

PERATURAN MENTERI PERTANIAN
NOMOR 93/Permentan/OT.140/12/2011

TENTANG

JENIS ORGANISME PENGGANGGU TUMBUHAN KARANTINA

DENGAN RAHMAT TUHAN YANG MAHA ESA

MENTERI PERTANIAN,

Menimbang :

a. bahwa dengan Keputusan Menteri Pertanian Nomor 38/Kpts/HK.060/I/2006 telah ditetapkan Jenis-jenis Organisme Pengganggu Tumbuhan Karantina Golongan I Kategori A1 dan A2, Golongan II Kategori A1 dan A2, Tanaman Inang, Media Pembawa dan Daerah Sebarnya;

b. bahwa berdasarkan hasil analisis risiko dan hasil pemantauan organisme pengganggu tumbuhan terdapat perubahan status jenis organisme pengganggu tumbuhan karantina;

c. bahwa berdasarkan pertimbangan sebagaimana dimaksud dalam huruf a dan huruf b, perlu mengatur kembali jenis organisme pengganggu tumbuhan karantina, dengan Peraturan Menteri Pertanian;

Mengingat :

1. Undang-Undang Nomor 16 Tahun 1992 tentang Karantina Hewan, Ikan, dan Tumbuhan (Lembaran Negara Tahun 1992 Nomor 56, Tambahan Lembaran Negara Nomor 3482);

2. Peraturan Pemerintah Nomor 14 Tahun 2002 tentang Karantina Tumbuhan (Lembaran Negara Tahun 2002 Nomor 35, Tambahan Lembaran Negara Nomor 4196)*;*

3. Keputusan Presiden Nomor 84/P Tahun 2009 tentang Pembentukan Kabinet Indonesia Bersatu II;

4. Peraturan Presiden Nomor 47 Tahun 2009 tentang Pembentukan dan Organisasi Kementerian Negara;

5. Peraturan Presiden Nomor 24 Tahun 2010 tentang Kedudukan, Tugas, dan Fungsi Kementerian Negara, serta Kedudukan, Tugas, dan Fungsi Eselon I Kementerian Negara;

6. Peraturan Menteri Pertanian Nomor 22/Permentan/OT.140/4/ 2008 tentang Organisasi dan Tata Kerja Unit Pelaksana Teknis Karantina Pertanian;

7. Peraturan Menteri Pertanian Nomor 09/Permentan/OT.140/2/ 2009 tentang Persyaratan dan Tatacara Tindakan Karantina Tumbuhan Terhadap Pemasukan Media Pembawa Organisme Pengganggu Tumbuhan Karantina ke Dalam Wilayah Negara Republik Indonesia;

8. Peraturan Menteri Pertanian Nomor 11/Permentan/OT.140/2/ 2009 tentang Persyaratan dan Tatacara Tindakan Karantina terhadap

Pengeluaran dan Pemasukan Media Pembawa Organisme Pengganggu Tumbuhan Karantina dari Suatu Area ke Area Lain di Dalam Wilayah Negara Republik Indonesia;

9. Peraturan Menteri Pertanian Nomor 56/Permentan/OT.140/9/ 2010 tentang Pelaksanaan Tindakan Karantina Tumbuhan di Luar Tempat Pemasukan dan Pengeluaran;
10. Peraturan Menteri Pertanian Nomor 61/Permentan/OT.140/ 10/2010 tentang Organisasi dan Tata Kerja Kementerian Pertanian;

MEMUTUSKAN:

Menetapkan : PERATURAN MENTERI PERTANIAN TENTANG JENIS ORGANISME PENGGANGGU TUMBUHAN KARANTINA.

Pasal 1

(1) Berdasarkan keberadaannya organisme pengganggu tumbuhan karantina dikategorikan menjadi organisme pengganggu tumbuhan karantina kategori A1 dan organisme pengganggu tumbuhan karantina kategori A2.

(2) Organisme pengganggu tumbuhan karantina kategori A1 merupakan organisme pengganggu tumbuhan karantina yang belum terdapat di Indonesia.

(3) Organisme pengganggu tumbuhan karantina kategori A2 merupakan organisme pengganggu tumbuhan karantina yang sudah terdapat di Indonesia, namun masih terbatas dan sedang dikendalikan.

Pasal 2

(1) Berdasarkan hasil tindakan karantina tumbuhan melalui perlakuan, organisme pengganggu tumbuhan karantina digolongkan menjadi organisme pengganggu tumbuhan karantina golongan I dan organisme pengganggu tumbuhan karantina golongan II.

(2) Organisme pengganggu tumbuhan karantina golongan I sebagaimana dimaksud pada ayat (1) merupakan organisme pengganggu tumbuhan karantina yang tidak dapat dibebaskan dari media pembawa organisme pengganggu tumbuhan karantina.

(3) Organisme pengganggu tumbuhan karantina golongan II sebagaimana dimaksud pada ayat (1) merupakan organisme pengganggu tumbuhan karantina yang dapat dibebaskan dari media pembawa organisme pengganggu tumbuhan karantina.

Pasal 3

Jenis organisme pengganggu tumbuhan karantina sebagaimana dimaksud dalam Pasal 1 dan golongan organisme pengganggu tumbuhan karantina sebagaimana dimaksud dalam Pasal 2, seperti tercantum pada Lampiran sebagai bagian tidak terpisahkan dari Peraturan Menteri ini.

Pasal 4

Dengan diundangkannya Peraturan Menteri ini, Keputusan Menteri Pertanian Nomor 38/Kpts/HK.060/1/2006 tentang Jenis-jenis Organisme Pengganggu Tumbuhan Karantina Golongan I Kategori A1 dan A2, Golongan II Kategori A1 dan A2, Tanaman Inang, Media Pembawa dan Daerah Sebarnya, dicabut dan dinyatakan tidak berlaku.

Pasal 5

Peraturan Menteri ini mulai berlaku pada tanggal diundangkan.

Agar setiap orang mengetahuinya, Peraturan Menteri ini diundangkan dengan penempatannya dalam Berita Negara Republik Indonesia.

Ditetapkan di Jakarta
pada tanggal 29 Desember 2011

MENTERI PERTANIAN,

ttd

SUSWONO

Diundangkan di Jakarta
pada tanggal

MENTERI HUKUM DAN HAK ASASI MANUSIA
REPUBLIK INDONESIA,

ttd.

AMIR SYAMSUDIN
BERITA NEGARA REPUBLIK INDONESIA TAHUN 2011 NOMOR 6

LAMPIRAN PERATURAN MENTERI PERTANIAN
NOMOR : 93/Permentan/OT.140/12/2011
TANGGAL : 29 Desember 2011

JENIS ORGANISME PENGGANGGU TUMBUHAN KARANTINA

A. JENIS-JENIS ORGANISME PENGGANGGU TUMBUHAN KARANTINA (KATEGORI A1)

I. SERANGGA / INSECTS

No.	NAMA ILMIAH/ ORDO/ FAMILI/ NAMA UMUM/ *SCIENTIFIC NAME/ TAXON/ COMMON NAME*	INANG/ *HOST*	GOL / *GROUP*	MEDIA PEMBAWA/ *PATHWAY*	DAERAH SEBAR/ *GEOGRAPHICAL DISTRIBUTION*
1.	*Acraea acerata* (Hew).; Lepidoptera: Nymphalidae; sweet potato butterfly	(P): *Ipomoea batatas* (ubi jalar, sweet potato)	II	daun (leaf), buah (fruit), bagian vegetatif tanaman untuk pertumbuhan (vegetative part of plant for planting)	Africa: Burundi, DR Congo, Ethiopia, Kenya, Nigeria, Rwanda, Sudan, Tanzania, Uganda, Zambia

Keterangan : P : Primary Host / Inang Utama
S : Secondary Host / Inang Pilihan

2.	*Aetherastis circulata* (Meyrick); Lepidoptera: Yponomeutidae; yponomeutid caterpillar	(P): *Hevea brasiliensis* (karet, rubber tree)	II	batang (stem), daun (leaf)	Asia: India
3.	*Agrilus mali* (Matsumura); Coleoptera: Buprestidae; apple borer	(P): *Malus domesticum* (apel, apple)	II	tunas (bud), batang (stem), bibit (seedling)	Asia: China, Korea Europe: Russia
4.	*Alcidodes dentipes* (Olivier); (=*Alcides dentipes* Olivier); Coleoptera: Curculionidae; stripped sweet potato weevil	(P): *Ipomoea batatas* (ubi jalar, sweet potato) (S): *Gossypium barbadens* (kapas, cotton), *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Vigna* spp. (buncis, cowpea)	II	tunas (bud), batang umbi (stem/ tuber/ corm), daun (leaf), legumes, buah (fruit)	Africa: Angola, Botswana, Burundi, Cameroon, Central Africa, Ethiopia, Ghana, Gambia, Gabon, Kenya, Liberia, Mali, Mauritania, Mauritius, Mozambique, Malawi, Sahara, Senegal, Somalia, Sudan, Swaziland, DR Congo, Zambia, Zimbabwe.
5.	*Alsophila pometaria* (Harris); Lepidoptera: eometridae; fall cancer worm	(P): *Malus domesticum* (apel, apple), *Ulmus* sp. (elm), *Pyrus communis* (pear), other stone fruit (buah batu lainnya)	II	batang (stem), daun (leaf), bunga (flower), buah (fruit)	America: Canada, USA

6.	*Amblypelta cocophaga* China; *(=Amblypelta cocophaga cocophaga =A.cocophaga malaitensis =Dasynus sp.)*; Hemiptera:Coreidae; coconut bug	(P): *Cocos nucifera* (kelapa, coconut), *Eucalyptus deglupta*, *Mangifera indica* (mangga, mango), *Carica papaya* (pepaya, pawpaw), *Cucumis melo* (melon), *Ceiba pentandra* (kapuk randu, kapok), *Citrus* spp.(jeruk, orange), *Manihot esculenta* (ubi kayu, cassava), *Passiflora quadrangularis* (markisah, passion fruit, granadilla), *Prunus persica* (persik, peach), *Psophocarpus tetragonolobus* (kecipir, winged bean), *Saccharum officinarum* (tebu, sugarcane), *Theobroma cacao* (kakao, cocoa)	II	tunas (bud), batang (stem), daun (leaf), bunga (flower), buah (fruit)	Asia: Singapore Oceania : Fiji, Papua New Guinea, Solomon Islands

7.	*Anastrepha fraterculus* (Wiedemann).; *(=Acrotoxa fraterculus =Anastrepha braziliensis =Anthomyia frutalis =Dacus fraterculus =Tephritis mellea =Trypeta fraterculus =Trypeta unicolor =Anastrepha peruviana =A.soluta)*; Diptera: Tephritidae; Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guianan fruitfly, West Indian fruitfly	P): *Citrus* spp.(jeruk, orange), *Eugenia* spp., *Prunus* spp., *Psidium guajava* (jambu biji, guava), *Syzygium* spp. (S): *Annona* spp, *Actinidia deliciosa* (kiwi, kiwifruit), *Averrhoa carambola* (belimbing, carambola, star-fruit), *Citrus* spp., *Coffea* spp. (kopi, coffee), *Cydonia oblonga* (quince), *Diospyros kaki* (kesemek, persimmon), *Ficus carica (*ara, fig), *Fortunella japonica* (kumquat), *Fragaria vesca* (arbei, strawberry), *Juglans regia* (walnut), *Achras (= Manilkara) zapota* (sawo, sapodilla), *Persea americana* (alpokat, avocado), *Prunus americana* (apricot), *Psidium*	II	buah (fruit), media tanam (planting medium), tanah (soil)	America : Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Mexico, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, USA, Uruguay, Venezuela.

		longipes, *Punica granatum* (delima, pomegranate), *Pyrus communis (*pear*)*, *Solanum quitoense*, *Spondias cytherea*, *Syzygium malaccense* (jambu bol, malay-apple), *Terminalia catappa* (ketapang, Indian *almon*d), *Theobroma cacao* (kakao, cocoa), *Vitis vinifera* (anggur, grapevine), *Diospyros* spp. , *Eriobotrya japonica* (lloquat), *Eugenia dombeyi*, *Eugenia uniflora*, *Feijoa sellowiana*, *Inga edulis*, *Juglans neotropica*, *Malus* sp., *Malus domesticum (*apel, apple*)*, *Mangifera indica* (mangga, mango), *Pouteria obovata*, *Prunus dulcis (*almond*)*, *Prunus*			

		persica (persik, peach), *Pyrus communis (*pear*)*, *Spondias* spp., *Syzygium aquea* (jambu air, star apple)			
8.	*Anastrepha ludens* (Loew); *(=Acrotoxa ludens =Trypeta ludens)*; Diptera: Tephritidae; Mexican fruit fly	(P): *Citrus* spp.(jeruk, orange), *Mangifera indica* (mangga, mango), *Prunus persica* (persik, peach) (S) : *Anacardium occidentale* (jambu mete, cashew-nut), *Annona reticulata* (buah nona, srikaya, bullock's heart, custard apple), *Citrus* spp, *Coffea* spp. (kopi, coffee), *Diospyros kaki* (kesemek, persimmon), *Feijoa sellowiana*, *Passiflora quadrangularis* (markisah, passion-fruit, granadilla), *Psidium longipes*, *Spondias purpurea*, *Annona* spp, *Carica papaya* (pepaya,	II	buah (fruit), media tanam (planting medium), tanah (soil)	America : Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, USA.

		pawpaw), *Casimiroa edulis*, *Cydonia oblonga* (quince), *Malus domesticum (*apel, apple*)*, *Mammea americana*, *Persea americana* (alpokat, avocado), *Pouteria sapota*, *Psidium guajava* (jambu biji, guava), *Punica granatum* (delima, pomegranate), *Pyrus communis (*pear*)*, *Sargentia greggii*, *Syzygium aquea* (jambu air, star apple)			
9.	*Anastrepha obligua* (Macq); (*=Acrotoxa obliqua =Anastrepha fraterculus var. ligata =A.fraterculus var. mombinpraeoptans =A.mombinpraeoptans =Tephritis obliqua =A.acudisa =A. trinidadensis =Trypeta obliqua*); Diptera: Tephritidae; West Indian fruit fly, Antillean	(P): *Mangifera indica* (mangga, mango), *Spondias* spp. (S): *Brosimum alicastrum*, *Citrus limetta*, *Coffea* spp. (kopi, coffee), *Eriobotrya japonica*, *Malpighia glabra*, *Achras (= Manilkara) zapota* (sawo, sapodilla), *Passiflora*	II	buah (fruit), media tanam (planting medium), tanah (soil)	America : Argentina, Bahama, Barbados, Belize, Brazil, Virgin Islands, Colombia, Costa Rica, Cuba, Dominica, Ecuador, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique,

	fruit fly	*quadrangularis* (markisah, passion fruit, granadilla), *Prunus dulcis (*almond*)*, *Prunus domesticum* (plum), *Psidium longipes*, *Pyrus communis (*pear*)*, *Spondias cytherea*, *Anacardium occidentale* (jambu mete, cashew-nut), *Averrhoa carambola* (belimbing, carambola, star-fruit), *Pouteria viridis*, *Citrus* spp, *Diospyros digyna*, *Pouteria sapota*, *Psidium guajava* (jambu biji, guava), *Spondias mombin*, *Spondias purpurea*, *Syzygium aquea* (jambu air, star apple), *Syzygium malaccense* (jambu bol, malay-apple).			Mexico, Montserrat, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, St. Kitts & Nevis, St. Lucia, Suriname, Trinidad and Tobago, Venezuela.

10.	*Anastrepha serpentina* (Wiedemann).; *(=Dacus serpentinus =Leptoxys serpentina =Acrotoxa serpentinus =Trypeta serpentina =Urophora vittithorax)*; Diptera: Tephritidae; sapodilla fruit fly, sapote fruit fly, dark fruit fly, black fruit fly, orange fruit fly	(P): *Citrus* spp.(jeruk, orange), *Chrysophyllum cainito*, *Achras (= Manilkara) zapota* (sawo, sapodilla) (S): *Pouteria viridis*, *Citrus* spp, *Mammea americana*, *Pouteria campechiana*, *Pouteria caimito*, *Pouteria obovata*, *Pouteria sapota*, *Spondias mombin*, *Spondias purpurea*, *Annona spp*, *Cydonia oblonga* (kwinsi, quince), *Eriobotrya japonica* (lokwat, loquat), *Malus domesticum (*apel, apple*)*, *Mangifera indica* (mangga, mango), *Manilkara* spp., *Persea americana* (alpokat, avocado), *Prunus cerrasus* (ceri, cherry), *Prunus persica* (persik,	II	buah (fruit), media tanam (planting medium), tanah (soil)	America : Argentina, Brazil, Colombia, Costa Rica, Dominica, Ecuador, Guyana France, Guatemala, Guyana, Mexico, Antilles Netherlands, Panama, Peru, Suriname, Trinidad and Tobago, USA,Venezuela

		peach), *Psidium guajava* (jambu biji, guava), *Pyrus communis (*pir, pear*)*, *Spondias* spp.			
11.	*Anastrepha suspensa* (Loew.); *(=Anastrepha unipuncta =Trypeta suspensa)*; Diptera: Tephritidae; Carribean fruit fly	(P): *Eugenia* spp., *Psidium guajava* (jambu biji, guava), *Syzygium* spp., *Annona* spp., *Fortunella margarita*, *Achras (= Manilkara) zapota* (sawo, sapodilla), *Syzygium aquea* (jambu air, star apple), *Terminalia catappa* (ketapang, Indian almond) (S): *Annona squamosa* (srikaya, sweetsop), *Blighia sapida* (akee apple), *Citrus* spp, *Clausena lansium*, *Coccoloba uvifera*, *Capsicum annuum* (paprika, bell-pepper), *Casimiroa edulis*,	II	buah (fruit), media tanam (planting medium), tanah (soil)	America: Cuba, Dominica, Guyana France, Haiti, Jamaica, Puerto Rico, USA, Virgin Islands

		Diospyros kaki (kesemek, persimmon), *Diospyros na*, *Dovyalis caffra*, *Ficus carica* (ara, fig), *Fortunellax crassifolia*, *Garcinia mangostana* (manggis, mangosteen), *Lycopersicum esculentum* (tomat, tomato), *Malus domesticum (*apel, apple*)*, *Malpighia glabra*, *Momordica balsamina*, *Prunus cerrasus* (ceri, cherry), *Murraya* spp. (kemuning, mock orange), *Persea americana* (alpokat, avocado), *Phoenix dactylifera* (kurma, dates-palm), *Pimenta dioica*, *Prunus persica* (persik, peach), *Psidium longipes*, *Punica granatum* (delima, pomegranate), *Pyrus communis (*pear*)*, *Spondias cytherea*,			

		Syzygium cumini (jamblang, java plum)), *Syzygium samarangense* (jambu Semarang, java apple), *Triphasia* sp. , *Annona glabra*, *Averrhoa carambola* (belimbing, star-fruit), *Canella winterana*, *Chrysobalanus icaco*, *Carica papaya* (pepaya, pawpaw), *Citrofortunella mitis*, *Chrysophyllum cainito*, *Chrysophyllum oliviforme*, *Diospyros blancoi*, *Eriobotrya japonica* (loquat), *Eugenia dombeyi*, *Flacourtia indica*, *Fortunella sp.*, *Garcinia livingstonei*, *Mangifera indica* (mangga, mango), *Momordica charantia* (paria, bitter gourd), *Pouteria campechiana*, *Psidium guineense*,			

		Spondias spp., *Spondias mombin*, *Synsepalum dulcificum*.			
12.	*Antestiopsis facetoides* (Le Pelley); Hemiptera: Pentatomidae; cherry and flower feeder	(P): *Coffea* spp. (kopi, coffee)	II	tunas (bud), batang (stem), daun (leaf), bunga (flower), buah (fruit)	Africa : Kenya, Tanzania, Tunisia.
13.	*Antestiopsis intricata* (Ghesq & Carayon); Hemiptera: Pentatomidae; Kaffee wanze (Germany), antestia bug	(P): *Coffea* spp. (kopi, coffee)	II	tunas (bud), batang (stem), daun (leaf), bunga (flower), buah (fruit)	Africa : Benin, Cameroon, Central Africa, Ethiopia, Gabon, Ghana, Ivory Coast, Kenya, Nigeria, Sudan, Togo, Uganda
14.	*Antestiopsis orbItalys* (Westwood); *(=Antestia lineaticolli =A.orbitalis facetus =Antestiopsis lineaticollis =A. orbitalis bechuana =A. orbitalis ghesquieri =A. orbitalis orbItalys)*; Hemiptera: Pentatomidae; antestia	(P): *Coffea* spp. (kopi, coffee)	II	tunas (bud), batang (stem), daun (leaf), bunga (flower), buah (fruit)	Africa : Angola, Burundi, Congo, Ethiopia, Kenya, Malawi, Mozambique, Namibia, Rwanda, South Africa, Tanzania, Uganda, Zambia, Zimbabwe

15.	*Anthonomus grandis* (Bohem).; Coleoptera: Curculionidae; Mexican cotton boll weevil, boll weevil, cotton boll weevil, Thurberia weevil	(P): *Gossypium barbadens* (kapas, cotton) (S): *Hibiscus syriacus*	II	bibit (seedling), bunga (flower), buah (fruit)	America : Argentina, Belize, Brazil, Colombia, Costa Rica, Cuba, Dominica, El Salvador, Guatemala, Haiti, Honduras, Martinique, Mexico, Nicaragua, Paraguay, St. Kitts & Nevis, USA, Venezuela
16.	*Anthonomus signatus* (Say).; *(=Anthonomus bisignatus =Anthonomus pallidus =Anthonomus scutellatus)*; Coleoptera: Curculionidae; strawberry bud weevil, strawberry clipper	(P): *Morus* spp. (murbei, mulberry), *Rubus idaeus* (S): *Rubus caesius, Rubus fruticosa*	II	buah (fruit), bunga (flower), media tanam (planting medium)	America: Canada, USA
17.	*Anthonomus vestitus* (Bohenan); Coleoptera: Curculionidae; Peruvian boll weevil, Peruvian cotton weevil, Peruvian boll weevil, Peruvian square weevil, Peruvian cotton square weevil	(P): *Gossypium barbadens* (kapas, cotton)	II	bibit (seedling), buah (fruit), bunga (flower)	America: Ecuador, Peru

18.	*Aonidomytilus albus* (CockereII); *(=Coccomytilus dispar =Lepidosaphes albus =L.dispar*, *Mytilaspis albus, M.dispar*); Hemiptera: Diaspididae; cassava scale, white mussel scale, cassava stem mussel scale, tapioca scale	(P): *Citrus* spp.(jeruk, orange), *Manihot esculenta* (ubi kayu, cassava)	II	tunas (bud), batang (stem), daun (leaf)	Africa : Angola, Cape Verde, Ivory Coast, Ghana, Kenya, Madagascar, Malawi, Mozambique, Nigeria, Senegal, Tanzania, Uganda America : Antigua and Barbuda, Argentina, Barbados, Brazil, Colombia, Cuba, Dominica, Grenada, Guadeloupe, Guyana France, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Puerto Rico, St. Kitts & Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, USA, Virgin Islands, Asia : Bahrain, China, India, Sri Lanka, Thailand

19.	*Apate monachus* Fabricius; *(=Apate monacha =A.carmelita =A.francisca =A.gibba =A.mendica =A.monachus var. rufiventris =A.semicostata =A.senii)*; Coleoptera: Bostrichidae; black borer, twig borer, date palm bostrichid	(P): *Coffea* spp. (kopi, coffee), *Theobroma cacao* (kakao, cocoa), *Elaeis guineensis* (kelapa sawit, oilpalm), *Mangifera indica* (mangga, mango), *Cajanus cajan* (kacang gude, pigeon pea), *Psidium guajava* (jambu biji, guava), *Punica granatum* (delima, pomegranate), *Swietenia mahogany* (mahoni, mahogany), *Tamarindus indica* (asam, tamarind) (S): *Calicotome spinosa*, *Citrus* spp.(jeruk, orange), *Gleditsia triacanthos*, *Morrus alba* (murbei, mulberry), *Olea europea subsp. europea* (zaitum, olive), *Robinia pseudoacacia*, *Styphnolobium japonicum*, *Syringa*	II	batang (stem)	Africa : Algeria, Congo, Ivory Coast, Egypt, Erythrea, Ethiopia, Ghana, Guinea, Morocco, Niger, Nigeria, Sao Tome & Principe, Tanzania, Togo, Tunisia, Uganda, Zambia Asia: Israel, Lebanon, Syria. Europe: France, Italy, Spain

		*pekinensis, Annona cherimola, Malus domesticum (*apel, apple*), Melia azedarach*, *Phoenix dactylifera* (kurma, dates-palm), *Prunus persica* (persik, peach), *Pyrus communis (*pear*), Tamarix gallica*, *Vitis vinifera* (anggur, grapevine)			
20.	*Argyrotaenia velutinana* (Walker);(=Eulia velutinana =Tortrix velutinana); Lepidoptera: Tortricidae; redbanded leafroller	(P): *Persea americana* (alpokat, avocado), *Malus domesticum (*apel, apple*), Psidium guajava* (jambu biji, guava), *Syzygium aquea* (jambu air, star apple), *Mangifera indica* (mangga, mango), *Pyrus communis (*pear*)*	II	batang (stem), daun (leaf), buah (fruit)	America: Canada, North America, USA
21.	*Aspidiotus nerii* (Bouché); *(=Aspidiotus aloes = Aspidiotus hederae = Aspidiotus limonii = Aspidiotus genistae = Chermes aloes = Chermes ericae = Chermes cycadicola = Diaspis*	(P): *Actinidia chinensis* (Chinese gooseberry), *Albizia julibrissin* (silk tree), Citrus, Olea (olive), Oleaceae, *Ananas comosus* (nenas,	II	bibit tanaman (seedling), bunga (flower), buah (fruit), daun (leaf),	Europe: Bulgaria, Cyprus, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro,

	bouchei = Aspidiotus bouchei = Chermes nerii = Aspidiotus affinis = Aspidiotus caldesii = Aspidiotus denticulatus = Aspidiotus villosus = Aspidiotus budleiae = Aspidiotus ceratoniae = Aspidiotus cycadicola = Aspidiotus epidendri = Aspidiotus ericae = Aspidiotus gnidii = Aspidiotus ilicis = Aspidiotus myricinae = Aspidiotus ulicis = Aspidiotus uriesciae = Aspidiotus lentisci = Aspidiotus capparis = Aspidiotus myrsinae = Aspidiotus budlaei = Aspidiotus atherospermae = Aspidiotus oleae = Aspidiotus corynocarpi = Aspidiotus oleastin = Aspidiotus offinis = Aspidiotus sophorae = Aspidiotus carpodeti = Aspidiotus transpareus var. simillimus = Aspidiotus vagabundus = Aspidiotus simillimus = Aspidiotus transvaalensis = Aspidiotus	pineapple), *Asparagus setaceus* (Asparagus fern), *Asplenium nidus* (bird's nest fern), Ceratonia , *Cocos nucifera* (kelapa, coconut), *Dianthus caryophyllus* (carnation), Diospyros (malabar ebony), *Hedera helix* (ivy), *Ilex aquifolium* (holly), Juniperus (junipers), *Laurus nobilis* (sweet bay), Magnolia , *Mangifera indica* (mangga, mango), *Melia azedarach* (Chinaberry), Morus (mulberry tree), *Musa paradisiaca* (pisang kepok, plantain), Nerium (oleander), Orchidaceae (orchids), Pandanus (screw-pine), Phoenix (date palm), *Plumeria rubra var. acutifolia* (Mexican frangipani), *Prunus persica* (peach),		batang (stem)	Macedonia, France, Gibraltar, Greece, Italy, Malta, Poland, Portugal, Romania, Spain, UK Asia: China, Iran, Israel, Japan, Jordan, Lebanon, Saudi Arabia, Syria, Turkey Africa: Algeria, Congo, Egypt, Ethiopia, Kenya,Libya, Madagascar, Malawi, Morocco, Nigeria, South Africa,Tanzania, Tunisia, Uganda, Zimbabwe America: Argentina, Bolivia, Brazil, Central America, Chile, Colombia, Ecuador, Mexico, North America, USA, Peru, Uruguay Oceania: Australia,

	confusus = Aspidiotus tasmaniae = Aspidiotus viresciae = Octaspidiotus atherospermae = Chermes hederae = Chermes genistae = Chermes osmanthi = Aspidiotus transpareus var. rectangulatus = Aspidiotus rectangulatus = Aspidiosus unipectinatus = Aspidiotus hederae var. urenae = Aspidiotus urenae = Octaspidiotus anthospermae = Aspidiotus hederae = Aspidiotus hederae ssp. unisexualis); Hemiptera: Diaspididae; aucuba scale; ivy scale; white scale; oleander scale	*Pyrus communis* (European pear), Rosa (mawar, roses), *Simmondsia chinensis* (jojoba), *Vitis vinifera* (anggur, grapevine)			New Caledonia, New Zealand, Norfolk Island
22.	*Augosoma centaurus* (Fabricius); Coleoptera: Scarabaeidae; stem tissues borer	(P):*Elaeis guineensis* (kelapa sawit, Oilpalm), palma lainnya (other palmae)	II	batang (stem)	Africa: Cameroon, Gambia, Ghana, Guinea, Ivory Coast, Liberia, Niger, Nigeria, Senegal.

23.	*Bactrocera jarvisi* (Tryon.); *(=Afrodacus jarvisi =Dacus jarvisi =D.australis =Chaetodacus jarvisi)*; Diptera: Tephritidae; Fiji fruitfly, Jarvis's fruitfly	(P): *Mangifera indica* (mangga, mango), *Psidium guajava* (jambu biji, guava), *Terminalia catappa* (ketapang, Indian almond) (S): *Anacardium occidentale* (jambu mete, cashew-nut), *Annona glabra*, *Annona muricata* (sirsak, soursop), *Areca catechu* (pinang, betelnut palm), *Averrhoa carambola* (belimbing, star-fruit), *Carica papaya* (pepaya, pawpaw), *Citrus* spp (jeruk, orange), *Cydonia oblonga* (kwinsi, quince), *Diospyros blancoi*, *Diospyros kaki* (kesemek, persimmon), *Feijoa sellowiana*, *Fortunella japonica* (kumkwat, kumquat), *Malus domesticum (*apel, apple*)*, *Malpighia emarginata*, *Musa paradisiaca* (pisang,	II	buah (fruit), media tanam (planting medium), tanah (soil)	Oceania: Australia

		kepok, plantain), *Opuntia* sp., *Passiflora quadrangularis* (markisah, passion-fruit, granadilla), *Persea americana* (alpokat, avocado), *Pouteria campechiana*, *Pouteria caimito*, *Prunus americana* (aprikot, apricot), *Prunus persica* (persik, peach), *Psidium cattleianum*, *Punica granatum* (delima, pomegranate), *Pyrus communis (*pir, pear*)*, *Spondias purpurea*, *Syzygium aquea* (jambu air, star apple), *Psidium guajava* (jambu biji, guava), *Syzygium malaccense* (jambu bol, malay apple), *Syzygium samarangense* (jambu Semarang, Java apple).			

24.	*Bactrocera caryeae* (Kapoor); Diptera: Tephritidae; Indian fruit fly	(P): *Aegle marmelos* (maja, bael fruit), *Citrus* spp, *Malpighia glabra*, *Mangifera indica* (mangga, mango), *Pouteria sapota*, *Psidium guajava* (jambu biji, guava)	II	buah (fruit), media tanam (planting medium), tanah (soil)	Asia: India, Sri Lanka.
25.	*Bactrocera ciliatus* (Loew).; *(=Dacus caryae)*; Diptera: Tephritidae; lesser melon fly	(P): Cucurbitaceae	II	buah (fruit), media tanam (planting medium), tanah (soil)	Asia: Pakistan, India, Bangladesh, Iran, Sri Lanka, Saudi Arabia, Yemen. Africa: Angola, Botswana, Cameroon, Chad, Dahomey, Egypt, Ethiopia, Ghana, Guinea, Kenya, Lesotho, Malawi, Madagascar, Mauritius, Mozambique, Nigeria, Reunion, Senegal, Sierra Leone, Somalia, South Africa, Northwest Africa, Sudan, Tanzania, Uganda, DR Congo, Zambia, Zimbabwe

26.	*Bactrocera curvipennis* (Frog); *(=Bactrocera curvipennis =Chaetodacus curvipennis =Dacus curvipennis =Strumeta curvipennis)*; Diptera: Tephritidae; banana fruit fly	(P): *Citrus* spp.(jeruk, orange), *Mangifera indica* (mangga, mango)	II	buah (fruit), media tanam (planting medium), tanah (soil)	Oceania: New Caledonia, Vanuatu
27.	*Bactrocera depressa* (ShIrak); *(=Bactrocera (Paradacus) depressa =B.depressus =Dacus depressus =Paradacus depressus =Zeugodacus depressus)*; Diptera: Tephritidae; fruit fly	(P): *Cucurbita maxima* (waluh, labu parang, pumpkin)	II	buah (fruit), media tanam (planting medium), tanah (soil)	Asia: China, Taiwan, Japan, Korea
28.	*Bactrocera passiflorae* (Frog); *(=Bactrocera passiflorae =Chaetodacus passiflorae =Dacus passiflorae =Strumeta passiflorae)*; Diptera: Tephritidae; Fijian fruit fly	(P): *Citrus* spp.(jeruk, orange), *Passiflora quadrangularis* (markisah, passion-fruit, granadilla), *Carica papaya* (pepaya, pawpaw), *Mangifera indica* (mangga, mango), *Persea americana* (alpokat, avocado), *Theobroma cacao* (kakao, cocoa), *Psidium guajava* (jambu biji, guava)	II	buah (fruit), media tanam (planting medium), tanah (soil)	Oceania: Fiji, Niue, Tonga, Tuvalu, Wallis-Futuna.

29.	*Bactrocera kandiensis* (Drew &Hancock); *(=Bactrocera* sp. *near dorsalis)*; Diptera: Tephritidae; Sri Lankan fruit fly	(P): *Artocarpus integrifolius* (nangka, jackfuit), *Anacardium occidentale* (jambu mete, cashew-nut), *Annona glabra*, *Areca catechu* (pinang, betelnut palm), *Averrhoa carambola* (belimbing, carambola, star-fruit), *Citrus maxima*, *Persea americana* (alpokat, avocado), *Psidium guajava* (jambu biji, guava), *Punica granatum* (delima, pomegranate), *Spondias cytherea*, *Syzygium aromaticum* (cengkeh, clove), *Syzygium aquea* (jambu air, star apple), *Mangifera indica* (mangga, mango) (S): *Carica papaya* (pepaya, pawpaw)	II	buah (fruit), media tanam (planting medium), tanah (soil)	Asia: Sri Lanka

30.	*Bactrocera kinabalu* Drew & Hancock; Diptera: Tephritidae; Kinabalu fruit fly	(P): *Persea americana* (alpokat, avocado)	II	buah (fruit), media tanam (planting medium), tanah (soil)	Asia : Malaysia
31.	*Bactrocera neohumeralis* (Hardy); *(=Chaetodacus humeralis =C.tryoni* var. *sarcocephali =Dacus neohumeralis =Dacus tryoni* var. *neohumeralis)*; Diptera: Tephritidae lesser Queensland fruit fly	(P): *Psidium guajava* (jambu biji, guava) (S): *Anacardium occidentale* (jambu mete, cashew), *Annona* spp. (buah nona, sirsak, srikaya, annona, soursop, sweetsop) , *Avverhoa carambola* (belimbing, carambola, star fruit), *Cananga odorata* (kenanga, cadmia), *Carica papaya* (pepaya, pawpaw), *Citrus* spp. (jeruk, orange), *Clausena lansium*, *Calophyllum inophyllum* (nyamplung, Alexandrian laurel), *Coffea* spp. (kopi, coffee), *Capsicum annuum* (cabai,	II	buah (fruit), media tanam (planting medium), tanah (soil)	Indonesia : Papua Oceania : Australia , Papua New Guinea.

		hot pepper, chilies), *Crateva religiosa*, *Chrysophyllum cainito* (kenitu, sawo duren, cainito), *Casimiroa edulis*, *Cyphomandra betacea*, *Diospyros blancoi*, *Diospyros kaki* (kesemek, persimmon), *Eriobotrya japonica* (lokwat, loquat), *Eugenia dombeyi*, *Eugenia uniflora*, *Feijoa sellowiana*, *Fortunella japonica* (kumkwat, kumquat), *Lycopersicum esculentum* (tomat, tomato), *Malus sylvestris* (apel, apple), *Malpighia emarginata*, *Mangifera indica* (mangga, mango), *Achras (= Manilkara) zapota* (sawo, sapodilla), *Morus nigra* (murbei, mulberry), *Musa x paradisiaca* (pisang kepok, plantain),			

		Muntingia calabura (kersen, talok, Jamaica cherry), *Myrciaria cauliflora, Passiflora* spp, *Phoenix dactylifera* (kurma, date-palm), *Pouteria caimito, Prunus americana* (aprikot, apricot), *Prunus domesticum* (plam, plum), *Prunus persica* (persik, peach), *Pyrus communis* (pir, pear), *Rollinia mucosa, Rubus rosaefolius, Solanum laciniatum, Solanum seaforthianum, Spondias mombin, Spondias purpurea, Synsepa lum dulcificum, Syzygium* spp, *Vitis labrusca, Ziziphus jujuba.*			

32.	*Bactrocera philipinensis* Drew & Hancock; Diptera: Tephritidae; Phillipines fruit fly	(P): *Mangifera indica* (mangga, mango), *Artocarpus communis* (sukun, breadfruit), *Averrhoa carambola* (belimbing, carambola, star-fruit), *Carica papaya* (pepaya, pawpaw), *Citrus* spp.(jeruk, orange), *Achras (= Manilkara) zapota* (sawo, sapodilla), *Psidium guajava* (jambu biji, guava), *Spondias purpurea*, *Syzygium malaccense* (jambu bol, malay apple)	II	buah (fruit), media tanam (planting medium), tanah (soil)	Asia : Philippines
33.	*Bactrocera psidii* (Frog); *(=Dacus psidii =D.ornatissimus =D.virgatus =Strumeta psidii =Tephritis psidii)*; Diptera: Tephritidae; southensea guava fruit fly	(P): *Psidium guajava* (jambu biji, guava), *Prunus persica* (persik, peach) (S): *Aleurites moluccana* (kemiri, candle nut), *Anacardium occidentale* (jambu mete, cashew-nut), *Annona reticulata*, *Citrus*	II	buah (fruit), media tanam (planting medium), tanah (soil)	Oceania *:* New Caledonia

		maxima (jeruk Bali, pummelo), *Eugenia uniflora*, *Mangifera indica* (mangga, mango), *Psidium cattleianum*, *Syzygium aquea* (jambu air, star apple), *Syzygium malaccense* (jambu bol, malay apple), *Terminalia catappa* (ketapang, indian almond)			
34.	*Bactrocera pyrifoliae* (Drew & Hancock); Diptera: Tephritidae; pyrifolia fruit fly	(P): *Psidium guajava* (jambu biji, guava), *Prunus persica* (persik, peach)	II	buah (fruit), media tanam (planting medium), tanah (soil)	Asia : Thailand
35.	*Bactrocera tryoni* (Frog.); *(=Bactrocera tryoni =Chaetodacus sarcocephali =Chaetodacus tryoni =Dacus tryoni =D.ferrugineus tryoni =Strumeta melas =Strumeta tryoni =Tephritis tryoni)*; Diptera: Tephritidae;	P): *Anacardium occidentale* (jambu mete, cashew-nut), *Anona* spp, *Averrhoa carambola* (belimbing, carambola, star-fruit), *Carica papaya* (pepaya, pawpaw), *Coffea* spp. (kopi, coffee), *Capsicum annuum*	II	buah (fruit), media tanam (planting medium), tanah (soil)	Oceania : Australia, Polynesia France, New Caledonia.

	Queensland fruit fly	(paprika, bell-pepper), *Chrysophyllum cainito*, *Casimiroa edulis*, *Eriobotrya japonica* (lokwat, loquat), *Eugenia uniflora*, *Fortunella japonica* (kumkwat, kumquat), *Lycopersicum esculentum* (tomat, tomato), *Malus sylvestris (crab-apple)*, *Mangifera indica* (mangga, mango), *Achras (= Manilkara) zapota* (sawo, sapodilla), *Morus nigra*, *Passiflora quadrangularis* (markisah, passion-fruit, granadilla), *Passiflora suberosa* , *Prunus persica* (persik, peach), *Psidium cattleianum*, *Psidium guajava* (jambu biji, guava), *Syzygium* spp, *Terminalia catappa* (ketapang, indian almond).			

		(S): *Aegle marmelos* (maja, bael fruit), *Annona squamosa* (srikaya, sweetsop), *Averrhoa bilimbi* (belimbing sayur, bilimbi*)*, *Blighia sapida*, *Cananga odorata* (kenanga, cadmia), *Citrus* spp., *Clausena lansium*, *Calophyllum inophyllum* (nyamplung, alexander laurel), *Cucurbita maxima* (waluh, labu parang, pumpkin), *Cydonia oblonga* (kwinsi, quince), *Cyphomandra betacea*, *Dimocarpus longan* (kelengkeng, longan), *Diospyros blancoi*, *Diospyros kaki* (kesemek, persimmon), *Dovyalis caffra*, *Eremocitrus glauca*, *Eugenia dombeyi*, *Feijoa sellowiana*, *Ficus racemosa*, *Flacourtia jangomas*, *Flacourtia rukam* (rukem, rukam), *Fortunellax crassifolia*,			

		Grewia asiatica, *Juglans regia* (walnut, walnut), *Dimocarpus litchii* (leci,litchii), *Malpighia emarginata*, *Mimusops elengi* (tanjung, asian bulletwood), *Momordica charantia* (paria, bitter gourd), *Morus alba* (murbei, mulberry), *Musa paradisiaca* (pisang kepok, plantain), *Myrciaria cauliflora*, *Nephelium lappaceum* (rambutan, rambutan), *Nerium oleander*, *Olea europea subsp. europea* (zaitum, olive), *Opuntia ficus-indica*, *Passiflora foetida*, *Passiflora quadrangularis* (markisah, passion fruit, granadilla), *Persea americana* (alpokat, avocado), *Phoenix dactylifera* (kurma, dates-palm), *Physalis peruviana* (gooseberry), *Pometia*			

		pinnata, *Pouteria campechiana*, *Pouteria caimito*, *Pouteria sapota*, *Prunus* spp., *Psidium guineense*, *Punica granatum* (delima, pomegranate), *Phyllanthus acidus*, *Pyrus communis* (pir, pear), *Rollinia mucosa*, *Rollinia pulchrinervis*, *Rubus fruticosa*, *Rubus ursinus*, *Solanum melongena* (terung, eggplant), *Solanum* spp., *Spondias* spp., *Synsepalum dulcificum*, *Syzygium* spp., *Thevetia peruviana*, *Trichosanthes cucumerina*, *Vitis labrusca*, *Vitis vinifera* (anggur, grapevine), *Ziziphus mauritiana*			

36.	*Bactrocera tsuneonis* (Miyake); *(=Dacus cheni =D.tsuneonis =Tetradacus tsuneonis)*; Diptera: Tephritidae; Japanese orange fly, Citrus fruit fly	(P): *Citrus* spp.(jeruk, orange), *Musa* spp. (pisang, banana)	II	buah (fruit), media tanam (planting medium), tanah (soil)	Asia : China, Japan, Vietnam
37.	*Bothynus gibbosus* (De Geer); *(=Ligyrus gibbosus =L.californicus)*; Coleoptera: Scarabaeidae; carrot beetle, carrot head beetle, muck beetle	(P): *Solanum tuberosum* (kentang, potato), *Apium graveolens* (seledri, celery), *Daucus carota* (wortel, carrot), *Zea mays* (jagung, corn, maize), *Ipomoea batatas* (ubi jalar, sweet potato)	II	batang (stem), daun (leaf), umbi (tuber/ corm), akar (root), tanah (soil)	America : Canada, Mexico, USA
38.	*Busseola fusca* Fuller; *(=Calamistis fusca =Busseola sorghicida =Sesamia fusca)*; Lepidoptera: Noctuidae; African maize stalk borer, maize stalk borer, maize stem borer, sorghum stalk/stem borer	(P): *Zea mays* (jagung, corn, maize), *Sorghum bicolor* (sorgum, sorghum) (S): *Saccharum officinarum* (tebu, sugarcane); *Eleusine coracana*, *Pennisetum glaucum* (bajra, pearl-millet).	II	batang (stem), daun (leaf)	Africa : Angola, Benin, Burkina Faso, Burundi, Cameroon, Chad, DR Congo, Ethiopia, Gabon, Ghana, Guinea, Ivory Coast, Kenya, Lesotho, Malawi, Mozambique, Nigeria, Rwanda, Sierra Leone, Somalia, South Africa, Sudan, Swaziland,

					Tanzania, Togo, Uganda, Zambia, Zimbabwe
39.	*Caulophilus oryzae* (Gyllenhal); *(=Caulophilus latinasus =Rhyncolus oryzae)*; Coleoptera: Curculionidae; broad nosed grain weevil, broad nosed granary weevil	(P): *Cicer arietinum*, *Panicum miliaceum*, *Pennisetum* spp., *Zea mays* (jagung, corn, maize) (S): *Ipomoea batatas* (ubi jalar, sweet potato), *Zingiber officinale* (jahe, ginger), *Persea americana* (alpokat, avocado)	II	benih/biji (seed/grain), umbi (tuber/corm), akar (root), rhizome	America : Cuba, Guatemala, Jamaica, Mexico, Panama, Puerto Rico, USA Europe : Portugal
40.	*Coelaenomenodera elaeidis* Maulik, Coleoptera: Chrysomelidae; hispid leafminer, oilpalm leafminer	(P): *Cocos nucifera* (kelapa, coconut) sawit (S): *Borassus flabelifer* (lontar, palmyra palm), *Cocos nucifera* (kelapa, coconut), *Pennisetum purpureum* (rumput gajah, elephant grass), *Roystonea regia* (palem raja, royal palm).	II	batang (stem), daun (leaf)	Africa : Angola, Benin, Botswana, Cameroon, DR Congo, Congo, Ghana, Ivory Coast, Namibia, Nigeria, Sierra Leone, South Africa, Swaziland, Zambia, Zimbabwe

41.	*Carposina niponensis* Wals.; *(=Carposina sasakii =C.persicana =Cydia persicana)*; Lepidoptera: Carposinidae; peach fruit moth, peach fruit borer	(P): *Malus domesticum (*apel, apple*)*, *Pyrus communis (*pear*)*, *Prunus persica* (persik, peach) (S): *Aronia arbutifolia*, *Chaenomeles japonica*, *Cydonia oblonga* (quince), *Eriobotrya japonica* (lokwat, loquat), *Malus* spp., *Phoenix dactylifera* (kurma, dates-palm), *Prunus americana* (apricot), *Prunus cerrasus* (ceri, cherry), *Prunus domesticum* (plum), *Prunus dulcis (*almond*)*, *Ziziphus jujube*	II	buah (fruit)	Asia: China, Japan, Korea. Europe : Russia
42.	*Cephus cinctus* Norton; *(=Cephus occidentalis)*; Hymenoptera, Cephidae; wheat stem sawfly western wheat-stem fly	(P): *Triticum aestivum* (gandum, wheat), serealea (cerealia) (S): *Hordeum vulgare* (barli, barley)	II	batang (stem)	America : Canada, USA.

43.	*Ceratitis capitata* (Wiedemann); *(=Ceratitis citriperda =Ceratitis hispanica =Tephritis capitata)*; Diptera: Tephritidae; Mediterranean fruit fly, medfly	(P): *Gossypium barbadens* (kapas, cotton), *Coffea* spp. (kopi, coffee), *Vitis vinifera* (anggur, grapevine), *Persea americana* (alpokat, avocado), *Annona* spp., *Malus domesticum (*apel, apple*)* , *Capsicum annuum* (cabai, hot pepper, chilies, red pepper), *Citrus* spp.(jeruk, orange), *Mangifera indica* (mangga, mango), *Lycopersicum esculentum* (tomat, tomato), *Theobroma cacao* (kakao, cocoa), *Psidium guajava* (jambu biji, guava) (S): *Anacardium occidentale* (jambu mete, cashew-nut), *Annona reticulata*, *Citrus* spp, *Carissa spp.*, *Chrysophyllum cainito*, *Casimiroa edulis*, *Cyphomandra betacea*,	II	buah (fruit), media tanam (planting medium), tanah (soil)	Europe: Albania, Croatia, Cyprus, France, Greece, Italy, Malta, Portugal, Russia, Slovenia, Spain, Switzerland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia. Asia: Israel, Jordan, Lebanon, Saudi Arabia, Syria,Turkey, Yemen Africa: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, DR Congo, Congo, Egypt, Ethiopia, Gabon, Ghana, Guinea, Ivory Coast, Kenya, Liberia,

		Dovyalis caffra, *Eugenia* spp., *Garcinia mangostana* (manggis, mangosteen), *Juglans regia*, *Dimocarpus litchii* (leci,litchii), *Malpighia glabra*, *Achras (= Manilkara) zapota* (sawo, sapodilla), Morus, *Mespilus germanica*, *Muntingia calabura* (kersen, talok, jamaica cherry), *Opuntia* spp., *Passiflora coerulea*, *Phoenix dactylifera* (kurma, dates-palm), *Physalis peruviana*, *Psidium longipes*, *Punica granatum* (delima, pomegranate), *Rubus loganobaccus*, *Santalum album*, *Solanum* spp., *Spondias cytherea*, *Syzygium* spp., *Thevetia peruviana*, *Pouteria viridis*, *Carica papaya* (pepaya, pawpaw), *Chrysophyllum*			Libya, Madagascar, Malawi, Mali, Morocco, Mauritius, Mozambique, Niger, Nigeria, Réunion, St. Helena, Sao Tome & Principe, Senegal, Seychelles, Sierra Leone, South Africa, Sudan, Tanzania, Togo, Tunisia, Uganda, Zimbabwe. America : Antilles Netherlands, Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, USA, Uruguay, Venezuela. Oceania: Australia.

		oliviforme, *Cydonia oblonga* (quince), *Diospyros* spp., *Eriobotrya japonica* (loquat), *Eugenia dombeyi*, *Eugenia uniflora*, *Feijoa sellowiana*, *Fortunella japonica* (kumquat), *Garcinia livingstonei*, *Mangifera indica* (mangga, mango), *Persea americana* (alpokat, avocado), *Pouteria sapota*, *Prunus americana* (aprikot, apricot), *Prunus domesticum* (plam, plum), *Prunus persica* (persik, peach), *Pyrus communis (*pear*)*, *Spondias purpurea*, *Syzygium aquea* (jambu air, star apple), *Terminalia catappa* (ketapang, indian almond), *Vitis vinifera* (anggur, grapevine)			

44.	*Ceratitis cosyra* (Wlk.); *(=Ceratitis giffardi =Pardalaspis cosyra =P.giffardi =P.giffardi var. sarcocephali =P.parinarii =P.sarcocephali =Trypeta cosyra)*; Diptera: Tephritidae; mango fruit fly, marula fruit fly	(P): *Mangifera indica* (mangga, mango) (S): *Annona* spp, *Citrus aurantium* (jeruk nipis, lime), *Persea americana* (alpokat, avocado), *Prunus persica* (persik, peach), *Psidium guajava* (jambu biji, guava)	II	buah (fruit), media tanam (planting medium), tanah (soil)	Africa: Angola, Benin, Botswana, Burkina Faso, Cameroon, Central Africa, DR Congo, Guinea, Ivory Coast, Kenya, Madagascar, Malawi, Mali, Mozambique, Nigeria, Senegal, Sierra Leone, South Africa, Sudan, Tanzania, Togo, Zambia, Zimbabwe.
45.	*Ceratitis punctata* (Wied.); *(=Pardalaspis punctata =P.senegalensis =Tephritis senegalensis)*; Diptera: Tephritidae; cacao fruit fly	(P): *Coffea* spp. (kopi, coffee), *Psidium guajava* (jambu biji, guava), *Passiflora quadrangularis* (markisah, granadilla, passion fruit), *Mangifera indica* (mangga, mango), *Cucumis melo* (melon, melon), *Chrysophyllum albidum* (S): *Theobroma cacao* (kakao, cocoa)	II	buah (fruit), media tanam (planting medium), tanah (soil)	Africa: Cameroon, DR Congo, Congo, Ghana, Kenya, Senegal, Sierra Leone, South Africa, Tanzania, Uganda, Zambia, Zimbabwe.

46.	*Ceratitis quinaria* (Bezzi); *(=Pardalaspis quinaria)*; Diptera: Tephritidae; Rhodesian fruit fly	(P): *Psidium guajava* (jambu biji, guava), *Citrus* spp.(jeruk, orange), *Prunus americana* (aprikot, apricot), *Prunus persica* (persik, peach)	II	buah (fruit), media tanam (planting medium), tanah (soil)	Asia: Yemen Africa: Botswana, Malawi, Namibia, South Africa, Sudan, Zimbabwe
47.	*Ceratitis rosa* Karsch.; *(=Pterandrus rosa)*; Diptera: Tephritidae; Natal fruit fly	(P): *Citrus* spp.(jeruk, orange), *Coffea* spp. (kopi, coffee) (S): *Averrhoa carambola* (belimbing, carambola, star-fruit), *Carica papaya* (pepaya, pawpaw), *Citrus* spp, *Capsicum annuum* (cabai, hot pepper, Chilies, red pepper), *Cydonia oblonga* (kwinsi, quince), *Eugenia uniflora*, *Ficus carica* (ara, fig), *Garcinia mangostana* (manggis, mangosteen), *Lycopersicum esculentum* (tomat, tomato), *Malus domesticum (*apel, apple*)*, *Prunus americana*	II	buah (fruit), media tanam (planting medium), tanah (soil)	Africa: Angola, DR Congo, Ethiopia, Guinea, Kenya, Malawi, Mali, Mauritius, Mozambique, Nigeria, Rwanda, Réunion, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe.

		(aprikot, apricot), *Achras (= Manilkara) zapota* (sawo, sapodilla), *Prunus domesticum* (plam, plum), *Psidium longipes*, *Pyrus communis (*pir, pear*)*, *Syzygium* spp., *Terminalia catappa* (ketapang, indian almond), *Theobroma cacao* (kakao, cocoa), *Ziziphus jujuba*, *Annona reticulate* (fruit nona, custard apple), *Carissa macrocarpa*, *Eriobotrya japonica* (lokwat, loquat), *Dimocarpus litchii* (leci, litchii), *Mangifera indica* (mangga, mango), *Persea americana* (alpokat, avocado), *Prunus persica* (persik, peach), *Psidium guajava* (jambu biji, guava), *Vitis vinifera* (anggur, grapevine)			

48.	*Chaetocnema confinis* (Crotch); (= Chaetocnema flavicornis = Chaetocnema etiennei); Coleoptera: Chrysomelidae; flea beetle; sweet potato flea beetle; flea beetle.	(P): *Beta vulgaris* (bit, beetroot), *Calystegia sepium* (great bindweed), *Ipomoea aquatica* (swamp morning-glory*), Ipomoea batatas* (ubi jalar, sweet potato), *Ipomoea pandurata* (bigroot morningglory (USA)), *Lycopersicon esculentum* (Tomat, tomato), *Pharbitis purpurea* (Tall morning glory), *Zea mays* (jagung, maize), *Abutilon hybridum* (Indian mallow), *Acer negundo* (box elder), *Acer platanoides* (Norway maple), Aesculus (buckeye), *Amaranthus retroflexus* (redroot pigweed), *Arctium minus* (common burdock), *Avena sativa* (oats), *Beta vulgaris var. saccharifera* (sugarbeet), *Brassica*	II	buah (fruit), bibit tanaman (seedling)	Asia: China, Taiwan, Japan, Thailand, Vietnam Africa: Comoros, Gambia, Ghana, Madagascar, Malawi, Mauritius, Réunion, Senegal, Seychelles, South Africa America: Canada, USA, Brazil, Ecuador Oceania: Palau, French Polynesia

		napus var. napus (rape), *Brassica rapa ssp. oleifera* (turnip rape), *Catalpa bignonioides* (Southern catalpa), *Fragaria vesca* (wild strawberry), *Fraxinus americana* (white ash), *Glycine max* (kedelai, soyabean), Gossypium (kapas, cotton), *Helianthus tuberosus* (Jerusalem artichoke), Hibiscus (rosemallows), *Malus domestica* (apel, apple), *Medicago sativa* (lucerne), Mucuna (velvetbeans), *Nicotiana tabacum* (tembakau, tobacco), *Phaseolus lunatus* (lima bean), *Phaseolus vulgaris* (common bean), *Prunus americana* (aprikot, apricot), *Prunus avium* (sweet cherry), *Prunus na*			

		(common chokecherrytree), Rubus (blackberry, raspberry), Secale cereale (rye), *Solanum nigrum* (black nightshade), *Solanum tuberosum* (kentang, potato), *Tilia americana* (basswood), *Trifolium pratense* (purple clover), *Triticum aestivum* (gandum, wheat), *Vitis vinifera* (anggur, grapevine)			
49.	*Chilo orichalcociliellus* (Strand); *(=Chilotraea argyrolepia =Diatraea argyrolepia =Proceras argyrolepia=P.argyrolepidus =P.orichalcociliella =Chilo argyrolepia =Diatraea orichalcociliella)*; Lepidoptera: Crambidae; coastal stalk borer	(P): *Saccharum officinarum* (tebu, sugarcane), *Zea mays* (jagung, corn, maize), *Sorghum bicolor* (sorgum, sorghum), Poaceae, *Panicum miliaceum*	II	batang (stem), daun (leaf)	Africa : Kenya, Uganda, Burundi, Rwanda, Tanzania, Kenya, Madagascar

50.	*Cholus cattleyae* Champion; Coleoptera: Curculionidae; cattleya weevil	(P): anggrek (Orchidaceae)	II	tanaman (plant), batang (stem), daun (leaf) bunga (flower)	America : USA
51.	*Chrysobothris femorata* Olivier; Coleoptera: Buprestidae; flatheaded apple tree borer	(P): *Malus domesticum (*apel, apple*)*, *Prunus persica* (persik, peach), *Pyrus communis (*pir, pear*)*, other stone fruit (buah batu lainnya)	II	batang (stem), daun (leaf), buah (fruit)	America : Canada, USA
52.	*Chrysobothris mali* Horn.; Coleoptera: Buprestidae; Pacific flatheaded apple tree borer	(P): *Malus domesticum (*apel, apple*)*, *Prunus persica* (persik, peach), *Pyrus communis (*pear*)*, other stone fruit (buah batu lainnya)	II	batang (stem), daun (leaf), buah (fruit)	America : Canada, USA
53.	*Cicadulina bipunctella* (Melichar); *(=Cicadulina bipunctata bipunctella =C.bipunctella =C.bipunctella zeae =C.zeae =Gnathodus bipunctata)*; Hemiptera: Cicadellidae; maize leaf hopper, sorghum jassid	(P): *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, corn, maize), *Oryza sativa* (padi, paddy), *Sorghum bicolor* (sorgum, sorghum), *Saccharum officinarum* (tebu, sugarcane)	II	batang (stem), daun (leaf)	Africa : Egypt, Ethiopia Asia : Syria, Turkey Europe : Italy

54.	*Cicadulina latens* (Fenech).; Hemiptera: Cicadellidae; Maize leaf hopper	(P): *Zea mays* (jagung, corn, maize)	II	batang (stem), daun (leaf)	Africa : Cameroon, Ethiopia, Ghana, Gambia, Guinea, Ivory Coast, Kenya, Liberia, Mali, Nigeria, Senegal, Sudan, Somalia, Tanzania, Uganda.
55.	*Cicadulina mbila* (Naude); *(=Balclutha mbila);* Hemiptera: Cicadellidae; maize leaf hopper	(P): *Zea mays* (jagung, corn, maize) S): serealea (cerealia), *Saccharum officinarum* (tebu, sugarcane), *Triticum aestivum* (gandum, wheat), *Pennisetum glaucum*, *Avena sativa* (oat, oat), *Cynodon* spp., *Digitaria sanguinalis*, *Eleusine coracana*, *Zea perennis*, *Hordeum vulgare* (barli, barley), *Oryza glaberrima*, *Oryza sativa* (padi, paddy), *Panicum* spp., *Paspalum conjugatum*, *Pennisetum*	II	batang (stem), daun (leaf)	Africa : Angola, Botswana, Burkina Faso, Cameroon, Cape Verde, Congo, Ethiopia, Gambia, Kenya, Mauritius, Mozambique, Namibia, Nigeria, South Africa, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe

		spp., *Sorghum bicolor* (sorgum, sorghum)			
56.	*Cicadulina storeyi* China; *(=Cicadulina nicholsi=C.triangula)*; Hemiptera: Cicadellidae; maize leaf hopper	(P): *Zea mays* (jagung, corn, maize), Poaceae, *Pennisetum glaucum*, *Sorghum bicolor* (sorgum, sorghum)	II	batang (stem), daun (leaf)	Africa : Ethiopia, Nigeria, Togo, Northwest Africa, Zimbabwe
57.	*Coccus alpinus* de Lotto; Hemiptera: Diaspididae; soft green scale	(P): *Syzygium aquea* (jambu air, star apple), *Psidium guajava* (jambu biji, guava), *Citrus* spp.(jeruk, orange), *Coffea* spp. (kopi, coffee)	II	batang (stem), daun (leaf), buah (fruit)	Africa : Burundi, Kenya, Rwanda, Tanzania, Uganda.
58.	*Conotrachelus nenuphar* (Herbst.); *(=Curculio nenuphar)*; Coleoptera: Curculionidae; plum curculio, American, plum weevil, peach curculio	(P): *Prunus persica* (persik, peach), *Prunus americana* (aprikot, apricot), *Prunus domesticum* (plam, plum), *Prunus cerrasus* (ceri, cherry), other stone fruit (buah batulainnya)	II	buah (fruit), tanah (soil)	America : Canada, USA

		(S): *Pyrus communis* (pir, pear), *Malus domesticum* (apel, apple), *Vaccinium* spp., *Ribes* spp., *Cydonia oblonga* (kwinsi, quince), *Diospyros kaki* (kesemek, persimmon), *Vitis vinifera* (anggur, grapevine)			
59.	*Corythuca marmorata* (Uhler); Hemiptera: Tingidae; *Chrysant hemum* lace bug	(P): *Chrysanthemum* spp. (krisan, chrysant)	II	batang (stem), daun (leaf), bunga (flower)	America : USA
60.	*Crioceris asparagi* (L.); Coleoptera: Chrysomelidae; Asparagus beetle	(P): *Asparagus officinalis* (asparagus, asparagus)	II	batang (stem), daun (leaf), bunga (flower), tanah (soil)	America : Canada, USA.
61.	*Crioceris duodecimpunctata* (L.); *(=Chrysomela duodecimpunctata =Lema duodecimpunctata)*; Coleoptera: Chrysomelidae; spotted Asparagus beetle, twelve-spotted Asparagus beetle	(P): *Asparagus officinalis* (asparagus, asparagus)	II	batang (stem), daun (leaf), bunga (flower)	America : Canada, North America, USA Europe : France, Italy, Netherland

62.	*Cryptophlebia leucotreta* (Meyrick); *(=Argyroploce leucotreta =Cryptophlebia roerigii =Thaumatotibia roerigii =Olethreutes leucotreta=Thaumatotibia leucotreta)*; Lepidoptera: Tortricidae; false codling moth, *Citrus* codling moth, orange codling moth	(P): *Zea mays* (jagung, corn, maize), *Citrus* spp.(jeruk, orange), *Camellia sinensis* (teh, tea), *Persea americana* (alpokat, avocado), *Psidium guajava* (jambu biji, guava), *Averrhoa carambola* (belimbing, carambola, star-fruit), *Abelmoschus moschatus* (okra, lady's finger), *Ananas comosus* (nenas, pineapple), *Annona muricata* (sirsak, soursop), *Coffea* spp. (kopi, coffee), *Dimocarpus litchii* (leci, lychee), *Capsicum annuum* (cabai, hot pepper, chilies, red pepper), *Mangifera indica* (mangga, mango), *Prunus persica* (persik, peach), *Sorghum bicolor* (sorgum, sorghum), *Ceiba*	II	buah (fruit), bunga (flower)	Africa : Angola, Benin, Burkina Faso, Burundi, Cameroon, Cape Verde, Central Africa, Chad, DR Congo, Ivory Coast, Erythrea, Ethiopia, Gambia, Ghana, Kenya, Madagascar, Malawi, Mali, Mauritius, Mozambique, Niger, Nigeria, Rwanda, St. Helena, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe

		pentandra (kapuk randu, kapok), *Olea europea subsp. europea* (zaitum, olive), *Punica granatum* (delima, pomegranate), *Macadamia ternifolia*			
63.	*Cydia pomonella* (L).; *(=Laspeyresia pomonella =Carpocapsa pomonella =C.pomonana =Enarmonia pomonella =Phalaena pomonella)*; Lepidoptera: Tortricidae; codling moth	(P): *Malus domesticum (*apel, apple*)*, *Pyrus communis (*pir, pear*)*, *Prunus americana* (aprikot, apricot), *Prunus persica* (persik, peach), *Prunus domesticum* (plam, plum), *Prunus cerrasus* (ceri, cherry), *Prunus dulcis* (almon, almond), *Zea mays* (jagung, corn, maize)	II	buah (fruit)	Asia : Afghanistan, Armenia, Azerbaijan, China, Georgia, India, Iran, Iraq, Israel, Jordan, Kazakhstan, Kyrgyzstan, Lebanon, Pakistan, Syria, Tajikistan, Turkey, Turkmenistan, Uzbekistan Africa : Algeria, Egypt, Libya, Mauritius, Morocco, South Africa,Tunisia America : Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Mexico, Peru, USA Oceania : Australia, New Zealand

64.	*Cylas puncticollis* (Boh.); *(=Cylas compressus)*; Coleoptera: Curculionidae; African sweet potato weevil	(P*): Ipomoea batatas* (ubi jalar, sweet potato) (S): *Coffea* spp. (kopi, coffee), *Sesamum indicum* (Sesamum indicum (wijen, sesame), *Vigna cylindricaI (*kacang tunggak, long bean), *Zea mays* (jagung, corn, maize)	II	batang (stem), daun (leaf), umbi (tuber/corm)	Africa : Burundi, Cameroon, Cape Verde, Central Africa, Chad, DR Congo, Congo, Ethiopia, Guinea, Ivory Coast, Kenya, Madagascar, Malawi, Mali, Mozambique, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, Sudan, Tanzania, Uganda, Zambia
65.	*Delia antiqua* (Meigen); *(=Anthomyia antique =A.ceparum =Chortophila antiqua =Delia cepetorum =Hylemya antiqua =H.ceparum =Leptohylemyia antique =Pegomyia ceparum =P.cepetorum =Phorbia ceparum =P.cepetorum = P.antiqua)*; Diptera: Anthomyiidae; *onion* maggot, *onion* fly	(P): *Allium ascalonicum* (bawang merah, shallot), *Allium* porrum (bawang prei, leek) (S): *Allium sativum* (bawang putih, garlic), *Allium* spp.	II	batang (stem), daun (leaf), umbi (tuber/corm), media tanam (planting medium), tanah (soil)	Africa : Egypt America : Antigua and Barbuda, Brazil, Canada, Colombia, Mexico, USA Asia : Armenia, China, Georgia, India, Iran, Iraq, Israel, Japan, Kazakhstan, Korea, Mongolia, Philippines,

					Turkey Europe : Austria, Belgium, Bulgaria, Cyprus, Czech, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia
66.	*Delia arambourgi* (Seguy); *(=Hylemya arambourgi)*; Diptera: Anthomyiidae; barley fly	(P): *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, corn, maize), *Saccharum officinarum* (tebu, sugarcane), serealia lainnya (other cerealia)	II	batang (stem), daun (leaf), akar (root), media tanam (planting medium), tanah (soil)	Africa : Ethiopia

67.	*Delia radicum* (Linnaeus); *(=Anthomyia brassicae =A.radicum =Aricia villipes =Chortophila appendiculata =C.floccosa =C.frontalis =Delia brassicae =Eustalomyia brassicae =Hylemya brassicae =H.brassicae =Musca radicum =Pegomya brassicae =Erioischia brassicae =Chortophila brassicae =Phorbia brassicae)*; Diptera: Anthomyiidae; cabbage maggot, cabbage root fly, radish fly	(P): *Brassica oleracea capitata* (kubis, cabbage), Cruciferae (S): *Matthiola* spp., *Raphanus sativus* (lobak, radish)	II	batang (stem), daun (leaf), akar (root), media tanam (planting medium), tanah (soil)	Africa : Algeria, Morocco America : Canada, USA Asia : Armenia, China, Georgia, Israel, Kazakhstan, Turkey, Uzbekistan Europe : Austria, Belarus, Belgium, Bulgaria, Czech, Denmark, Estonia, Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Hungary, Iceland, Ireland, Italy, Latvia, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Ukraine

68.	*Delia platura* (Meigen); *(=Anthomyia cana =A.corelia =A.deceptiva =A.diversa =A.funesta =A.lanicrus =A.perrima =A.platura =A.platygaster =A.radicum* var. *calopteni =A.raphani =A.rubifrons =A.sergia =A.tinia =A.trifilis =A.tyana =A.viana =A.zeas =Aricia fusciceps =Chortophila cana =C.deceptiva =C.prisca =C.rubifrons =C.spinipes =C.trifilis =Delia cilicrura =D.prisca =Dialyta cupreifrons =Eriphia marginata =Homalomyia rava =Hylemya cana =H.deceptiva =H.fusciceps =H.platura =H.prisca =H.spinipes =H.trifilis =Pegomyia fusciceps =Phorbia cilicrura =P.fusciceps =P.novazealandica =P.prisca =P.spinipes =H.cilicrura =Chortophila cilicrura =Phorbia platura)*; Diptera: Anthomyiidae; corn seed maggot , bean seed fly, seed potato maggot	(P): *Gossypium hirsutum*, *Hordeum vulgare* (barli, barley), *Juniperus na*, *Larix laricina*, *Phaseolus lunatus*, *Raphanus sativus* (lobak, radish), *Trifolium repens*, *Vicia faba*, *Allium ascalonicum* (bawang merah, shallot), *Asparagus officinalis* (asparagus, asparagus), *Brassica oleracea* var. *botrytis* (kembang kol, cauliflower), *Brassica oleracea capitata* (kubis, cabbage), *Citrullus lanatus*, *Citrullus vulgaris* (semangka, watermelon), *Cucumis sativus* (mentimun, cucumber), *Glycine max* (kedelai, soybean), *Pinus merkusii (tusam, pinetree) albus*, *Nicotiana tabacum* (tembakau, tobacco), *Phaseolus coccineus*,	II	benih/biji (seed/grain), akar (root), media tanam (planting medium), tanah (soil)	Africa : Algeria, Egypt, Ethiopia, Kenya, Libya, Madagascar, Morocco, Rwanda, St. Helena, South Africa, Sudan, Tanzania, Tunisia, Uganda, Zimbabwe America : Argentina, Bermuda, Bolivia, Brazil, Canada, Chile, Colombia, Ecuador, Greenland, Mexico, Peru, USA, Uruguay, Venezuela Asia : Azerbaijan, China, Georgia, India, Iran, Iraq, Israel, Japan, Kazakhstan, Korea, Lebanon, Nepal, Pakistan, Saudi Arabia, Sri Lanka, Syria, Turkey, Uzbekistan, Yemen

		Vigna spp. (buncis, cowpea), *Pisum sativum* (kapri, sweet pea), *Solanum tuberosum* (kentang, potato), *Spinacia oleracea (*selada, spinach), *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, corn, maize)			Europe : Albania, Austria, Belarus, Belgium, Bulgaria, Croatia, Cyprus, Czech, Denmark, Faroes, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovenia, Slovakia, Spain, Sweden, Switzerland, Ukraine,UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia

69.	*Diabrotica undecimpunctata* (Mannerheim); *(=Chrysomela duodecimpunctata =Crioceris sexpunctata =Diabrotica duodecimpunctata =D.soror =D.undecimpunctata* subsp. Howardi Barber*)*; Coleoptera: Chrysomelidae; 12-spotted cucumber beetle, southern corn rootworm, spotted cucumber beetle, western spotted cucumber beetle	(P): *Cucumis melo* (melon, melon), *Cucumis sativus* (mentimun, cucumber), *Citrullus vulgaris* (semangka, watermelon), *Cucurbita pepo* (labu kuning, zucchini) (S): *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Glycine max* (kedelai, soybean), *Ipomoea batatas* (ubi jalar, sweet potato), *Vigna* spp. (buncis, cowpea), *Zea mays* (jagung, corn, maize)	II	batang (stem), akar (root), daun (leaf), bunga (flower), media tanam (planting medium)	America : Canada, El Salvador, Guatemala, Mexico, Nicaragua, USA
70.	*Diaprepes abbreviatus* (L.); *(=Curculio abbreviatus =Diaprepes festivus =D.irregularis =D.quadrilineatus =Exophthalmus abbreviatus)*; Coleoptera: Curculionidae; *Citrus* weevil, sugarcane	(P): *Citrus* spp.(jeruk, orange), *Zea mays* (jagung, corn, maize), *Saccharum officinarum* (tebu, sugarcane), *Manihot esculenta* (ubi kayu, cassava), *Nephelium lappaceum* (rambutan, rambutan)	II	Akar (root), batang (stem), daun (leaf)	America : Antigua and Barbuda, Barbados, Cuba, Dominica, Guyana France, Grenada, Guadeloupe, Haiti, Jamaica, Martinique, Montserrat, Puerto

	rootstalk borer weevil, *Citrus* weevil, sugarcane rootstalk borer weevil, West Indian weevil, West Indian sugarcane root borer, West Indian weevil	S): *Psidium guajava* (jambu biji, guava), kacang, *Coffe a*spp. (kopi, coffee), *Ipomoea batatas* (ubi jalar, sweet potato), *Mangifera indica* (mangga, mango), *Achras (= Manilkara) zapota* (sawo, sapodilla), *Musa* spp. (pisang, banana), *Persea americana* (alpokat, avocado), lima bean, *Phoenix dactylifera* (kurma, dates-palm), *Capsicum annuum* (cabai, hot pepper, chilies, red pepper), *Solanum tuberosum* (kentang, potato), *Sorghum bicolor* (sorgum, sorghum), *Theobroma cacao* (kakao, cocoa), *Dioscorea* spp.			Rico, St. Kitts & Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, USA

71.	*Diaspis boisduvalii* (Signoret); *(=Aulacaspis boisduvalii)*; Hemiptera: Diaspididae; boisduval scale, coconut snow scale, orchid, scale, pinapple scale	(P): *Ananas comosus* (nenas, pineapple), *Cocos nucifera* (kelapa, coconut), *Musa* spp. (pisang, banana)	II	batang (stem), daun (leaf)	America : Antigua and Barbuda, Barbados, Bermuda, Dominica, Guyana France, Guadelope, Guyana, Jamaica, Martinique, Mexico, Puerto Rico, St. Kitts & Nevis
72.	*Diaspidiotus perniciosus* (Comstock); (*=Aonidia fusca =Aonidiella fusca =A.perniciosa =Aspidiotus (Comstockaspis) perniciosus =A.(Diaspidiotus) andromelas =A.(Diaspidiotus) perniciosus =A.(Hemiberlesiana) perniciosus =A.perniciosus =A.albopunctatus =A.fuscus =A.perniciosus =Comstockaspis perniciosa =Diaspidiotus perniciosus =Hemiberlesia perniciosa =Quadraspidiotus perniciosus =Q.perniciosus*); Hemiptera: Coccidae; California scale,Chinese scale, perniciosus scale, San José scale	(P): *Malus domesticum (*apel, apple*), Vitis vinifera* (anggur, grapevine), *Prunus cerrasus* (ceri, cherry), *Prunus persica* (persik, peach), *Pyrus communis (*pir, pear*), Prunus persica nectarina* (nektarin, nectarine) *Citrus* spp.(jeruk, orange), buah batu (stone fruit)	II	batang (stem), daun (leaf), buah (fruit)	Africa : Algeria, Angola, DR Congo,Congo, Morocco, South Africa,Tunisia, Zimbabwe Asia : Afghanistan, Armenia, Azerbaijan, Bangladesh, Bhutan, Brunei, China, Georgia, India, Iran, Iraq, Japan, Kazakhstan, Korea, Nepal, Pakistan, Tajikistan, Thailand, Turkey, Uzbekistan, Vietnam, Yemen Europe : Albania,

					Austria, Belgium, Bulgaria, Croatia, Czech, France, Germany, Greece, Hungary, Italy, Moldova, Norway,Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Switzerland, Ukraine, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia America : Argentina, Bolivia, Brazil, Canada, Chile, Cuba, Ecuador, Mexico, Paraguay, Peru, USA, Uruguay, Venezuela Oceania : Australia, New Zealand

73.	*Diatraea saccharalis* (Fab).; *(=Chilo obliteratellus =Crambus leucaniellus =C.lineosellus =C.sacchari =Diatraea continens =D.crambidoides =D.pedidocta =D.saccharalis va grenadensis =D.sacchari =D.sacchari* f. *brasiliensis =Phalaena saccharalis =D.obliteratella =D.obliteratellus =D.incomparella)*; Lepidoptera: Crambidae; sugarcane stalk borer, sugarcane borer, sugarcane moth borer, American sugarcane borer, small moth borer, small sugarcane moth borer	(P): *Saccharum officinarum* (tebu, sugarcane) (S): *Oryza sativa* (padi, paddy), *Sorghum bicolor* (sorgum, sorghum), *Zea mays* (jagung, corn, maize)	II	batang (stem), daun (leaf)	America : Antigua and Barbuda, Argentina, Barbados, Belize, Bolivia, Brazil, Virgin Islands, Colombia, Costa Rica, Cuba, Dominica, Ecuador, El Salvador, France Guiana, Grenada, Guadeloupe,Guatemala , Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, St. Kitts & Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, USA, Uruguay, Venezuela

74.	*Diopsis longicornis* (Macquart); *(=Diopsis thoracica)*; Diptera: Diopsidae; stalk-eyed fly	(P): *Oryza sativa* (padi, paddy)	II	batang (stem), daun (leaf)	Africa: Cameroon, Ivory Coast, Ghana, Guinea, Kenya, Malawi, Nigeria, Sierra Leone, Togo, Northwest Africa, Zimbabwe Asia : India, Philippines
75.	*Diorymerellus laevimargo* (Champion); Coleoptera: Curculionidae; orchid weevil	(P): Orchidaceae (anggrek, orchid)	II	batang (stem), daun (leaf), bunga (flower)	America : Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana
76.	*Diparopsis castanea* (Hamp).; (= *Diparopsis watersi.* Rothschild) Lepidoptera: Noctuidae; red bollworm, red Sudan bollworm, red Sudan cotton worm, red cotton bollworm	(P): *Gossypium barbadens* (kapas, cotton) (S): *Cefenfuegosia heldebrandii*; *Gossypioides kirkii*; *Thespesia* spp.	II	batang (stem), daun (leaf), buah (fruit), benih/ biji (seed/grain)	Africa: Botswana, Malawi, Mozambique, Nigeria, South Africa, Swaziland, Tanzania, Zambia, Zimbabwe.

77.	*Distantiella theobromae* (Distant.); Hemiptera: Miridae; cocoa capsid, brown capsid, cocoa capsid stem sapper	(P): *Theobroma cacao* (kakao, cocoa), *Ceiba pentandra* (kapuk randu, kapok) (S): *Aandsonia digitata*, *Citrus* spp.(jeruk, orange)	II	batang (stem), daun (leaf), buah (fruit)	Africa : Cameroon, Congo, Ivory Coast, Ghana, Nigeria, Sierra Leonne, Togo
78.	*Elanda saccharina* (Wlk).; Lepidoptera: Pyralidae; sugarcane stalk borer	(P): *Saccharum officinarum* (tebu, sugarcane) (S): *Oryza sativa* (padi, paddy), *Sorghum bicolor* (sorgum, sorghum), *Zea mays* (jagung, corn, maize)	II	batang (stem), daun (leaf)	Africa : Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Chad, DR Congo, Congo, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea-Bissau, Guinea, Ivory Coast, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Zimbabwe Asia : Saudi Arabia

79.	*Empoasca facialis* (Jacobi); *(=Jacobiella facialis =Chlorita facialis =Chlorita fascialis);* Hemiptera, Cicadellidae; green leafhopper	(P): *Solanum melongena* (terung, eggplant aubergine)	II	batang (stem), daun (leaf), buah (fruit)	Africa : Congo, Gambia, Ghana, Kenya, Mauritania, Mozambique, Nigeria, Senegal, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, DR Congo, Zimbabwe Asia : Cambodia, India Oceania : Australia, Fiji
80.	*Empoasca lybica* (De Bergevin); *(=Jacobiasca lybica =Austroasca lybica =Chlorita lybica =C.signata =Empoasca benedettoi =E.signata =Jacobiasca signata)*; Hemiptera: Cicadellidae; cotton jassid, green leafhopper (GLH)	(P): *Gossypium barbadens* (kapas, cotton), *Lycopersicum esculentum* (tomat, tomato), *Solanum tuberosum* (kentang, potato), *Cajanus cajan* (kacang gude, pigeon pea), *Vitis vinifera* (anggur, grapevine)	II	batang (stem), daun (leaf), buah (fruit)	Africa : Algeria, Central Africa, DR Congo, Egypt, Erythrea, Kenya, Libya, Mauritius, Morocco, Mozambique, Nigeria, Senegal, Somalia, South Africa, Sudan, Tanzania, Tunisia, Uganda America : Argentina

					Asia : India, Iran, Israel, Lebanon, Saudi Arabia, Turkey, Yemen Europe: Albania, Italy, Portugal, Spain
81.	*Empoasca onukii* (Mats).; Hemiptera: Cicadellidae; tea green leafhopper	(P): *Camellia sinensis* (teh, tea)	II	batang (stem), daun (leaf)	Asia: Japan, Thailand
82.	*Epicauta albovittata* (Gestro); Coleoptera: Meloidae; stripped blister beetle	(P): *Capsicum annuum* (cabai, hot pepper, chilies, red pepper), *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Glycine max* (kedelai, soybean), solanaceae	II	batang (stem), daun (leaf), buah (fruit)	Africa : Kenya
83.	*Epicauta vittata* (Fabricius); Coleoptera: Meloidae; stripped blister beetle	(P): *Solanum tuberosum* (kentang, potato), *Medicago sative (*lucerne).	II	batang (stem), daun (leaf), buah (fruit)	Africa : DR Congo

84.	*Epilachna similis* (Thunb); Coleoptera: Coccinellidae; maize ladybird beetle, cereal ladybird	(P): *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, corn, maize), *Sorghum bicolor* (sorghum), *Pennisetum* spp. (S): *Oryza sativa* (padi, paddy)	II	batang (stem), daun (leaf)	Africa : Ghana, Kenya, Nigeria, Senegal, South Africa, Sudan, Tanzania, Uganda, Zimbabwe
85.	*Epilachna varivestis* (Mulsant).; *(=Epilachna corrupta =E.maculiventris)*; Coleoptera: Coccinellidae; Mexican bean beetle, bean ladybeetle, bean ladybird	(P): *Glycine max* (kedelai, soybean), leguminosae lainnya (other legume)	II	batang (stem), daun (leaf)	Asia : Japan America : Canada, Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, USA
86.	*Eulecanium tiliae* (Linnaeus); (=*Eulecanium coryli = Eulecanium mali = Lecanium coryli = Physokermes coryli = Coccus coryli = Coccus tiliae = Coccus mali = Parthenolecanium coryli = Eulecanium ibericum = Coccus capreae = Coccus alni = Coccus*	(P): *Acer campestre* (field maple), *Aesculus hippocastanum* (buckeye), *Crataegus monogyna* (hawthorn), *Cydonia oblonga* (quince), Ficus , Fraxinus (ashes), *Malus domestica* (apple), *Prunus domestica* (plum), *Prunus*	II	buah (fruit), bibit tanaman (seedling)	Europe: Bulgaria, Cyprus, Czech, Denmark, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece,

	salicum = Coccus fuscus = Coccus aceri = Coccus aceris campestris = Coccus pyri = Coccus rubi = Coccus xylostei = Calypticus fasciatus = Lecanium juglandis = Coccus aesculi = Lecanium fasciatum = Lecanium rubi = Lecanium genevense = Lecanium alni = Lecanium pyri = Lecanium aesculi = Lecanium berberidis = Lecanium cerasi = Lecanium variegatum = Lecanium fuscum = Lecanium (Eulecanium) aesculi = Lecanium (Eulecanium) capreae = Lecanium (Eulecanium) cerasi = Lecanium (Eulecanium) genevense = Lecanium (Eulecanium) juglandis, Lecanium (Eulecanium) rubi = Lecanium (Eulecanium) variegatum = Eulecanium fuscum = Lecanium (Saissetia) capreae = Lecanium (Eulecanium) hoferi = Lecanium websteri mirabilis = Eulecanium	*persica* (peach*), Prunus salicina* (Japanese plum), *Pyrus communis* (European pear), *Vaccinium myrtillus* (blueberry), *Vitis vinifera* (anggur, grapevine)			Hungary, Ireland, Italy, Latvia, Malta, Moldova, Netherlands, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Ukraine, UK (Scotland) Asia: Armenia, Azerbaijan, Georgia, India, Iran, Iraq, Israel, Pakistan, Turkey America: Canada , USA

	aceris = Eulecanium aesculi = Eulecanium alni = Eulecanium capreae = Eulecanium cerasi = Eulecanium fasciatum = Eulecanium pyri (Schrank) = Eulecanium rubi = Eulecanium variegatum = Eulecanium websteri mirabile = Eulecanium curtisi = Lecanium (Globulicoccus) fuscum = Eulecanium emerici = Globulicoccus fuscus = Lecanium mali = Eulecanium coryli cimbricus = Eulecanium gyrcanicum); Hemiptera: Coccidae; nut scale; thorn scale				
87.	*Eumerus tuberculatus* (Rond).; Diptera: Syrphidae; lesser bulb fly	(P): *Allium cepa* (bawang bombai, onion), *Narcissus* spp. (narsisus, narcissus), *Crinum asiaticum* (bakung, lily). (S): *Allium ascalonicum* (bawang merah, shallot), *Allium sativum* (bawang putih, garlic), *Irish* spp.,	II	akar (root), batang (stem), daun (leaf), umbi (tuber/corm), tanah (soil)	America : USA

		Lilia spp., *Pastinaca sativa (*parsnip, parsnip), *Solanum tuberosum* (kentang, potato), *Hippeastrum* spp. (amarilis, amaryllis), *Brassica oleracea capitata* (kubis, cabbage), *Calla elliottiana*, *Eurycies* spp., *Galtonia spp.*, *Gladiolus* spp. , *Scilla* spp., *Sprekelia*, *Allium ascalonicum* (bawang merah, shallot)			
88.	*Eupalamides cyparissias* (Fab).; *(=Castnia daedalus =Castnia dedalus =Lapaeumides dedalus =L.daedalus =Eupalamides dedalus =Papilio cyparissias =P.dedalus)*; Lepidoptera: Castniidae; oilpalm borer, coconut moth borer, stem borer and bunch stalk	(P): *Cocos nucifera* (kelapa, coconut), *Elaeis guineensis* (kelapa sawit, oilpalm)	II	batang (stem), daun (leaf)	America : Guyana France, Guyana, Panama, Peru, Suriname

89.	*Euscepes postfasciatus* (Fairm.); *(=Batatarhynchus destructor =Cryptorhynchus batatae =C.postfasciatus =Euscepes batatae =Hyperomorpha squamosa)*; Coleoptera: Curculionidae; West 70ndian sweet potato weevil, scarabee weevil, small sweet potato weevil	(P): *Ipomoea batatas* (ubi jalar, sweet potato), *Pharbitis nil* (S): *Ipomoea aquatica* (kangkung, water spinach)	II	batang (stem), akar (root)	Asia : Japan America : Antigua and Barbuda, Barbados, Bermuda, Brazil, Virgin Islands, Cuba, Dominica, Guyana France, Grenada, Guadeloupe, Guyana, Haiti, Jamaica, Martinique, Montserrat, Paraguay, Peru, Puerto Rico, St. Kitts & Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, USA, Venezuela Oceania : Palau, Cook Island, Micronesia, Fiji, France Polynesia, Guam, Kiribati, New Caledonia, Norfolk Island, Northern Mariana Island, Pitcairn Island, Samoa, Tonga, Vanuatu, Wallis-Futuna

90.	*Eutinobothrus brasiliensis* (Hambleton); *(=Gasterocercodes brasiliensis =G.gossypii)*; Coleoptera: Curculionidae; Brazilian cotton borer	(P): *Gossypium barbadens* (kapas, cotton) (S): *Hibiscus* spp.	II	batang (stem), akar (root)	America : Argentina, Brazil, Paraguay
91.	*Frankliniella occidentalis* (Pergande); *(=Euthrips helianthi =Euthrips occidentalis =E.tritici* var. *californicus =Frankliniella californica =F.canadensis =F.chrysanthemi =F.claripennis =F.conspicua =F.dahliae =F.dianthi =F.nubila =F.occidentalis* f. *brunnescens =F.occidentalis* f. *dubia =F.syringae =F.tritici maculata =F.tritici* var. *moultoni =F.umbRosa =F.venusta =F.helianthi =F.moultoni =F.trehernei)*; Thysanoptera, Thripidae; western flower thrips, alfalfa thrips, flower thrips, western (USA) grass thrips	(P): *Gossypium barbadens* (kapas, cotton), *Allium ascalonicum* (bawang merah, shallot), *Brassica oleracea capitata* (kubis, cabbage), *Fragaria vesca* (*Fragaria vesca* (arbei, strawberry), Cucurbitaceae, Orchidaceae (anggrek, orchid), *Amaranthus palmeri (*palmer amaranth*)*, *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Beta vulgaris* (bit, beetroot), *Begonia* spp., *Carthamus tinctorius*, *Citrus x* paradise (grapefruit), *Capsicum annuum*	II	batang (stem), daun (leaf), bunga (flower)	Africa : Kenya, Nigeria, South Africa, Swaziland, Zimbabwe Asia :India, Israel, Japan, Korea, Kuwait, Malaysia, Sri Lanka, Turkey America : Argentina, Brazil, Canada, Chile, Colombia, Costa Rica, Dominica, Ecuador, Guatemala, Guyana, Martinique, Mexico, Peru, Puerto Rico, USA Europe : Albania, Austria, Belgium, Bulgaria, Croatia,

		(paprika, bell-pepper), *Cyclamen* spp., *Dahlia* spp., *Daucus carota* (wortel, carrot), *Dianthus caryophyllus* (anyelir, carnation), *Euphorbia pulcherrima*, *Ficus carica* (ara, fig), *Fuchsia* sp., *Gerbera jamesonii*, *Geranium* spp., *Gladiolus hybrids*, *Gypsophila*, *Hibiscus*, *Impatiens*, *Kalanchoe*, *Lactuca sativa* (sla, lettuce), *Limonium sinuatum*, *Lisianthus* spp., *Lathyrus odoratus*, *Leucaena leucocephala* (lamtoro, wild tamarind), *Lycopersicum esculentum* (tomat, tomato), *Malus domesticum (*apel, apple*)*, *Medicago sativa*, *Petroselinum crispum* (parslei, parsley), *Vigna* spp. (buncis, cowpea), *Pisum sativum* (kapri, sweet pea), *Prunus*			Cyprus, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Macedonia, Malta, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, UK Oceania : Australia, New Zealand

		americana (aprikot, apricot), *Prunus domesticum* (plam, plum), *Prunus persica* var. *nucipersica* (nektarin, nectarine), *Prunus persica* (persik, peach), *Purshia tridentata*, *Raphanus raphanistrum*, *Rhododendron* spp. (azalea), *Rosa* spp. (mawar, rose), *Salvia spp*., *Secale cereale* (rye) , *Sinapis arvensis*, *Sinningia speciosa*, *St.paulia ionantha*, *Solanum melongena* (terung, eggplant), *Sonchus* spp., *Syzygium aquea* (jambu air, star apple), *Trifolium* spp., *Triticum aestivum* (gandum, wheat), *Vitis vinifera* (anggur, grapevine), *Zinnia* spp.			

92.	*Graphognathus leucoloma* (Boh).; *(=Naupactus leucoloma = Pantomorus leucoloma)*; Coleoptera: Curculionidae; white fringed weevil, whitefringed beetle	(P): *Solanum tuberosum* (kentang, potato), *Trifolium repens*, pastures, *Medicago sativa* (alfalfa, lucerne), *Arachys hypogaea* (kacang tanah, groundnut, peanut) (S): *Allium ascalonicum* (bawang merah, shallot), *Ipomoea batatas* (ubi jalar, sweet potato)	II	batang (stem), daun (leaf), buah (fruit)	Africa : South Africa America : Argentina, Brazil, Chile, Peru, USA, Uruguay Oceania : Australia, New Zealand
93.	*Grapholitha molesta* (Busck).; *(=Cydia molesta =Laspeyresia molesta =Carpocapsa molesta)*; Lepidoptera: Tortricidae; oriental fruit moth	(P): *Prunus persica* (persik, peach), *Prunus americana* (aprikot, apricot), *Prunus persica* var. *nucipersica* (nektarin, nectarine). (S): *Cydonia oblonga* (kwinsi, quince), *Malus domesticum (*apel, apple*)*, *Prunus domesticum* (plam, plum), *Prunus dulcis* (almon, almond*)*, *Prunus cerrasus* (ceri,	II	batang (stem), buah (fruit)	Africa : Mauritius, Morocco, South Africa America : Argentina, Brazil, Canada, Chile, Mexico, USA, Uruguay Asia : China, Japan, Korea, Syria Europe : Widespread Oceania : Australia, New Zealand

		cherry), *Pyrus communis (*pear*)*, Buah batu lain (other stone fruits), *Malus* sp., *Eriobotrya japonica* (lokwat, loquat)			
94.	*Grapholitha packardi* (Zeller); *(=Cydia packardi =Enarmonia packardi =Enarmonia pyricolana =Laspeyresia packardi =L.pyricolana =Steganoptycha pyricolana)*; Lepidoptera: Tortricidae; cherry fruitworm	(P): *Prunus cerrasus* (ceri, cherry) (S): *Cydonia oblonga*, *Malus domesticum (*apel, apple*)*, *Prunus domesticum* (plam, plum), *Prunus persica* (persik, peach), *Pyracantha*, *Pyrus communis (*pir, pear*)*, *Rosa* spp., *Vaccinium corymbosum*	II	batang (stem), buah (fruit)	America : Canada, Mexico, USA
95.	*Grapholita prunivora* (Walsh).; *(=Cydia prunivora =Laspeyresia prunivora =Semasia prunivora =Enarmonia prunivora);* Lepidoptera: Tortricidae; lesser apple worm, plum moth	(P): *Malus domesticum (*apel, apple*)*, *Prunus domesticum* (plam, plum), other stone fruit (buah batu lainnya) (S): Amelanchier, *Prunus americana* (aprikot, apricot), *Prunus cerrasus*	II	batang (stem), daun (leaf), bunga (flower), buah (fruit), media tanam (planting medium)	America : Canada, USA

		(ceri, cherry), *Prunus persica* (persik, peach), *Pyrus communis (*pir, pear*),* *Rosa* spp. (mawar, rose)			
96.	*Harmolita grandis* (Riley); Lepidoptera: Tortricidae; wheat strand worm	(P): *Triticum aestivum* (gandum, wheat), *Hordeum vulgare* (barli, barley), *Avena sativa* (oat, oats), *Glycine max* (kedelai, soybean)	II	batang (stem), daun (leaf), tanah (soil)	America : USA
97.	*Harmolita tritici* (Fitch.); Lepidoptera: Tortricidae; wheat joint worm	(P): *Triticum aestivum* (gandum, wheat), *Hordeum vulgare* (barli, barley), *Avena sativa* (oat, oats), *Glycine max* (kedelai, soybean)	II	batang (stem), daun (leaf), tanah (soil)	America : USA Asia : West Asia Europe : Russia
98.	*Helopeltis anacardii* (Miller); Heteroptera: Miridae; cashew helopeltis	(P): *Anacardium occidentale* (jambu mete, cashew-nut)	II	batang (stem), daun (leaf), bunga (flower)	Africa : Tanzania
99.	*Helopeltis bergrothi* (Reut).; *(=Helopeltis bergrothi =H.bergrothi flavescens*	(P): *Theobroma cacao* (kakao, cocoa)	II	batang (stem), daun (leaf), bunga (flower)	Africa : Angola, Benin, Burundi, Cameroon, Central Africa, DR

	=H.bergrothi nigripes =H.bergrothi rubrinervis); Heteroptera: Miridae; helopeltis bug, cacao-mosquito, tea-bug, tea-mosquito, cacao mosquito	(S): *Anacardium occidentale* (jambu mete, cashew-nut), *Camellia sinensis* (teh, tea), kina, *Gossypium barbadens* (kapas, cotton), *Manihot esculenta* (ubi kayu, cassava), *Ricinus communis* (jarak, castor-oil)			Congo., Ivory Coast, Guinea Equator, Gabon, Guinea, Mozambique, Niger, Nigeria, Rwanda, Togo Europe : Spain
100.	*Helopeltis schoutedeni* (Reut).; *(=Helopeltis sanguineus =H.schoutedeni rubra =H.schoutedeni vanderysti)*; Heteroptera: Miridae; tea mosquito, cotton bug, cacao-mosquito, tea-bug, cotton helopeltis, cotton helopeltis	(P): *Gossypium barbadens* (kapas, cotton), *Anacardium occidentale* (jambu mete, cashew-nut), *Ricinus communis* (S): *Camellia sinensis* (teh, tea), *Mangifera indica* (mangga, mango)	II	batang (stem), daun (leaf), buah (fruit)	Africa : Angola, Burundi, Cameroon, Central Africa, Chad, DR Congo, Ivory Coast, Ethiopia, Gabon, Ghana, Guinea, Kenya, Liberia, Malawi, Mali, Mozambique, Nigeria, Rwanda, Sao Tome & Principe, Sierra Leone, Sudan, Tanzania, Togo, Uganda, Zimbabwe

101.	*Hercinothrips bicinctus* (Bagnall); *(=Caliothrips bicinctus =Heliothrips bicinctus)*; Thysanoptera: Thripidae; banana thrips, banana-silvering thrips, smilax thrips	(P): *Musa* spp. (pisang, banana)	II	batang (stem), daun (leaf), buah (fruit)	Africa : Equatorial Guinea, Guinea, Kenya, South Africa, Tanzania Asia : India Europe : Belgium, Portugal, Spain, UK America : Bermuda, Brazil, Peru Oceania : Australia, New Zealand
102.	*Heteroligus appius* Burm.; Coleoptera : Scarabaeidae; lesser yam beetle	(P): *Dioscorea* spp. (gembili, yam)	II	batang (stem), daun (leaf), umbi (tuber/corm)	Africa : Bourkina Faso, Cameroon, Dahomey, Gambia, Ghana, Guinea, Ivory Coast, Mali, Liberia, Nigeria, Senegal, Sierra Leone, Togo
103.	*Heteroligus meles* Billb.; Coleoptera : Scarabaeidae; greater yam beetle	(P): *Dioscorea* spp. (gembili, yam)	II	batang (stem), daun (leaf), umbi (tuber/corm)	Africa : Bourkina Faso, Cameroon, Dahomey, Gambia, Ghana, Guinea, Ivory Coast, Mali, Liberia, Nigeria, Senegal, Sierra Leone, Togo

104.	*Hilda patruelis* (Stal.); Hemiptera: Tettigometridae; groundnut hopper	(P): *Arachys hypogaea* (kacang tanah, groundnut, peanut) (S): *Anacardium occidentale* (jambu mete, cashew-nut); *Citrus* spp.(jeruk, orange); *Abelmoschus moschatus* (okra, lady's finger); *Helianthus annuus* (bunga matahari, sunflower); *Vigna radiata* (kacang hijau, mungbean); *Vigna cylindrica (*kacang tunggak, long bean), *Vigna* spp. (buncis, cowpea)	II	batang (stem), daun (leaf), bunga (flower)	Africa : Malawi, South Africa, Tanzania, Zimbabwe
105.	*Homona magnanima* Diakonoff; Lepidoptera: Tortricidae; leaf roller, tea tortrix, Oriental tea tortrix	(P): *Camellia sinensis* (teh, tea), *Lithocarpus edulis*, *Rosa* spp. (mawar, rose), *Pyrus communis (*pir, pear*)*, *Malus domesticum (*apel, apple*)*, *Citrus* spp.(jeruk, orange), *Diospyros kaki* (kesemek,	II	tunas (bud), batang (stem), daun (leaf)	Asia: Japan, Taiwan

		persimmon), *Chrysant hemum* spp. (krisan, chrysant), *Paulownia tomentosa*, *Solanum melongena* (terung, eggplant , aubergine), *Prunus cerrasus* (ceri, cherry), *Arachys hypogaea* (kacang tanah, groundnut, peanut), buah batu (stone fruit), *Eurya* spp., *Glycine max* (kedelai, soybean), *Rhododendron Ispp. (*azalea), *Nandina domestica*, *Podocarpus* spp.			
106.	*Homorocoryphus nitidulus* Scopoli; *(=Ruspolia differens = R.vicina)*; rthoptera:Tettigoniidae; edible grasshopper	(P): *Nicotiana tabacum* (tembakau, tobacco)	II	batang (stem), daun (leaf)	Africa : Kenya, Zimbabwe

107.	*Horcias nobilellus* (Berg.); *(=Capsus (Deraeocoris) nobilitatus =Horcias (Horciasoides) nobilellus =H.plagosus =Poecilocopsus nobilellus)*; Hemiptera: Miridae; cotton plant bug, cotton bug	(P): *Gossypium barbadens* (kapas, cotton) (S): *Abelmoschus moschatus* (okra, lady's finger), *Bidens pilosa*	II	batang (stem)	America : Argentina, Bahama, Bolivia, Brazil, Paraguay, Peru, Suriname, Uruguay, Venezuela
108.	*Hyphantria cunea* (Drury); *(=Hyphantria textor);* Lepidoptera: Arctiidae; blackheaded webworm, mulberry moth, redheaded webworm, fall webworm, American white moth	(P): *Morus alba*, *Prunus cerrasus* (ceri, cherry), *Juglans nigra (walnut, walnut)*, *Pyrus communis (*pir, pear*)*, *Malus domesticum (*apel, apple*)*, *Prunus domesticum* (plam, plum), *Carya illinoinensis*, *Carya ovata*, *Diospyros na*, *Liquidambar styraciflua*, *Prunus avium* (S): *Carya* spp., *Humulus lupulus (*hops), *Ulmus americana*, *Ailanthus altissima*, *Juglans regia* (walnut, walnut), *Pinus densiflora*, *Vitis vinifera* (anggur, grapevine)	II	batang (stem), daun (leaf)	America : Canada, Mexico, USA Asia : China, Japan, Korea, Turkey Europe : Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech, France, Hungary, Italy, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Switzerland, Ukraine, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedoni Oceania : Micronesia, Northern Mariana Island

109.	*Keiferia lycopercicella* Walsingham; *(=Gnorimoschema elmorei =G.lycopersicella =Keiferia elmorei =Phthorimaea elmorei =P.lycopersicella)*; Lepidoptera: Gelechiidae; tomato pinworm	(P): *Lycopersicum esculentum* (tomat, tomato) (S): *Solanum melongena* (terung, eggplant, aubergine), *Solanum tuberosum* (kentang, potato), *Gossypium barbadens* (kapas, cotton), *Nicotiana tabacum* (tembakau, tobacco)	II	batang (stem), daun (leaf), buah (fruit)	America : Bermuda, Bolivia, Colombia, Costa Rica, Cuba, Haiti, Jamaica, Mexico, USA, Venezuela
110.	*Lepidosaphes ulmi* (L.); *(=Aspidiotus conchiformis =A. falciformis =A.juglandis =A.pomorum =A.pyrus-malus =A.saliceti =Coccus conchiformis =C.ulmi =Diaspis linearis =Lepidosaphes (Mytilaspis) ulmi =L.ceratoniae =L. conchiformis =L.juglandis =L.pomorum =L.ulmi =L.vulva =Mytilaspis (Lepidosaphes) pomorum =M.ceratoniae =M.juglandis =M.pomicorticis*	(P): *Ficus carica* (ara, fig), *Fagus grandifolia*, *Fraxinus americana*, *Juglans regia* (walnut, walnut), *Malus domesticum (*apel, apple*)*, *Olea europaea* subsp. *Europaea* (zaitun, olive), *Populus* spp., buah batu (stone fruit), *Pyrus communis (*pir, pear*)*, *Salix alba*, *Tilia cordata*,	II	batang (stem), daun (leaf), buah (fruit), bunga (flower)	Africa : Algeria, Egypt, South Africa America : Argentina, Brazil, Canada, Chile, Colombia, Mexico, Peru, USA, Uruguay Asia : Afghanistan, Armenia, China, Georgia, India, Iran, Iraq, Israel, Japan, Kazakhstan, Korea, Saudi Arabia, Syria,

	=M.pomorum =M.ulicis =M.ulmi =M.vitis =Mytilococcus saliceti =M.ulmi); Hemiptera: Diaspididae; oyster shell scale, apple mussel scale, mussel scale	*Vaccinium myrtillus*			Turkey Europe : Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech, Denmark, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Hungary, Italy, Luxembourg, Macedonia, Netherlands, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Oceania : Australia

111.	*Leptinotarsa decemlineata* Say.; *(=Chrysomela decemlineata =Doryphora decemlineata =Leptinotarsa multitaeniata =Polygramma decemlineata)*; Coleoptera: Chrysomelidae; beetle, potato beetle	(P): *Solanum tuberosum* (kentang, potato) (S): *Lycopersicum esculentum* (tomat, tomato), *Solanum melongena* (terung, eggplant, aubergine), *Hyoscyamus niger*, *Nicotiana tabacum* (tembakau, tobacco)	II	batang (stem), daun (leaf), tanah (soil)	Africa : Gabon America : Canada, Costa Rica, Cuba, Guatemala, Mexico, USA Asia: Armenia, Azerbaijan, China, Iran, Japan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey, Turkmenistan, Uzbekistan Europe : Andorra, Austria, Belarus, Belgium, Bulgaria, Croatia, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Moldova, Netherlands, Poland, Portugal, Romania, Russia,

					Slovakia, Switzerland, Ukraine, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia
112.	*Leptopharsa heveae* (Drake & Poor); Hemiptera: Tingidae; lace bug, rubber tingid bug	(P): *Hevea brasiliensis* (karet, rubber tree)	II	tunas (bud), batang (stem), daun (leaf)	America : Brazil
113.	*Leucoptera caffeina* (Washburn).; Lepidoptera: Lyonetiidae; coffee leaf miner	(P): *Coffea* spp. (kopi, coffee)	II	batang (stem), daun (leaf), buah (fruit)	Africa : Kenya, Uganda, Burundi, Rwanda, Tanzania, Madagascar America : Antigua and Barbuda, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominica, Ecuador, El Salvador, Guyana France, Grenada, Guadeloupe, Guatemala, Guyana,

					Haiti, Honduras, Jamaica, Martinique, Montserrat, Peru, Puerto Rico, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, Venezuela
114.	*Leucoptera coffeella* (Guer & Menev); Lepidoptera: Lyonetiidae; white coffee leaf miner	(P): *Coffea* spp. (kopi, coffee)	II	batang (stem), daun (leaf), buah (fruit)	Africa : Madagascar America : Antigua and Barbuda, Barbados, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominica, Ecuador, El Salvador, Guyana France, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Nicaragua, Peru, Puerto Rico, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, Venezuela

115.	*Leucoptera coma* (Ghesq); Lepidoptera: Lyonetiidae coffee leaf miner	(P): *Coffea* spp. (kopi, coffee)	II	batang (stem), daun (leaf), buah (fruit)	Africa : Congo
116.	*Leucoptera meyrick* (Ghesq).; Lepidoptera: Lyonetiidae; coffee leaf miner	(P): *Coffea* spp. (kopi, coffee)	II	batang (stem), daun (leaf), buah (fruit)	Africa : Central Africa, Kenya, Uganda, Burundi, Rwanda, Tanzania, Kenya, Tanzania, Uganda, Zimbabwe America : Brazil, Peru
117.	*Liriomyza bryoniae* (Kaltenbach); Diptera: Agromyzidae; coffee leaf miner	(P): *Solanum tuberosum* (kentang, potato), *Lycopersicum esculentum* (tomat, tomato), Solanaceae	II	tunas (bud), daun (leaf), media tanam (planting medium)	Africa : Egypt, Morocco Asia : China, India, Israel, Japan, Korea, Nepal, Turkey, Turkmenistan Europe : Albania, Belgium, Bulgaria, Croatia, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia,

					Lithuania, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Spain, Sweden, Ukraine, UK
118.	*Listronotus bonariensis* (Kuschel); Coleoptera: Curculionidae; wheat stem weevil	(P): *Triticum aestivum* (gandum, wheat), *Hordeum vulgare* (barli, barley), *Zea mays* (jagung, corn, maize), cerealia, rerumputan (Poaceae). (S): *Cynodon* spp. , *Festuca pratensis*, *Agrostis capillaris*, *Anthoxanthum puelii*, *Avena sativa* (oat, oats) , *Bromus* spp., *Festuca rubra*, *Phleum pratense*	II	batang (stem), daun (leaf), akar (root), bunga (flower), benih/biji (seed/grain)	America : Argentina, Bolivia, Brazil, Chile, Uruguay Oceania : Australia, New Zealand
119.	*Listronotus oregonensis* (Leconte); Coleoptera: Curculionidae; carrot weevil	(P): *Daucus carota* (wortel, carrot), *Apium graveolens* (seladeri, celery), *Anethum*	II	akar (root), batang (stem), daun (leaf), umbi (tuber/	America : Canada, USA

		graveolens (dill), *Petroselinum crispum* (parseli, parsley).		corm). , tanah (soil)	
120.	*Listronotus texanus* (Stockton); (= *Hyperodes texanus*); Coleoptera: Curculionidae; carrot weevil	(P): *Daucus carota* (wortel, carrot), *Petroselinum crispum* (piterseli, parsley)	II	akar (root), batang (stem), daun (leaf), umbi (tuber/corm).	America : USA
121.	*Lobesia botrana* (Denis & Schiffer Muller.); (= grave berry moth); Lepidoptera: Tortricidae; vinemoth	(P): *Vitis vinifera* (anggur, grapevine) (S): *Actinidia deliciosa* (kiwi, kiwi fruit), *Dianthus* spp., *Diospyros kaki* (kesemek, persimmon), *Prunus cerrasus* (ceri, cherry), *Prunus* spp., *Punica granatum* (delima, pomegranate), *Ribes* spp., *Olea europea subsp. europea* (zaitum, olive), *Prunus domesticum* (plam, plum)	II	batang (stem), daun (leaf)	Africa : Algeria, Egypt, Erythrea, Kenya, Libya, Morocco Asia : Armenia, Azerbaijan, Georgia, Iran, Iraq, Israel, Japan, Jordan, Kazakhstan, Lebanon, Syria, Tajikistan, Turkey, Turkmenistan, Uzbekistan Europe : Austria, Belgium, Bulgaria, France, Germany, Greece, Italy, Malta, Netherlands, Portugal,

					Rusia, Spain, Switzerland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia
122.	*Longitarsus nigripennis* (Motsch.); Coleoptera: Chrysomelidae; pepper flea beetle	(P): *Piper nigrum* (lada, pepper)	II	batang (stem), daun (leaf), bunga (flower), benih/biji (seed/grain), tanah (soil)	Asia: India.
123.	*Lygus lineolaris* (Palisot de Beauvois); Hemiptera: Miridae; plant bugs	(P): *Brassica napus* var. napus (raap, rape), *Gossypium barbadens* (kapas, cotton), *Amaranthus cruentus*, *Brassica oleracea* var. *botrytis* (bunga kol, cauifolwer), *Fragaria vesca* (arbei, strawberry), *Medicago sativa* (alfalfa, lucerne), *Phaseolus lunatus*, *Vigna* spp.	II	batang (stem), daun (leaf), bunga (flower)	America : Bermuda, Canada, El Salvador, Guatemala, Honduras, Mexico, USA

		(buncis, cowpea), *Prunus persica* (persik, peach), *Solanum tuberosum* (kentang, potato), *Trifolium incarnatum, Vicia sativa* (S): *Anethum graveolens* (dill), *Apium graveolens* (seladeri, celery), *Asparagus officinalis* (asparagus, asparagus), *Aster* spp., *Beta* vulgaris (bit, beetroot), *Bellis perennis, Brassica oleracea capitata* (kubis, cabbage), *Calendula officinalis, Cosmos* spp., *Cucumis sativus* (mentimun, cucumber), *Dahlia hybrids*, *Dendranthema* spp., *Gladiolus hybrids*, *Glycine max* (kedelai, soybean), *Helianthus* spp., *Lespedeza cuneata, Pinus merkusii* (tusam, pinetree*)*			

		echinata, *spp*., *Pyrus communis (*pir, pear*)*, *Rubus* spp., *Salvia officinalis*, *Sinapis alba*, *Tragopogon porrifolius*, *Verbena* spp., *Zinnia elegans*			
124.	*Macrodactylus subspinosus* (F); Coleoptera: Scarabaeidae; rose chaffer	(P): *Malus domesticum (*apel, apple*)*. (S): *Vitis vinifera* (anggur, grapevine), *Beta* spp., cucurbitae, *Prunus cerrasus* (ceri, cherry), *Piper nigrum* (lada, pepper), legumes, *Rosa* spp. (mawar, rose), *Prunus persica* (persik, peach), *Pyrus communis (*pir, pear*)*, buah batulainnya (other stone fruit), *Rubus* spp., *Fragaria vesca* (arbei, strawberry)	II	batang (stem), daun (leaf), buah (fruit)	America : Mexico, USA

125.	*Macroplectra nararia* (Moore); Lepidoptera: Limacodidae; fringed nettle grub	(P): *Camellia sinensis* (teh, tea), *Coffea* spp. (kopi, coffee), *Musa* spp. (pisang, banana), *Elaeis guineensis (*kelapa sawit, oilpalm), *Cocos nucifera* (kelapa, coconut), *Erythrina* spp.(dadap, december tree) (S): *Gliricidia maculata*, *Crotalaria* spp., *Tephrosia* spp., *Citrus* spp., *Rosa* spp. (mawar, rose), *Lonicera* spp., *Canna* spp. (bunga tasbih, canna)a, *Eucalyptus robusta*, *Psidium guineense*.	II	batang (stem), daun (leaf), tanah (soil)	Asia : India, Sri Lanka
126.	*Macrosiphum euphorbiae* (Thomas); Hemiptera: Aphididae; potato aphid	(P): *Beta vulgaris* (bit gula, beetroot), *Ipomoea batatas* (ubi jalar, sweet potato), *Lactuca sativa* (sla, lettuce), *Lycopersicum esculentum* (tomat, tomato), *Rosa*	II	batang (stem), daun (leaf), bunga (flower)	Africa : Algeria, Angola, Burundi, DR Congo, Egypt, Ethiopia, Kenya, Libya, Malawi, Mauritius, Morocco, Mozambique, Rwanda,

		spp. (mawar, rose), *Solanum melongena* (terung, eggplant), *Solanum tuberosum* (kentang, potato), *Zea mays* (jagung, corn, maize)			Reunion, St. Helena, South Africa, Tanzania, Tunisia, Uganda, Zambia, Zimbabwe America : Argentina, Bermuda, Bolivia, Brazil, Canada, Chile, Colombia, Cuba, Ecuador, Jamaica, Mexico, Peru, Puerto Rico, USA, Uruguay, Venezuela Asia : Bangladesh, China, India, Iran, Israel, Japan, Jordan, Korea, Lebanon, Malaysia, Pakistan, Saudi Arabia, Sri Lanka, Turkey Europe : Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech, Denmark, Finland, Belarus,

					Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia , France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Oceania : Australia, New Caledonia, New Zealand

127.	*Maladera castanea* (Arrow.); Coleoptera: Scarabaeidae; Asiatic garden beetle	(P): *Beta* vulgaris (bit, beetroot), *Daucus carota* (wortel, carrot), *Pastinaca sativa* (parsnip), *Capsicum annuum* (cabai, hot pepper, chilies, red pepper*), Brassica rapa* subspec. rapa (turnip)	II	tanaman (plant), tanah (soil)	America : USA Asia : China, Japan, Korea
128.	*Malacosoma americanum* (F).; Lepidoptera: Lasyocampidae; eastern tent caterpillar	(P): *Malus domesticum (*apel, apple*), Prunus domesticum* (plam, plum), *Prunus persica* (persik, peach)	II	batang (stem), daun (leaf), buah (fruit)	America : Canada, USA
129.	*Manduca quinquemaculata* (Haworth); Lepidoptera: Sphingidae; tomato hornworm	(P): *Lycopersicum esculentum* (tomat, tomato), *Nicotiana tabacum* (tembakau, tobacco)	II	batang (stem), daun (leaf), tanah (soil)	America : Canada, USA
130.	*Manduca sexta* (Linn.); Lepidoptera: Sphingidae; tobacco hornworm	(P): *Capsicum annuum* (paprika, bell-pepper), *Sesamum indicum* (wijen, sesame), *Lycopersicum esculentum* (tomat, tomato), *Nicotiana*	II	batang (stem), daun (leaf), tanah (soil)	America : Antigua and Barbuda, Argentina, Bahama, Barbados, Belize, Bolivia, Brazil, Canada, Caribbean Islands, Cayman

		tabacum (tembakau, tobacco), *Solanum tuberosum* (kentang, potato) (S): *Datura stramonium (*kecubung, jimsonweed), *Verbena* spp.			Island, Chile, Colombia, Costa Rica, Cuba, Dominica, Ecuador, Guyana France, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, St. Kitts & Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, USA, Virgin Islands
131.	*Mayetiola destructor* (Say.); Diptera: Cecidomyiidae; hessian fly	(P): *Triticum aestivum* (gandum, wheat) (S): *Agropyron* spp. , *Hordeum vulgare* (barli, barley), *Secale cereale* (rye)	II	batang (stem), daun (leaf), benih/ biji (seed/ grain)	Africa: Algeria, Morocco, Tunisia America: Canada, USA Asia: Iraq, Israel, Kazakhstan, Syria, Turkey

					Europe: Austria, Belgium, Bulgaria, Cyprus, Czech, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Oceania: New Zealand
132.	*Ophiomyia simplex* (Loew.); Diptera: Agromyzidae; Asparagus miner	(P): *Asparagus officinalis* (asparagus, asparagus)	II	batang (stem), daun (leaf), akar (root)	America : USA Europe : France

133.	*Parthenolecanium corni* (Bouché);(= *Lecanium corni = Lecanium robiniarum = Lecanium vini =Coccus tiliae = Lecanium ribis = Lecanium cynosbati = Lecanium corylifex = Lecanium juglandifex = Coccus rosarum = Lecanium fitchii = Lecanium rugosum = Lecanium tarsalis = Lecanium wistariae = Lecanium armeniacum = Lecanium assimile = Lecanium caryae canadense= Lecanium lintneri = Lecanium (Eulecanium) caryarum = Lecanium (Eulecanium) kingii =Lecanium (Eulecanium) maclurarum = Lecanium crawii = Lecanium maclurae = Lecanium kansasense = Lecanium (Eulecanium) aurantiacum = Lecanium websteri = Eulecanium rosae = Lecanium rehi = Lecanium adenostomae =Eulecanium guignardi =*	(P) : Crataegus (hawthorns), Malus (ornamental species apple), Prunus (stone fruit), *Prunus domestica* (plum), *Prunus persica* (peach), Ribes (currants), *Ribes nigrum* (blackcurrant), *Ribes rubrum* (red currant), Rosa (mawar, roses), *Vitis vinifera* (anggur, grapevine), *Malus domestica* (apel, apple), *Mespilus germanica* (medlar), *Morus alba* (mora), Populus (poplars), *Prunus salicina* (Japanese plum), *Prunus serotina* (black cherry), *Pyracantha coccinea* (Scarlet firethorn), Pyrus (pir, pears), *Pyrus communis* (European pear), *Ribes uva-crispa* (gooseberry), *Robinia*	II	bunga (flower), buah (fruit), daun (leaf), batang (stem), bibit tanaman (seedling)	Europe: Albania, Austria, Belgium, Bulgaria, Czech, Denmark, Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia-Montenegro, Slovakia, Spain, Sweden, Switzerland, Ukraine, UK Asia: Afghanistan, Armenia, Azerbaijan, China, Georgia, India, Iran, Japan, Kazakhstan, Korea,

	Eulecanium fraxini =Lecanium folsomi = Lecanium obtusum =Lecanium corni robiniarum = Lecanium persicae crudum =Lecanium pruinosum armeniacum = Lecanium (Eulecanium) corylifex = Lecanium (Eulecanium) rugosum = Lecanium (Eulecanium) lintneri = Lecanium canadense = Lecanium (Eulecanium) canadense = Lecanium (Eulecanium) armeniacum = Lecanium (Eulecanium) cynosbati = Lecanium (Eulecanium) tarsale = Lecanium (Eulecanium) ribis = Lecanium (Eulecanium) fitchii = Lecanium (Eulecanium) crawii = Lecanium (Eulecanium) vini = Eulecanium vini = Eulecanium kansasens = Lecanium (Eulecanium) assimile =Lecanium coryli = Eulecanium corni corni = Parthenolecanium	*pseudoacacia* (black locust), *Rosmarinus officinalis* (rosemary), Rubus (blackberry, raspberry), *Rubus idaeus* (raspberry), Salix (willows), Sorbus (rowan), Spiraea , Taxus baccata (English yew), Tilia (limes), Ulmus (elms), *Vaccinium myrtillus* (blueberry), Viburnum, *Wisteria sinensis* (purple wisteria)			Kyrgyzstan, Lebanon, Mongolia, Pakistan, Syria, Tajikistan,Turkey, Turkmenistan, Uzbekistan Africa: Algeria, Egypt, Libya America: Argentina, Brazil, Canada, Chile, North America, Mexico, USA, Peru Oceania: Australia, New Zealand

	corni = Parthenolecanium coryli); Hemiptera: Coccidae; European fruit lecanium brown scale; European fruit scale; peach scale; yew scale; fruit scale				
134.	*Protomelittoma insulare* (Fairmaire); Coleoptera: Lymexylidae; stem borer	(P): *Cocos nucifera* (kelapa, coconut), *Elaeis guineensis (*kelapa sawit, oilpalm)	II	batang (stem)	Africa : Madagascar, Seychelles.
135.	*Monochamus alternatus* (Hope); Coleoptera: Cerambycidae; pine sawyer	(P): *Pinus merkusii* (tusam, pinetree)	II	ranting, batang, kayu (wood)	Asia : China, Japan, Korea, Laos, Vietnam
136.	*Monochamus nitens* (Bates); Coleoptera: Cerambycidae; pine sawyer	(P): *Pinus merkusii* (tusam, pinetree)	II	ranting, batang, kayu (wood)	Asia : China, Japan, Korea, Laos, Vietnam
137.	*Myopardalis pardalina* (Biggot); Diptera: Tephritidae; Baluchistan fruit fly	(P): *Cucumis sativus* (mentimun, cucumber), *Cucumis melo* (melon, melon), *Cucurbita maxima* (waluh, labu parang, pumpkin), *Citrullus vulgaris* (semangka, watermelon), Cucurbitaceae	II	buah (fruit), media tanam (planting medium), tanah (soil)	Asia: Cyprus, Iran, Iraq, Israel, Lebanon, Syria, Turkey, Northern India, Pakistan, Afghanistan Europe: Russian (Kaukasus)

138.	*Mythimna unipuncta* (Haworth); Lepidoptera: Noctuidae; rice armyworm	(P): *Saccharum officinarum* (tebu, sugarcane), *Nicotiana tabacum* (tembakau, tobacco), *Zea mays* (jagung, corn, maize), *Oryza sativa* (padi, paddy), *Sorghum bicolor* (sorgum, sorghum), rumput and serealea lainnya (Poaceae and other cerealia) (S): Turfgrasses, *Medicago sativa* (alfalfa, lucerne), *Trifolium* spp., *Allium* spp., *Lycopersicum esculentum* (tomat, tomato), *Phaseolus* spp., *Solanum tuberosum* (kentang, potato)	II	batang (stem), daun (leaf), tanah (soil)	Africa : Mali, Morocco, Niger, Senegal, Somalia,Togo America : Argentina, Bahama, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Guatemala, Jamaica, Mexico, Panama, Paraguay, Puerto Rico, USA, Uruguay, Venezuela Asia : India, Iran, Israel, Turkey, Uzbekistan Europe : Bulgaria, Czech, Denmark, France, Germany, Greece, Hungary, Iceland, Italy, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland, UK

139.	*Myzaphis rosa rum* (Kaltenbach); Hemiptera: Aphididae; lesser rose aphid	(P): *Rosa* spp. (mawar, rose)	II	batang (stem), daun (leaf), bunga (flower)	Africa : South Africa
140.	*Nematocerus* spp.; Coleoptera: Curculionidae; shiny cereal weevil	(P): *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, corn, maize), cerealia, legumes, *Camellia sinensis* (teh, tea), *Coffea* spp. (kopi, coffee)	II	batang (stem), daun (leaf), benih/ biji (seed/ grain)	Africa : Ethiopia, Kenya, Somalia, Sudan, Tanzania, Uganda
141.	*Oberea bimaculatus* (Leconte); Coleoptera: Cerambycidae; raspberry cane borer	(P): *Rosa* spp. (mawar, rose)	II	batang (stem), daun (leaf), bunga (flower)	America: America.
142.	*Oryctes boas* (Fabricius); Coleoptera: Scarabaeidae; rhinoceros beetle	(P): *Cocos nucifera* (kelapa, coconut), *Elaeis* guineensis (kelapa sawit, oilpalm), *Phoenix dactylifera* (kurma, dates-palm)	II	batang (stem), daun (leaf), media tanam (planting medium), tanah (soil)	Africa: Angola, Benin, Burkina Faso, Burundi, Cameroon, Central Africa, Chad, DR Congo, Congo, Ethiopia, Gabon, Gambia, Guinea-Bissau, Ivory Coast, Kenya, Madagascar, Malawi, Mali, Mauritania, Mauritius,

					Mozambique, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe Asia : Saudi Arabia, Yemen
143.	*Oryctes elegans* (Prell); Coleoptera: Scarabaeidae; rhinoceros beetle	(P): *Phoenix dactylifera* (kurma, dates-palm)	II	batang (stem), daun (leaf), media tanam (planting medium), tanah (soil)	Africa : Mauritius Asia : Iran
144.	*Oryctes monoceros (*Oliv.); Coleoptera: Scarabaeidae; rhinoceros beetle; coconut beetle	(P): *Cocos nucifera* (kelapa, coconut), *Elaeis* guineensis (kelapa sawit, oilpalm), *Phoenix dactylifera* (kurma, dates-palm) (S): *Agave part oflana*, *Areca* spp., *Dracaena*	II	batang (stem), daun (leaf), media tanam (planting medium), tanah (soil)	Africa: Angola, Benin, Burkina Faso, Burundi, Cameroon, Comoros, DR Congo, Congo, Ivory Coast, Ghana, Guyana, Kenya, Liberia, Madagascar, Malawi, Mali,

		spp., *Musa* spp. (pisang, banana), *Raphia* spp., *Saccharum officinarum* (tebu, sugarcane)			Mauritius, Mozambique, Niger, Nigeria, Rwanda, Reunion, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Tanzania, Togo, Uganda Asia : Saudi Arabia, Yemen
145.	*Ostrinia nubilalis* (Hubner); Lepidoptera: Crambidae; European corn borer	(P): *Humulus lupulus (*hops), rerumputan (Poaceae), *Zea mays* (jagung, corn, maize), *Sorghum bicolor* (sorgum, sorghum), serealia lainnya (cerealia) (S): *Amaranthus hybridus* (bayam, spinach), *Amaranthus* spp., *Arctium minus*, *Artemisia vulgaris*, *Chrysant hemum* spp. , *Capsicum* spp., *Cynara scolymus* (artisyok,	II	batang (stem), daun (leaf), buah (fruit), benih/biji (seed/grain)	Africa : Algeria, Egypt, Libya, Morocco, Tunisia America : Canada, USA Asia : Georgia, Iran, Israel, Lebanon, Syria, Turkey Europe : Austria, Belgium, Bulgaria, Cyprus, Czech, Denmark, France, Germany, Greece,

		artichoke), *Glycine max* (kedelai, soybean), *Gossypium barbadens* (kapas, cotton), *Helianthus annuus* (bunga matahari, sunflower), *Lycopersicum esculentum* (tomat, tomato) , *Malus domesticum (*apel, apple*)*, *Vigna* spp. (buncis, cowpea), *Prunus persica* (persik, peach), *Solanum tuberosum* (kentang, potato)			Hungary, Ireland, Italy, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia
146.	*Oulema oryzae* Kuw.; (Lema oryzae); Coleoptera: Chrysomelidae; rice leaf beetle	(P): *Oryza sativa* (padi, paddy)	II	batang (stem), daun (leaf)	Asia : China, Japan, Korea Europe : Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia

147.	*Pachymerus lacerdae* Chevr.; (=Pachymerus olearius); Coleoptera: Bruchidae; seed borer	(P): *Elaeis* guineensis (kelapa sawit, oilpalm)	II	buah (fruit), benih/biji (seed/grain)	Africa: Benin, Burkina Faso, Cameroon, Cape Verde, Ivory Coast, Gabon, Ghana, Guinea-Bissau, Liberia, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo, Northwest Africa America : Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Panama, Peru, Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana, Uruguay, Venezuela

148.	*Pachymerus nucleorum* (Fabricius); (=Bruchus nucleorum =Caryoborus nucleorum); Coleoptera: Bruchidae; coconut borer, kernel borer	(P): *Cocos nucifera* (kelapa, coconut), *Elaeis* guineensis (kelapa sawit, oilpalm)	II	buah (fruit), benih/biji (seed/grain)	America: Brazil, Guyana France, Guyana, Paraguay.
149.	*Paleacrita vernata* (Peck.); *(=Alsophila vernata)*; Lepidoptera: Geometridae; spring cancerworm	(P): *Ulmus* spp., kayu hutan lainnya (other forest tree)	II	batang (stem), daun (leaf), buah (fruit)	America : Canada, USA
150.	*Papaipema nebris* (Guenee); (=Papaipema nitela); Lepidoptera: Noctuidae; stalk borer	(P): *Zea mays* (jagung, corn, maize), cerealia	II	batang (stem), daun (leaf), bunga (flower)	America : USA
151.	*Parallelodiplosis cattleyae* (Molliard); Diptera: Cecydomiidae; cattleya midge	(P): Orchidaceae (anggrek, orchid)	II	batang (stem), daun (leaf), bunga (flower)	America : USA
152.	*Pemphigus betae* (Doane); Hemiptera: Aphididae; sugarbit root aphid	(P):*Beta* spp.	II	batang (stem), daun (leaf), umbi (tuber/corm)	America : Canada, North America, USA

153.	*Peridroma saucia* (Hubner); *(=Agrotis angulifera =A.impacta =A.inermis =A.intecta =A.ortonii =A.saucia =Lycophotia margaritosa =L.ochronota =L.saucia =Noctua aequa =N.majuscula =N.margaritosa =N.saucia =Rhyacia margaritosa =R.saucia =Peridroma margaritosa)*; Lepidoptera: Noctuidae; variegated cutworm, pirly underwing moth	(P): *Beta* vulgaris (bit, beetroot), *Brassica oleracea capitata* (kubis, cabbage), *B. oleracea var. botrytis* (bunga kol, cauliflower), *Capsicum annuum* (paprika, bell-pepper), *Lactuca sativa* (selada, lettuce), *Lycopersicum esculentum* (tomat, tomato), *Solanum tuberosum* (kentang, potato), *Cynara scolymus* (artisyok, artichoke), *Medicago sativa* (alfalfa, lucerne), *Nicotiana tabacum* (tembakau, tobacco) (S): *Allium ascalonicum* (bawang merah, shallot), *Apium graveolens* (seledri, celery), *Arachys hypogaea* (kacang tanah, groundnut, peanut*)*, *Asparagus officinalis* (asparagus, asparagus),	II	batang (stem), daun (leaf), bunga (flower)	Africa : Morocco, Tunisia America : Argentina, Bermuda, Brazil, Chile, Colombia, Costa Rica, Guatemala, Jamaica, Mexico, Peru, Puerto Rico, USA, Uruguay, Venezuela Asia : Armenia, China, Israel, Japan, Sri Lanka, Syria, Turkey Europe : Albania, Austria, Belgium, Bulgaria, Canary Island, Czech, Denmark, Faroes Island, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal,

		Avena sativa (oats), *Brassica* spp, *Citrus* spp.(jeruk, orange), *Cicer arietinum*, *Cucumis melo* (melon), *Cucumis sativus* (mentimun, cucumber), *Cucurbita maxima* (waluh, labu parang, pumpkin), *Daucus carota* (wortel, carrot), *Fragaria vesca* (arbei, strawberry), *Gossypium barbadens* (kapas, cotton), *Hordeum vulgare* (barley), *Humulus lupulus* (hops), *Ipomoea batatas* (ubi jalar, sweet potato), *Linum usitatissimum*, *Malus domesticum (*apel, apple), *Persea americana* (alpokat, avocado), *Phleum pratense*, *Phaseolus lunatus*, *Vigna* spp. (buncis, cowpea), *Pisum sativum* (kapri, sweet pea), *Pimenta*			Romania, Russia, Slovakia, Spain, Sweden, Switzerland, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia

		dioica, *Prunus americana* (apricot), *Prunus domesticum* (plum), *Pyrus communis (*pear*), Rheum hybridum*, *Ribes uva-crispa*, *Rubus idaeus*, Secale cereale (rye) , *Sinapis alba*, *Spinacia oleracea*, Trifolium, *Triticum aestivum* (gandum, wheat), turfgrasses, *Vicia faba, Vitis vinifera* (anggur, grapevine), *Zea mexicana, Ambrosia artemisiifolia*, *Anthemis cotula*, *Chamaecyparis thyoides*, *Citrullus vulgaris* (semangka, watermelon), *Conyza canadensis*, *Gleditsia triacanthos*, *Helianthus annuus* (bunga matahari, sunflower), *Inula helenium*, *Lolium* spp., *Mentha piperita*, *Portulaca oleracea*,			

		Prunus cerasus, *Prunus persica* (persik, peach), *Pteridium aquilinum*, Raphanus sativus (lobak, radish), Rumex, *Stellaria media*, *Zea mays* (jagung, corn, maize)			
154.	*Phenacoccus gossypii* Townsend & Cockerell; Hemiptera: Coccidae; Mexican mealybug	(P): *Gossypium barbadens* (kapas, cotton), *Manihot esculenta* (ubi kayu, cassava)	II	batang (stem), daun (leaf), bunga (flower)	America : Bahama, Brazi, Cuba, Mexico, North America, Paraguay, Peru, Puerto Rico, USA Asia : India
155.	*Phenacoccus manihoti* Matile-Ferraro; Hemiptera: Coccidae; cassava mealybug	(P): *Manihot esculenta* (ubi kayu, cassava)	II	batang (stem), daun (leaf), bunga (flower)	Africa : Angola, Benin, Cameroon, Central African, DR Congo,Congo, Ivory Coast, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea-Bissau, Guinea, Kenya, Liberia, Madagascar,

					Malawi, Mali, Mozambique, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Sudan, Tanzania, Zanzibar, Togo, Uganda, Zambia, Zimbabwe America : Argentina, Bolivia, Brazil, Guyana, Paraguay
156.	*Phylloxera vitifoliae* (Fitch.); *(=Dactylosphaera vastatrix =D.vitifoliae =D.vitifoliae =D.vitifoliae =Pemphigus vitifoliae =Peritymbia vastatrix =P.vitifoliae =P.vitisana =Phylloxera pervastatrix =P.vastatrix =P.vitifoliae =P.vitifolii =Rhizaphis vastatrix =Viteus vastatrix)*; Hemiptera: Phylloxeridae; phylloxera, grape phylloxera, vine louse, grape leaf louse	(P): *Vitis vinifera* (anggur, grapevine)	II	batang (stem), daun (leaf), buah (fruit), bunga (flower), akar (root)	Africa : Algeria, Morocco, South Africa, Tunisia, Zimbabwe America : Argentina, Bermuda, Bolivia, Brazil, Canada, Colombia, Mexico, Panama, Peru, USA, Uruguay, Venezuela Asia : Armenia, Azerbaijan, China, Georgia, India, Israel,

					Japan, Jordan, Korea, Lebanon, Syria, Turkey Europe : Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech, France, Germany, Greece, Hungary, Italy, Luxembourg, Macedonia, Malta, Moldova, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Oceania : Australia, New Zealand

157.	*Pieris rapae* (L).; *(=Artogeia rapae =Ascia rapae =Mancipium rapae =Papilio rapae =Pontia rapae)*; Lepidoptera: Pieridae; cabbage butterfly, cabbage white butterfly, common cabbage worm, imported cabbage worm, rape white butterfly, small white butterfly	(P): *Brassica* spp. (S): *Alliaria petiolata*, *Erysimum cheiranthoides*, *Rorippa indica*, *Spinacia oleracea*, *Tropaeolum majus*	II	batang (stem), daun (leaf)	Africa : Algeria, Egypt, Libya, Morocco America : Bermuda, Canada, Mexico, USA Asia : Afghanistan, China, Georgia, Iran, Iraq, Israel, Japan, Jordan, Korea, Kyrgyzstan, Lebanon, Mongolia, Myanmar, Pakistan, Philippines, Singapore, Syria, Turkey, Vietnam Europe : Austria, Belgium, Bulgaria, Cyprus, Czech, Denmark, Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Ireland, Italy, Lithuania, Macedonia,

					Malta, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Oceania : Australia, New Zealand
158.	*Pimelephila ghesquierei* (Tams).; Lepidoptera: Pyralidae; African spir borer	(P): *Elaeis guineensis* (kelapa sawit, oilpalm) (S): *Cocos nucifera* (kelapa, coconut)	II	batang (stem), daun (leaf)	Africa : Benin, Cameroon, Central Africa, DR Congo, Congo, Gabon, Gambia, Ghana, Guinea-Bissau, Guinea, Ivory Coast, Liberia, Niger, Nigeria, Senegal, Sierra Leone, Togo

159.	*Planococcus kenyae* (Le Pelley);*(=Planococcus subukiaensis =Pseudococcus kenyae =P.kenyaensis);* Hemiptera: Pseudococcidae; coffee mealybug, Kenya mealybug	(P): *Cajanus cajan* (kacang gude, pigeon pea), *Citrus* spp.(jeruk, orange), *Coffea* spp. (kopi, coffee), *Dioscorea* sp. (gembili, yam), *Ipomoea batatas* (ubi jalar, sweet potato), *Passiflora* spp., *Saccharum officinarum* (tebu, sugarcane), *Theobroma cacao* (kakao, cocoa) (S): *Acacia* spp., *Gossypium barbadens* (kapas, cotton), *Indigofera* spp. , *Impatiens* spp., *Pueraria lobata*, *Sesbania grandiflora* (turi, agati)	II	Semua bagian tanaman (all parts of plant)	Africa :Burundi, DR Congo, Congo, Ivory Coast, Ghana, Kenya, Malawi, Nigeria, Rwanda, Siera Leone, Sudan, Tanzania, Togo, Uganda, Zimbabwe
160.	*Planococcoides njalensis* (Laing); *(=Pseudococcus njalensis =P.exitiabilis)*; Hemiptera: Pseudococcidae;	(P): *Theobroma cacao* (kakao, cocoa), *Persea americana* (alpokat, avocado)	II	Tunas (bud), batang (stem), daun (leaf), buah (fruit)	Africa : Benin, Cameroon, DR Congo, Congo, Ghana, Guinea, Ivory Coast, Liberia,

	Northwest African cocoa mealybug	(S): *Ananas comosus* (nenas, pineapple), *Coffea* spp. (kopi, coffee), *Cola acuminata*, *Mangifera indica* (mangga, mango)			Nigeria, Sao Tome & Principe, Senegal, Sierra Leone, Togo
161.	*Popilia japonica* (Newman); *(=Aserica japonica =A.japonica =Maladera japonica =Serica japonica)*; Coleoptera: Scarabaeidae; Japanese beetle, velvety chafer	(P): *Acer* spp., *Asparagus officinalis* (asparagus, asparagus), *Glycine max* (kedelai, soybean), *Malus domesticum (*apel, apple*)*, buah batu (stone fruit), *Rheum hybridum*, *Rosa* spp. (mawar, rose), *Rubus* spp.(raspberry), *Tilia* spp., *Ulmus* spp., *Zea mays* (jagung, corn, maize) (S): *Aesculus* spp., *Althaea* spp., *Castanea* spp., *Hibiscus* spp., *Juglans nigra*, *Platanus* spp., *Populus* spp., *Salix* spp., *Sorbus americana*, *Sassafras albidum*, *Betula* spp., turfgrasses.	II	batang (stem), daun (leaf), bunga (flower), akar (root), tanah (soil)	America : Canada, USA Asia : China, India, Japan, Korea Europe : Portugal, Russia

162.	*Prionoryctes canniculus* (Arr).; Coleoptera : Scarabaeidae; yam beetle	(P): *Dioscorea* sp. (gembili, yam), *Dioscorea esculenta*	II	batang (stem), daun (leaf), umbi (tuber/corm)	Africa : widespread
163.	*Prostephanus truncatus* (Horn.); (=Dinoderus truncates); Coleoptera: Bostrichidae; larger grain borer, greater grain borer, scania beetle	(P): Dried cassava (gaplek), *Zea mays* (jagung, corn, maize), *Arachys hypogaea* (kacang tanah, groundnut, peanut) S): *Dioscorea* sp. (gembili, yam),, *Sorghum bicolor* (sorgum, sorghum), *Triticale* spp., *Triticum aestivum* (gandum, wheat)	II	umbi kering (tuber/corm dried), benih/biji (seed/ grain)	Africa : Benin, Burkina Faso, Burundi, Ghana, Guinea, Kenya, Malawi, Namibia, Niger, Nigeria, Rwanda, South Africa, Tanzania, Togo, Zambia America : Brazil, Canada, Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, USA Asia : China, India, Iraq, Israel, Philippines, Thailand Europe : France

164.	*Pseudotheraptus wayi* (Brown); Hemiptera: Coreidae; coconut bug	(P): *Cocos nucifera* (kelapa, coconut), *Anacardium occidentale* (jambu mete, cashew-nut), *Macadamia* spp. (S): *Cinnamomum Myanmarnii* (bark of manis, cassia vera) *Eriobotrya japonica* (lokwat, loquat), *Psidium guajava* (jambu biji, guava), *Theobroma cacao* (kakao, cocoa), *Averrhoa carambola* (belimbing, carambola, starfruit) *Carya illinoinensis*, *Mangifera indica* (mangga, mango), *Persea americana* (alpokat, avocado)	II	batang (stem), bunga (flower), buah (fruit)	Africa : Kenya, South Africa, Tanzania
165.	*Pseudococcus calceolariae* (Maskell); (= *P. fragilis* Brain; *P. gahani* Green); Homoptera : Pseudococcidae;	(P): *Abutilon* (Indian Mallow), *Arachis hypogaea* (kacang tanah, groundnut), *Brachychyton*, *Brassica*,	II	Bibit tanaman (seedling), bagian tanaman (part of plant)	Europe : Czech, France, Italy, Netherlands, Portugal, Rusia, Slovakia, Spain,

	Citrophilus mealybug.	*Ceanothus* (white-thorne), *Chenopodium* (Goosefoot), *Citrus medica* (citron), *Conium maculatum* (Poison hemlock), *Crataegus*, (hawthorns), *Cynodia oblonga* (quince), *Daucus carota* (wortel, carrot), *Dodonaea viscosa* (switsch sorrel), *Eugenia*, *Ficus*, *Fragaria* (stroberi, strawberry), *Geranium* (cranesbill), *Hedera helix* (ivy), *Helianthus spp.* (sunflower), *Heliotropium arborescens* (cherry pie), *Hibiscus* (rosemallows), *Juglans regia* (walnut), *Laburnum anargyroides* (laburnum), *Ligustrum* (privet), *Lolium* spp (ryegrasses), *Malus domestica* (apple), *Malus sylvestris* (crab-apple tree), *Malva* (mallow), *Musa paradisiaca* (pisang kepok, plantain), *Nerium oleander* (oleander),			Ukraine, UK Asia : China, Georgia Africa: Ghana, Madagascar, Morocco, Namibia, South Africa America : Mexico, USA, Chilie, Lousiana, Central America, Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana Oceania : Australia, New Zealand, Victoria

		Pelargonium (pelargoniums), *Pinus radiata* (radiata pine), *Pisum sativum* (pea), *Pittosporum*, *Polyscias*, *Prunus*, (stone fruit), *Pyrus communis* (European pear), *Rheum hybridum*, (rhubarb), *Rhododendron* (Azalea), *Ribes sanguineum* (Flowerring currant), *Rosa* (mawar, roses), *Rubus* (blackberry, raspberry) *Schinus molle* (false pepper tree), *Sechium edulle* (chayotte), *Solanum tuberosum* (kentang, potato), *Theobroma cacao* (kakao, cocoa), *Vitis vinifera* (anggur, grapevine), *Saccharum officinarum* (tebu, sugarcane)			

166.	*Psila rosae* (Fab.); *(=Chamaepsila rosae = Musca rosae =Chamaepsila hennigi)*; Diptera: Psilidae; carrot fly, carrot rust fly	(P): *Petroselinum crispum* (parseli, parsley), *Pastinaca sativa* (parsnip), *Apium graveolens* (seledri, celery), *Daucus carota* (wortel, carrot) (S): *Anethum graveolens* (dill), *Anthriscus cerefolium*, *Coriandrum sativum* (ketumbar, corriander), *Carum carvi* (caraway), *Foeniculum vulgare* (adas pedas, fennel)	II	umbi (tuber/corm), media tanam (planting medium), tanah (soil)	America : Canada, USA Asia : Georgia, Japan, Mongolia, Turkey Europe : Austria, Belarus, Belgium, Czech, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Netherlands, Norway, Poland, Russia, Slovakia, Spain, Sweden, Switzerland, Ukraine, UK
167.	*Psorosina hammondi* (Riley).; Lepidoptera: Pyralidae; apple leaf skeletonizer	(P): *Malus domesticum (*apel, apple*)*, *Prunus persica* (persik, peach), *Pyrus communis (*pir, pear*)*, nektarin, other stone fruit (buah batu lainnya)	II	batang (stem), daun (leaf), buah (fruit)	America : Canada, USA

168.	*Pyrrhia umbra* (Hufnagel); Lepidoptera: Noctuidae; rose budworm, tobacco striped caterpillar	(P): *Lycopersicum esculentum* (tomat, tomato)	II	batang (stem), daun (leaf), bunga (flower)	Asia : Korea Europe : Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia , Germany
169.	*Recilia mica* (Kramer); Hemiptera: Cicadellidae; cicadellid leafhopper	(P): *Elaeis guineensis (*kelapa sawit, oilpalm)	II	tunas (bud), batang (stem), daun (leaf)	Africa : Ivory Coast, Northwest Africa
170.	*Rhagoletis cerasi* (L); *(= Musca cerasi = Rhagoletis cerasi fasciata =R.cerasi nigripes =R.cerasi obsoleta =R.obsoleta =Spilographa cerasi =Tephritis cerasi =Trypeta signata =Urophora cerasorum =Urophora liturata)*; Diptera: Tephritidae; European cherry fly, cherry fruit fly	(P): *Prunus cerrasus* (ceri, cherry) (S): *Malus domesticum (*apel, apple*)*, *Prunus americana* (aprikot, apricot), *Prunus persica* (persik, peach), *Pyrus communis (*pir, pear*)*, *Prunus domesticum* (plam, plum)	II	buah (fruit), media tanam (planting medium), tanah (soil)	Asia: Georgia, Iran, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey, Turkmenistan, Uzbekistan Europe: Austria, Belgium, Bulgaria, Croatia, Czech, Denmark, Estonia, France, Germany,

					Greece, Hungary, Italy, Latvia, Lithuania, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Ukraine, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia
171.	*Rhagoletis cingulata* (Loew.); *(=Trypeta cingulata)*; Diptera: Tephritidae; cherry fruit fly	(P): *Malus domesticum (*apel, apple*),* *Prunus cerrasus* (ceri, cherry), *Pyrus communis (*pir, pear*)*, *Prunus domesticum* (plam, plum) (S): *Prunus americana* (aprikot, apricot), *Prunus persica* (persik, peach)	II	buah (fruit), media tanam (planting medium), tanah (soil)	America: Canada, Mexico, USA.

172.	*Rhagoletis fausta* (Osten Sacken); *(=Acidia fausta = Rhagoletis intrudens =Trypeta (Acidia) fausta =T.fausta)*; Diptera: Tephritidae; black (dark) cherry fruit fly	(P): *Prunus cerrasus* (ceri, cherry) (S): *Malus domesticum (*apel, apple*)*, *Prunus americana* (apricot), *Prunus persica* (persik, peach), *Pyrus communis (*pear*)*, *Prunus domesticum* (plum)	II	buah (fruit), media tanam (planting medium), tanah (soil)	America : Canada, USA
173.	*Rhagoletis pamonella* Walsh.; *(= Rhagoletis symphoricarpi =Spilographa pomonella =Trypeta pomonella =Zonosema pomonella)*; Diptera: Tephritidae; apple maggot fly, railroad worm	(P): *Malus domesticum (*apel, apple*)*, (S): *Prunus cerrasus* (ceri, cherry), *Prunus domesticum* (plam, plum), *Prunus persica* (persik, peach), *Pyrus communis (*pir, pear*)*, *Prunus americana* (aprikot, apricot)	II	buah (fruit), media tanam (planting medium), tanah (soil)	America : Canada, Mexico, USA.
174.	*Rhynchoporus palmarum* L.; Coleoptera: Curculionidae; boring weevil	(P): *Cocos nucifera* (kelapa, coconut), *Elaeis guineensis (*kelapa sawit, oilpalm), *Phoenix dactylifera* (kurma, dates-	II	batang (stem), daun (leaf)	America : Argentina, Barbados, Belize, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominica,

		palm), *Saccharum officinarum* (tebu, sugarcane), *Phoenix canariensis* (S): *Artocarpus communis* (sukun, breadfruit), *Ananas comosus* (nenas, pineapple), *Annona reticulata*, *Carica papaya* (pepaya, pawpaw), *Citrus* spp.(jeruk, orange), *Mangifera indica* (mangga, mango), *Musa* spp. (pisang, banana), *Persea americana* (alpokat, avocado), *Psidium guajava* (jambu biji, guava), *Theobroma cacao* (kakao, cocoa)			Ecuador, El Salvador, Guyana France, Grenada, Guadeloupe, Guatemala, Guyana, Honduras, Martinique, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, USA, Uruguay, Venezuela
175.	*Rhynchoporus phoenicis* (L).; Coleoptera: Curculionidae; boring weevil	(P): *Phoenix* spp, *Cocos nucifera* (kelapa, coconut), *Elaeis guineensis (*kelapa sawit, oilpalm)	II	batang (stem), daun (leaf)	Africa : Angola, Benin, Cameroon, DR Congo, Ivory Coast, Ethiopia, Ghana, Kenya, Mozambique, Nigeria, Senegal, Sierra Leone, Somalia, South Africa, Tanzania, Uganda

176.	*Sacadodes pyralis* (Dyar.); Lepidoptera: Noctuidae; Colombian pink bollworm, pink cotton boll worm, Thurberia bollworm, Trinidad bollworm, South American red bollworm, sugarcane stalk borer, South American bollworm	(P): *Gossypium barbadens* (kapas, cotton) (S): *Abelmoschus moschatus* (okra, lady's finger), *Cienfuegosia affinis*, *Hibiscus sabdariffa*	II	buah (fruit); batang (stem), daun (leaf), bunga (flower)	America :Colombia, Costa Rica, El Salvador, Guyana, Nicaragua, Panama, Paraguay,Trinidad and Tobago, Venezuela
177.	*Saccharosydne saccharivora* (Westwood); *(=Delphax saccharivora =Stenocranus saccharivorus)*; Hemiptera: Delphacidae; West indian cane fly, West Indian sugarcane leafhopper	(P): *Saccharum officinarum* (tebu, sugarcane)	II	batang (stem), daun (leaf), bunga (flower)	America : Antigua and Barbuda, Bahama, Barbados, Caribbean Island, Cuba, Dominica, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Jamaica, Martinique, Puerto Rico, St. Lucia, St. Vincent & Grenadines, Trinidad and Tobago, USA, Venezuela

178.	*Sahlbergella singularis* (Hagl).; *(=Sahlbergella theobroma)*; Heteroptera: Miridae; cocoa capsid, cotton capsid/bug	(P): *Theobroma cacao* (kakao, cocoa), *Cola nitida* (S): *Bombax buonopozense*, *Ceiba pentandra* (kapuk randu, kapok), *Cola* spp., *Gossypium barbadens* (kapas, cotton), *Theobroma* spp.	II	batang (stem), daun (leaf), buah (fruit)	Africa : Angola, Benin, Cameroon, Central Africa, DR Congo, Congo, Ivory Coast, Equatorial Guinea, Ghana, Madagascar, Nigeria, Sao Tome & Principe, Sierra Leone, Togo, Uganda
179.	*Scolytus rugulosus* (Muller); *(=Eccoptogaster mediterraneus =E.rugulosus =Scolytus mediterraneus =Ruguloscolytus mediterraneus =R.rugulosus)*; Coleoptera: Scolytidae; shoot hole borer, apple tree beetle, fruit tree bark beetle, shot-hole borer	(P): *Malus domesticum (*apel, apple*)*, *Prunus cerrasus* (ceri, cherry), *Prunus persica* (persik, peach), *Pyrus communis (*pir, pear*)*, *Prunus domesticum* (plam, plum), other stone fruit (buah batu lainnya)	II	batang (stem), daun (leaf), buah (fruit)	Africa : Algeria, Egypt, Libya, Morocco,Tunisia America : Argentina, Brazil, Canada, Chile, Peru, USA, Uruguay Asia : Afghanistan, Georgia, Iran, Iraq, Israel, Lebanon, Pakistan, Saudi Arabia, Syria, Turkey, Turkmenistan

					Europe : Albania, Austria, Belgium, Bulgaria, Cyprus, Czech, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Russia, Russia, Slovakia, Spain, Sweden, Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia,
180.	*Sesamia calamistis* (Hamps).; *(=Sesamia vuteria)*; Lepidoptera: Noctuidae; African pink stem borer, African pink borer of sugarcane, Mauritius pink borer of sugarcane, pink stalk borer of sugarcane,	(P): *Zea mays* (jagung, corn, maize), *Sorghum bicolor* (sorgum, sorghum), *Pennisetum glaucum*, *Triticum aestivum* (gandum, wheat), *Oryza sativa*	II	batang (stem), daun (leaf)	Africa : Angola, Benin, Burkina Faso, Burundi, Cameroon, Comoros, DR Congo, Congo, Ivory Coast, Ethiopia, Gambia, Ghana, Kenya, Madagascar,

	southern pink borer of sugarcane	(padi, paddy), *Saccharum officinarum* (tebu, sugarcane), cerealia.			Malawi, Mali, Mauritius, Mozambique, Niger, Nigeria, Rwanda, Reunion, Senegal, Sierra Leone, South Africa, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe
181.	*Sesamia cretica* (Lederer); *(=Sesamia cretica rufescens =S.cyrnaea =S.griselda =S.pecki =S.uniformis =S.vuteria vuterioides)*; Lepidoptera: Noctuidae; corn stem borer, greater sugarcane borer, *Sorghum bicolor* (sorgum, sorghum) stem borer, stem corn borer, durra stem borer, corn pink borer, large corn borer, pink sugarcane borer, sugarcane pink borer, sorghum borer	(P): *Oryza sativa* (padi, paddy), *Pennisetum glaucum*, *Saccharum officinarum* (tebu, sugarcane), *Sorghum bicolor* (sorgum, sorghum), *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, corn, maize)	II	batang (stem), daun (leaf)	Africa : Algeria, Cameroon, Chad, Egypt, Erythrea, Ethiopia, Kenya, Libya, Mali, Morocco, Niger, Nigeria, Somalia, Sudan, Togo, Tunisia Asia : China, India, Iran, Iraq, Israel, Jordan, Kyrgyzstan, Lebanon, Pakistan, Saudi Arabia, Sri Lanka, Syria, Tajikistan, Thailand,

					Turkey, Uzbekistan, Yemen Europe : Albania, Bulgaria, Croatia, France, Greece, Italy, Macedonia, Russia, Slovenia, Spain, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia
182.	*Sitophilus granarius* (L).; *(=Calandra granaria =Calendra granaria =Curculio granarius)*; Coleoptera: Curculionidae; maize weevil, granary weevil	(P): *Triticum aestivum* (gandum, wheat), *Hordeum vulgare* (barli, barley) (S): *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Avena sativa* (oat, oats), *Cicer arietinum*, *Helianthus annuus* (bunga matahari, sunflower), *Oryza sativa* (padi, paddy), *Panicum* spp., *Pennisetum* spp.,	II	benih/biji (seed/grain)	Africa : Algeria, Morocco, South Africa, Swaziland America : Argentina, Canada, Chile, Mexico, USA Asia : Afghanistan, India, Iraq, Israel, Japan, Saudi Arabia, Sri Lanka, Syria, Thailand, Turkey, Yemen

		Secale cereale (rye) , *Sorghum bicolor* (sorgum, sorghum), *Triticale* spp., *Vicia faba* (faba or broad bean), *Zea mays* (jagung, corn, maize)			Europe : Belgium, Denmark, France, Greece, Hungary, Italy, Poland, Romania, Russia, Slovenia, Spain, Sweden, UK Oceania : Australia
183.	*Tagosodes cubanus* (D.L.Crawford); *(=Chloriona cubana =Dicranotropis cubanus =Sogatella cubana =Sogatodes cubanus =Sogata cubana)*; Hemiptera: Delphacidae; paddy plant hopper	(P): *Vigna* spp. (buncis, cowpea), *Glycine max* (kedelai, soybean), *Oryza sativa* (padi, paddy) (S): *Vigna radiata* (kacang hijau, mungbean), *Cicer aeritinum*, *Lens esculenta* (lentils)	II	batang (stem), daun (leaf), tanah (soil)	Africa : Ivory Coast America : Colombia, Cuba, Guyana, Mexico, Puerto Rico, Suriname, Trinidad and Tobago, USA, Venezuela
184.	*Tagosodes orizocolus* (Muir).; *(=Chloriona orizicola =Sogata orizicola =Tagosodes brazilensis =Sogatodes brazilensis =S.orizicolus =S.oryzicola =S.orizicola =S.orizicolus =Sogata brazilensis)*; Hemiptera: Delphacidae; rice delphacid, rice leafhopper	(P): *Oryza sativa* (padi, paddy)	II	batang (stem), daun (leaf)	America : Belize, Brazil, Colombia, Costa Rica, Cuba, Dominica, El Salvador, Guatemala, Guyana, Mexico, Nicaragua, Panama, Peru, Puerto Rico, Suriname, Trinidad and Tobago, USA, Venezuela

185.	*Sophronica ventralis* (Auriv).; Coleoptera: Scolitidae; berry borer	(P): *Coffea* spp. (kopi, coffee)	II	batang (stem), daun (leaf), benih/biji (seed/grain), buah (fruit)	Africa : wide spread America : Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana
186.	*Stenoma decora* (Zeller); Lepidoptera: Oecophoridae; shoot and pod borer	(P): *Theobroma cacao* (kakao, cocoa) (S): *Ceiba pentandra* (kapuk randu, kapok)	II	daun (leaf), buah (fruit)	America : Brazil
187.	*Toxotrypana curvicauda* (Gerstaecker); *(=Mikimyia furcifera =Toxotrypana fairbatesi)*; Diptera: Tephritidae, papaya fruit fly	(P): *Carica papaya* (papaya, pawpaw)	II	buah (fruit), media tanam (planting medium), tanah (soil)	America : Bahama, Belize, Colombia, Costa Rica, Cuba, Dominica, El Salvador, Guatemala, Haiti, Honduras, Mexico, Antilles Netherlands, Nicaragua, Panama, Puerto Rico, St. Kitts & Nevis, Trinidad and Tobago, USA, Virgin Islands, Venezuela.

188.	*Trichispa sericea* (Guerin-Meneville); Coleoptera: Chrysomelidae; rice hispids	(P): *Oryza sativa* (padi, paddy)	II	batang (stem), daun (leaf)	Africa : Angola, Burkina Faso, Burundi, Cameroon, Congo, Ethiopia, Kenya, Madagascar, Mali, Nigeria, Rwanda, Senegal, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda Europe : Spain
189.	*Trogoderma granarium* (Everts); *(=Trogoderma affrum =Trogoderma khapra)*; Coleoptera: Dermestidae; kumbang kaphra/ khapra beetle	(P): *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Gossypium hirsutum* (kapas, cotton), *Oryza sativa* (padi, paddy), *Sorghum bicolor* (sorgum, sorghum), *Triticum aestivum* (gandum, wheat) , *Zea mays* (jagung, corn, maize) dan serealia lainnya	II	benih/biji (seed/grain), karung goni/alat pembungkus bekas komoditi (used gunny bags/used packing material), makanan ternak (animal feed).	Europe : Cyprus, Spain, Switzerland. Asia : Afghanistan, Bangladesh, Taiwan, India, Iran, Iraq, Israel, Japan, South Korea, Lebanon, Myanmar, Pakistan, Philippines, Saudi Arabia, Sri Lanka, Syria, Turkey, Yemen.

		(S): *Vigna unguiculata*			Africa : Algeria, Burkina Faso, Egypt, Libya, Mali, Mauritania, Morocco, Niger, Nigeria, Senegal, Somalia, Sudan, Zanzibar, Tunisia, Zambia, Zimbabwe.
190.	*Xyleborus ferrugineus* Fab.; *(=Xyleborus confusus =X.fuscatus)*; Coleoptera: Scolytidae; bark beetle	(P): Dioscorea spp. (gembili, yam), *Euterpe edulis*, *Persea americana* (alpokat, avocado), *Pinus elliottii*, *Pinus taeda*	II	batang (stem)	Asia: South Korea, Malaysia, Sri Lanka. Africa: Angola, Benin, Botswana, Burundi, Cameroon, Cape Verde, DR Congo, Ivory Coast, Guinea Ekuator, Ethiopia, Gabon, Ghana, Guinea, Kenya, Liberia, Madagascar, Mali, Mozambique, Namibia, Nigeria, Rwanda, Reunion, Sao Tome & Principe, Senegal,

					Seychelles, Sierra Leon, Somalia, South Africa, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe. America : Argentina, Barbados, Belize, Bolivia, Brazil, Chile, Clombia,Costa Rica, Cuba, Dominica, Ecuador, El Salvador, Guyana France,Grenada, Guadeloupe, Guatemala, Guyana, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Puerto Rico, St. Vincent and the Grenadines, Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru,

					Uruguay, French Guiana, Suriname,Trinidad and Tobago, USA, Uruguay, Venezuela. Oceania: American Samoa, Australia, Fiji, France Polynesian, Kiribati, Micronesia, Northern Mariana Island, Papua New Guinea, Samoa, Solomon Islands
191.	*Zonocerus elegans* (Thunb.); *(=Acrydium sanguinolentum =Gryllus elegans =Poekilocerus roseipennis)*; Orthoptera: Acrididae: Acridoidea: Pyrgomorphidae; elegants grasshopper	(P): Brassicaceae, Cucurbitaceae, Solanaceae, *Allium ascalonicum* (bawang merah, shallot), *Amaranthus hybridus* (bayam, spinach), *Ananas comosus* (nenas, pineapple), *Citrus* spp. (jeruk, orange), *Coffea* spp. (kopi, coffee), *Colocasia esculenta*	II	tanaman (plant), tanah (soil)	Africa : Angola, Botswana, DR Congo, Congo, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe

		(talas, taro), *Daucus carota* (wortel, carrot), *Dioscorea* sp. (gembili, yam), *Ipomoea batatas* (ubi jalar, sweet potato), *Musa* spp. (pisang, banana), *Plumeria* spp. , *Manihot esculenta* (ubi kayu, cassava), *Anacardium occidentale* (jambu mete, cashew-nut), *Chromolaena odorata*, *Nicotiana tabacum* (tembakau, tobacco) (S): *Persea americana* (alpokat, avocado)			
192.	*Zonocerus variegatus* (L.); *(=Acrydium sanguinolentum =Gryllus (Locusta) variegatus =G.laevis =G.opacus)*; Orthoptera: Acrididae: Pyrgomorphidae; variegated grass hopper	(P): Brassicaceae, Cucurbitaceae, Poaceae Solanaceae, *Allium ascalonicum* (bawang merah, shallot), *Amaranthus hybridus* (bayam, spinach), *Ananas comosus* (nenas, pineapple), *Citrus*	II	tanaman (plant), tanah (soil)	Africa : Angola, Benin, Burkina Faso, Cameroon, Central Africa, Chad, DR Congo, Congo, Ivory Coast, Gabon, Gambia, Ghana, Guinea-Bissau, Guinea, Kenya, Liberia, Malawi, Mali,

		spp.(jeruk, orange), *Colocasia esculenta* (talas, taro), *Daucus carota* (wortel, carrot), Dioscorea sp. (gembili, yam), *Gossypium barbadens* (kapas, cotton), *Ipomoea batatas* (ubi jalar, sweet potato), *Musa* spp. (pisang, banana), *Capsicum annuum* (cabai, hot pepper, chilies, red pepper), *Manihot esculenta* (ubi kayu, cassava), *Anacardium occidentale* (jambu mete, cashew-nut), *Citrus* spp.(jeruk, orange), *Coffea* spp. (kopi, coffee), *Chromolaena odorata*, *Helianthus annuus* (bunga matahari, sunflower), *Nicotiana tabacum* (tembakau, tobacco) (S): *Elaeis guineensis*			Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Togo

		*(*kelapa sawit, oilpalm), *Mangifera indica* (mangga, mango), *Persea americana* (alpokat, avocado), *Tectona grandis* (jati, teakwood)			
193.	*Zygogramma exclamationis* (Fab.); *(=Calligrapha exclamationis =Zygospila exclamationis =Chrysomela exclamationis)*; Coleoptera: Chrysomelidae; sunflower beetle	(P): *Helianthus annuus* (bunga matahari, sunflower)	II	batang (stem), daun (leaf), bunga (flower), benih/ biji (seed/ grain)	America : Canada, USA
194.	*Chaetosiphon fragaefolii* (Cockerell) (= *Capitophorus fragaefolii=Capitophorus fragariae =Chaetosiphon fragariae =Myzus fragaefolii = Myzus fragariae =Passerinia fragaefolii = Pentatrichopus fragaefolii =Pentatrichopus fragariae;* Hemiptera: Aphididae; strawberry aphid	(P): *Fragaria ananassa* (strawberry), *Fragaria chiloensis* (Chilean strawberry), *Fragaria vesca* (wild strawberry), *Fragaria vesca var. semperflorens* (Perpetual strawberry)	II	bibit tanaman (seedling), bagian tanaman (part of plant)	Europe: Belgium, Bulgaria, Germany, Italy, Portugal, Serbia and Montenegro,Spain, Switzerland, United Kingdom Asia: Israel, Japan, Philippines America: North America, Canada, USA, Bolivia Oceania; Australia, New Zealand

195.	*Caliothrips masculinus* (Hood); Thysanoptera: Thripidae	(P): *Manihot esculenta* (ubi kayu, cassava)	II	Bagian tanaman (part of plant)	America: Trinidad and Tobago

II. NEMATODA / NEMATODES

NO.	NAMA LMIAH/ORDO/FAMILI/NAMA UMUM/ SCIENTIFIC NAME/TAXON/ COMMON NAME	INANG/ HOST	GOL / GROUP	MEDIA PEMBAWA/ PATHWAYS	DAERAH SEBAR/ GEOGRAPHICAL DISTRIBUTION
1.	*Anguina tritici* (Steinbuch) Chitwood; *(=Anguillula tritici =Anguillulina tritici =Rhabditis tritici =Tylenchus scandens =T.tritici =Vibrio tritici)*; Anguinidae; wheat gall nematode, eelworm diseasee	(P): *Secale cereale* (rye) , *Triticum aestivum* (gandum, wheat), (S): *Avena sativa* (oat, oats) , *Hordeum vulgare* (barli, barley), *Triticum turgidum*	II	tunas (bud), benih (seed), tanah (soil)	America; Canada Asia: China, Iran, India, Syria, Iraq, Israel, Afghanistan, Azerbaijan, South Korea, Pakistan, Saudi Arabia, Turkey Africa: Egypt, Ethiopia Europe: Austria, Bulgaria, Croatia, Cyprus, France,

					Germany, Greece, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Rumania, Russia, Spain, Sweden, Switzerland, Ukranie, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Oceania: Australia, New Zealand.
2.	*Anguina agrostis* (Steinbuch) Filipjev; *(=Anguillula agrostidis =A.agrostis =A.phalaridis =Anguillulina agrostis =A.phalaridis =Anguina funesta =A.lolii =A.phalaridis =A.poophila =Tylenchus agrostidis =T.agrostis =T.phalaridis =T.phlei =Vibrio agrostis =Vibrio phalaridis)*; Anguinidae; rye grass nematode, bent grass nematode	(P): *Agrostis stolonifera* var. *palustris, Agrostis capillaris, Bromus erectus, Festuca ovina, Lolium rigidum, Phleum pratense, Trisetum flavescens, Agrostis canina, Agrostis exarata, Dactylis glomerata, Festuca nigrescens, Phleum boehmeri, Phleum phleoides, Poa alpina, Poa annua, Poa pratensis*	II	tunas (bud), daun (leaf), benih/biji (seed/grain), batang (stem), akar (root), bunga (flower), stolon, tanah (soil)	Europe: Czech, Estonia, Finland, Germany, Ireland, Norway, Poland, Russia, Slovakia, Sweden, Ukranie, UK Asia: China, Kirzikistan America: Canada, USA Oceania: New Zealand.

3.	*Aphasmatylenchus straturatus* Germani; Hoplolaimidae; ground nut chlorosis nematode	(P): *Arachys hypogaea* (kacang tanah, groundnut, peanut). (S): *Cajanus cajan* (kacang gude, pigeon pea), *Glycine max* (kedelai, soybean), *Vigna cylindrical* (kacang tunggak, long bean), *Voandzeia subterranea*	II	akar (root), tanah (soil)	Africa: Burkina Faso
4.	*Aphelenchoides arachidis* Bos.; Aphelenchoididae; groundnut testa nematode	(P): *Arachys hypogaea* (kacang tanah, groundnut, peanut) (S): *Oryza sativa* (padi, paddy), *Pennisetum glaucum*, *Saccharum officinarum* (tebu, sugarcane), *Sorghum bicolor* (sorgum, sorghum), *Zea mays* (jagung, corn, maize)	II	tunas (bud), benih/biji (seed/grain), legumes, tanah (soil)	Africa: Nigeria.

5.	*Aphelenchoides fragariae* (Ritzema Bos) (Chriestie); *(=Aphelenchoides olesistus =A.olesistus* var. *longicollis =A.pseudolesistus =Aphelenchus fragariae =A.olesistus =A.olesistus* var. *longicollis =A.pseudolesistus)*; Aphelenchoididae; bud and leaf nematode	(P): *Fragaria vesca* (arbei, strawberry), *Lilium* spp., *Anthurium andreanum*, *Rhododendron* spp. (azaleas), *Barleria cristata*, *Begonia* spp., *Chloranthus spicatus*, *Hibiscus rosa –sinensis* (kembang sepatu, china-rose), *Hosta* spp., *Hydrangea macrophylla*, *Maranta leuconeura*, Peony, *Pimpinella diversifolia, Primula* sp., *Psychotria nervosa*, *Rhododendron simsii*, *Ruscus hypophyllum*, *St.paulia ionantha*, *Saxifraga* spp., *Tolmiea menziesii*, *Veronica arvensis*, *Viola odorata*, *Wulfenia carinthiaca* (S): *Cornus canadensis*, *Ficus carica (ara, fig)*,	II	benih/biji (seed/grain), buah (fruit), bunga (flower), batang (stem), daun (leaf), umbi (tuber/corm), planlet, tanah (soil)	America: Canada, Mexico, USA Europe: Belgium, Denmark, Germany, Hungary, Ireland, Italy, Latvia, Moldovia, Portugal, Poland, Russia, Spain, Switzerland, Sweden, Ukranie, UK Asia: China, India, Israel, South Korea, Kirgyztan, Japan, Turkey Oceania: Australia, New Zealand, Papua New Guinea, Hawaii

		Ficus macrophylla, *Lamium maculatum*, *Prunus persica* (persik, peach), *Anigozanthos* sp., *Allium ascalonicum* (bawang merah, shallot), *Allium sativum* (bawang putih, garlic), *Avena sativa* (oat, oats) , *Ipomoea batatas* (ubi jalar, sweet potato), *Asplenium nidus* (bird's-nest fern), *Capsella bursa-pastoris*, *Chenopodium album*, *Cobotium chamissoi*, *Erigeron annuus*, *Ficus elastica*, Western Sword-fern, *Polygonum blumei*, *Pteris* spp., *Rorippa atrovirens*, *Senecio vulgaris*, *Solanum nigrum*, *Stellaria media*			

6.	*Aphelenchoides ritzemabosi* (Schwartz) Steiner & Buhrer; *(=Aphelenchoides ribes =Aphelenchus phyllophagus =A.ribes =A.ritzemabosi =Pathoaphelenchus ritzemabosi =Pseudaphelenchoides ritzemabosi =Tylenchus ribes)*; Aphelenchoididae; bud and leaf nematode, *Chrysant* foliar eelworm, leaf wilt nematode of *Chrysant* , *Chrysant* foliar nematode	(P): *Chrysanthemum* spp. (krisan, chrysant), Dahlia, *Fragaria vesca* (arbei, strawberry) (S): *Asplenium nidus*, *Bergenia* spp., *Calceolaria* spp., *Campanula* spp., *Campanula pyramidalis*, *Consolida ambigua*, *Crassula coccinea*, *Callistephus chinensis*, *Geranium* spp., *Helianthus annuus* (bunga matahari, sunflower), *Hibiscus rosa –sinensis* (kembang sepatu, china-rose), *Helleborus niger*, *Lavandula angustifolia*, *Lotus corniculatus*, *Lupinus* spp. (lupine), *Lycopersicum esculentum* (tomat, tomato), *Mimulus* spp., *Nicotiana tabacum* (tembakau, tobacco), *Ocimum basilicum* (kemangi, basil), *Passiflora quadrangularis*	II	benih/biji (seed/grain), daun (leaf), batang (stem), akar (root), bunga (flower), umbi (tuber/corm), tanah (soil)	America: Brazil, Chile, Mexico, Canada, USA, Venezuela. Africa: South Africa, Mauritius Asia: China, India, Japan, Kazakhtans, South Korea, Uzbekistan Oceania: New Zealand, Fiji Europe: Bulgaria, Germany, Russia, Hungary, Ireland, Italy, Latvia, Netherlands, Poland, Portugal, Spain, Switzerland, UK, Ukranie, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia

		(markisah, passionfruit, granadilla), *Peperomia sp.*, *Rheum hybridum*, *Rhododendron* spp. (azalea), *Ribes uva-crispa*, *Rudbeckia* spp. *Salvia splendens*, *Sinningia speciosa*, *St.paulia* spp., *St.paulia ionantha*, *Solanum nigrum*, *Verbena* spp., *Viburnum* spp., *Viola* spp., *Ribes nigrum*, *Limonium sinuatum*, *Medicago sativa* (alfalfa, lucerne), *Vigna* spp. (buncis, cowpea), *Zinnia elegans*, *Buddleia* spp., *Eleusine coracana*, *Ranunculus* spp., *Sambucus* spp., *Senecio* spp., *Sonchus* spp., *Veronica* spp., *Echium* spp., *Rumex* spp., *Stellaria media*			

7.	*Belonolaimus longicaudatus* Rau; Belonolaimidae; sting nematode	(P): *Gossypium hirsutum*, *Cucumis melo* (melon, melon), *Glycine max* (kedelai, soybean), *Cynodon dactylon (kacang gude, pigeon pea)*, *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Zea mays* (jagung, corn, maize), *Citrus sinensis* (jeruk manis, navel orange), *Fragaria* spp., *Daucus carota* (wortel, carrot), *Brassica* spp. (S): Poaceae, *Abelmoschus esculentus* (okra, lady's finger), *Acer* spp., *Acer pseudo platanus*, *Agrostis stolonifera* var. *palustris*, *Allium cepa* (bawang bombai, onion), *Apium graveolens* (seledri, celery), *Beta vulgaris* (bit,	II	tanah (soil), batu kerikil (gravel)	America: Bahama, Bermuda, Costa Rica, Mexico, Puerto Rico, USA.

		beetroot), *Chrysanthemum* spp., *Citrullus lanatus*, *Capsicum annuum* (cabai, hot pepper, chillies, red pepper), *Cucumis sativus* (mentimun, cucumber), *Desmodium tortuosum*, *Digitaria decumbens*, *Digitaria sanguinalis*, *Eremochloa ophiuroides*, *Festuca arundinacea*, *Helianthus annuus* (bunga matahari, sunflower), *Hordeum vulgare* (sorgum, sorghum), *Ipomoea batatas* (ubi jalar, sweet potato), *Lactuca sativa* (sla, lettuce), *Liquidambar styraciflua*, *Lolium multiflorum*, *Lyco persicon esculentum* (tomat, tomato), *Ocimum basilicum* (kemangi, basil), *Paspalum notatum*, *Pennisetum glaucum*,			

		Pisum sativum (kapri, sweet pea), *Pinus palustris*, *Pinus taeda*, *Pittosporum tobira*, *Secale cereale* (rye), *Sesbania exaltata*, *Solanum melongena* (terung, eggplant), *Solanum tuberosum* (kentang, potato), *Sorghum Sudanense*, *Stenotaphrum secundatum*, *Trifolium* spp., *Triticum aestivum* (gandum, wheat), *turfgrasses*, *Ulmus parvifolia*, *Vaccinium corymbosum*, *Vigna unguiculata*, *Baccharis halimifolia*, *Casuarina equisetifolia*, *Diospyros kaki* (kesemek, persimmon), *Mentha spicata*, *Pennisetum purpureum*, *Pharbitis purpurea*, *Vigna* spp.			

		(buncis, cowpea), *Rumex crispus*, *Saccharum officinarum* (tebu, sugarcane), *Schinus terebinthifolius*, *Vitis rotundifolia.*			
8.	*Bursaphelenchus cocophilus* (Cobb) Baujard; *(=Aphelenchoides cocophilus =Aphelenchus cocophilus =Rhadinaphelenchus cocophilus =Chitinoaphelenchus cocophilus)*; Aphelenchoididae; red ring disease	(P): *Cocos nucifera* (kelapa, coconut), *Elaeis guineensis* (kelapa sawit, oilpalm) (S): *Phoenix canariensis*, *Phoenix dactylifera* (kurma, dates-palm), *Sabal palmetto*	II	tunas (bud), kulit kayu (bark), planlet, batang (stem), daun (leaf), akar (root), kayu (wood), tanah (soil), Vector: *Rhynchophorus palmarum* & *Rhynchophorus cruentatus*	America: Bahama, Barbados, Belize, Brazil, Colombia, Costa Rica, Dominica, Ecuador, El Salvador, Guatemala, Guyana, Grenada, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Peru, Puerto Rico, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, Venezuela.
9.	*Bursaphelenchus xylophilus* (Steiner & Buhrer) Nickle; *(=Aphelenchoides xylophilus =Bursaphelenchus lignicolus)*; Parasitaphelenchidae; pine wood	(P): *Pinus* spp. (S): *Picea* spp., *Larix* spp., *Abies* spp., *Cedrus deodara*, *Cedrus*	II	kulit kayu (bark), kemasan kayu (wood packing material),	America: Canada, Mexico, USA. Asia: China, Japan, Korea

	nematode, pine wilt nematode	*atlantica*, *Pseudotsuga menziesii*, *Chamaecyparis nootkatensis*		*Monochamus alternatus* (vector), *M. nitens* (vector)	Europe: Portugal.
10	*Cactodera cacti (*Filipjev & Schuumans Stekhoven) Krall & Krall; (=*Heterodera cacti*); Heteroderidae; cactus cyst nematode, cactus cyst eelworm, cactus root eelworm	(P): *Schlumbergera truncata*, *Epiphyllum* spp., *Epiphyllum ackermannii*, *Echinopsis* spp., *Erysimum allionii*, *Ferocactus* spp., *Opuntia microdasys*, *Opuntia stricta*, *Saccharum officinarum* (tebu, sugarcane)	II	akar (root), batang (stem), tanah (soil)	Europe: Austria, Belgium, Czech, Denmark, Hungary, France, Germany, Italy, Malta, Netherlands, Poland, Rumania, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia , Slovakia, Spain, Sweden, Switzerland, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro,

					Macedonia Asia: India, Israel, Japan, South Korea, Uzbekistan, Vietnam Africa: Algeria America: Argentina, Brazil, Canada, Colombia, Cuba, Mexico, USA, Oceania: Australia.
11	*Ditylenchus africanus* Wendt *et. al*.; Anguinidae; peanut pod nematode, groundnut pod nematode	(P) : *Arachis hypogaea* (kacang tanah, groundnut) (S) : *Chenopodium album* (fat hen), *Datura stramonium* (jimsonweed), *Eleusine indica* (goose grass), *Glycine max* (kedelai, soyabean), *Gossypium hirsutum* (Bourbon cotton), *Helianthus annuus* (bunga matahari,	II	benih (*seed*)	Africa : Mozambieque, South Africa

		sunflower), *Lupinus albus* (white lupine), *Medicago sativa* (lucerne), *Nicotiana tabacum* (tembakau, tobacco), *Phaseolus vulgaris* (common bean), *Pisum sativum* (pea), *Solanum tuberosum* (ketang, potato), *Sorghum bicolor* (sorghum), *Tagetes minuta* (stinking Roger), *Triticum aestivum* (gandum, wheat), *Vigna unguiculata* (cowpea), *Xanthium strumarium* (common cocklebur), *Zea mays* (jagung, maize)			
12	*Ditylenchus destructor* Thorne; Anguinidae; potato rot nematode, potato tuber nematode, potato eelworm	(P): *Solanum tuberosum* (kentang, potato), *Ipomoea batatas* (ubi jalar, sweet potato), *Fragaria vesca* (arbei, strawberry), *Beta vulgaris* (bit, beetroot), *Daucus*	II	umbi (tuber/corm), rhizome, batang (stem), planlet, tanah (soil)	Europe: Albania, Austria, Belarusia, Belgium, Netherlands, Bulgaria, Czech, Estonia, Finland, France, Germany, Greece, Hungary,

		carota (wortel, carrot), *Allium ascalonicum* (bawang merah, shallot), *Allium sativum* (bawang putih, garlic), *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Camellia sinensis* (teh, tea), *Chrysanthemum* spp. (krisan, chrysant), *Citrus sinensis* (jeruk manis, navel orange), *Capsicum annuum* (paprika, bell-pepper), *Cucumis sativus* (mentimun, cucumber), *Cucurbita maxima* (waluh, labu parang, pumpkin), Dahlia hybrids, Gladiolus hybrids, *Glycine max* (kedelai, soybean), *Humulus lupulus* (hops), *Irish* spp., *Lycopersicum esculentum* (tomat, tomato), *Mentha* spp. (mentol, mint),			Ireland, Italy, Latvia, Lithuania, Luxembourg, Moldova, Norway, Poland, Rumania, Russia, Slovakia, Spain, Sweden, Switzerland, Ukranie, UK Asia: Azerbaijan, China, India, Iran, Japan, Kazakhstan, South Korea, Kyrgyzstan, Malaysia, Pakistan, Saudi Arabia, Tajikistan, Turkey, Uzbekistan, Africa: South Africa America: Canada, Ecuador, Haiti, Mexico, Peru, USA Oceania: Australia, New Zealand

		Panax schinseng (ginseng), *Solanum melongena* (terung, eggplant, aubergine), *Trifolium* spp., *Triticum aestivum* (gandum, wheat), *Tulipa* spp., *Zea mays* (jagung, corn, maize)			
13	*Ditylenchus dipsaci* (Khun.) Filipjev; Anguinidae; nematoda umbi/brown ring disease of hyacinth	*Allium ascalonicum* (bawang merah, shallot), *Allium sativum* (bawang putih, garlic), *Allium cepa* (bawang bombai, onion), *Allium fistulosum* (bawang daun, welch onion) dan Orchidaceae (anggrek, orchids), *Daucus carota* (wortel, carrot), *Solanum tuberosum* (kentang, potato), *Raphanus sativus* (lobak, radish), *Ipomoea batatas* (ubi jalar, sweet potato), tanaman *Abrosia*	II	umbi (bulb) dan tanah (soil)	Europe : Europe (as a whole), Albania, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Czech Republic and Slovakia , Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy , Latvia, Lithuania, Macedonia, Malta, Moldova, Netherlands, Norway,

		spp., *Chrysanthemun* spp., *Circium* spp., *Iris* spp., *Avena* spp., *Helianthus annuus* (bunga matahari, sunflower), *Erigeron* spp., *Lactuca sativa* (sla, lettuce)., *Secale cereale* (rye)., *Agropiron* spp., *Lepidium* spp., *Tagetes* spp., *Trifolium* spp., *Delpinium* spp., *Tulipa* spp., *Plantago* spp., *Hyacinthes* spp.,			Poland, Portugal, Romania, Russia (Central Russia, Russian Far East, Siberia, Southern Russia, Western Siberia), Slovakia, Slovenia, Spain , Sweden, Switzerland, Ukraine, UK (England and Wales, Scotland), Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia. Asia : Armenia, Azerbaijan, China , Georgia (Republic), Iran, Iraq, Israel, Japan, Jordan, Kazakhstan, Korea Republic of (South Korea), Kyrgyzstan, Oman, Pakistan, Syria, Turkey, Uzbekistan,

					Yemen. Africa : Algeria, Kenya, Morocco, Nigeria, Réunion, South Africa, Tunisia. America : Argentina, Bolivia, Brazil (Minas Gerais, Paraiba, Panama, Rio Grande do Sul, Santa Catarina, Canada, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Haiti, Mexico, Paraguay, Peru, USA (Hawaii), Uruguay, Venezuela. Oceania : Australia, New Zealand.
14	*Globodera tabacum* (Lownsbery & Lownsbery) Skarbilovich; *(=Globodera tabacum =Heterodera tabacum)*; Heteroderidae; tobaco cyst	(P): *Nicotiana tabacum* (tembakau, tobacco), *Lycopersicum esculentum* (tomat, tomato) (S): *Solanum melongena*	II	akar (root), tanah (soil)	Europe: France, Greece, Italy, Rusia, Serbia, Slovenia, Croatia, Bosnia and Herzegovina,

	nematode	(terung, eggplant), *Solanum nigrum*, *Solanum gilo*, *Solanum indicum*, *Solanum mauritianum*, *Solanum quitoense*, *Solanum tuberosum* (kentang, potato)			Montenegro, Macedonia Asia: China, South Korea, Pakistan Africa: Madagascar, Moroko America: Argentina, Colombia, Meksico, USA.
15	*Hemicycliophora arenaria* Raski; Criconematidae; sheath nematode	(P): *Citrus limonia* (mandarin lime), *Citrus aurantiifolia* (jeruk nipis, lime), *Citrus reticulate* (jeruk mandarin, mandarin) , *Lycopersicum esculentum* (tomat, tomato), *Cucurbita maxima* (waluh, labu parang, pumpkin) (S): *Apium graveolens* (selederi, celery) *Citrus limettioides* (palestine sweet lime), *Citrus macrophylla*, *Citrus*	II	akar (root), tanah (soil)	America: Argentina, Brazil, USA.

		taiwanica, *Capsicum annuum* (cabai, hot pepper, chilies, red pepper), *Libocedrus Chilensis*, *Saccharum officinarum* (tebu, sugarcane), *Vigna* cylindrical (kacang tunggak, long bean), *Vitis vinifera* (anggur, grapevine)			
16	*Heterodera avenae* Wollenweber; *(=Bidera avenae = B.ustinovi =Heterodera major =H. schachtii maior =H.schachtii* var. *avenae =Heterodera ustinovi)*; Heteroderidae; oat cyst nematode, cereal cyst nematode, cereal cyst eelworm, oat root eelworm	(P): *Avena sativa* (oat, oats), *Hordeum vulgare* (barli, barley), *Secale cereale* (rye), *Triticale* spp. *Triticum aestivum* (gandum, wheat) (S): Poaceae, *Zea mays* (jagung, corn, maize)	II	akar (root), umbi (tuber/ corm), (externally), tanah (soil).	Europe: Belgium, Bosnia and Herzegovina, Bulgaria, Czech, Denmark, Estonia, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece,Ireland, Italy, Latvia, Malta, Netherlands, Norway,

					Poland, Portugal, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukranie, UK Asia: China, India, Iran, Israel, Japan, Kazakstan, Pakistan, Saudi Arabia, Turkey Africa: Algeria, Libia, Morocco, South Africa, Tunisia America: Canada, Peru, USA Oceania: Australia, New Zealand.
17	*Heterodera carotae* Jones; Heteroderidae; carrot cyst nematode, carrot cyst eelworm, carrot root eelworm	(P): *Daucus carota* (wortel, carrot), *Olea europea sub.sp europea* (zaitum, olive)	II	umbi (tuber/corm), tanah (soil)	America: USA Europe: France, Portugal, Switzerland
18	*Heterodera cruciferae* Franklin; Heteroderidae; crucifer cyst nematode	(P): Cruciferae	II	akar (root), tanah (soil)	Europe: UK, Switzerland Asia: Pakistan.

19	*Heterodera goettingiana* Liebscher; Heteroderidae; pea cyst nematode, pea cyst eelworm, pea root eelworm	(P): *Pisum sativum* (kapri, sweet pea), *Vicia faba* (S): *Cicer arietinum*, *Glycine max* (kedelai, soybean), *Lens* esculentum (lentil), *Lathyrus odoratus*, *Lathyrus sativus*, *Lupinus albus*, *Lupinus luteus*, *Medicago sativa* (alfalfa, lucerne), *Pisum sativum* (kapri, sweet pea), *Vicia* spp.	II	umbi (tuber/corm), akar (root), tanah (soil)	Europe: Belgium, Bulgaria, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia , France, Germany, Italy, Malta, Poland, Portugal, Spain, UK Asia: China, Israel, Jordan Africa: Algeria America: USA.
20	*Heterodera oryzicola* Rao & Jayaprakash; Heteroderidae; rice cyst nematoda	(P): *Oryza sativa* (padi, paddy), *Cynodon dactylon* (S): *Musa paradisiaca* (pisang kepok, plantain)	II	akar (root), tanah (soil)	Asia: India.
21	*Heterodera sacchari* Luc.& Merny.; Heteroderidae; sugarcane	(P): *Oryza sativa* (padi, paddy), *Zea mays*	II	akar (root), tanah (soil)	Asia: India, Pakistan, Thailand

	cyst nematode	(jagung, corn, maize), *Saccharum officinarum* (tebu, sugarcane), *Nicotiana tabacum* (tembakau, tobacco)			Africa: Benin, Burkina Faso, Chad, Congo, Ivory Coast, Gambia, Ghana, Liberia, Nigeria, Senegal.
22	*Heterodera schachtii* Schmidt; *(=Heterobolbus schachtii =Heterodera schachtii minor =Tylenchus schachtii)*; Heteroderidae; sugar beet, cyst nematode, beet cyst eelworm	(P): *Beta* spp., *Brassica napus* var. *napus*, *Brassica oleracea*, *Alliaria petiolata*, *Amaranthus* spp., *Apium dulce*, *Arabis* spp., *Armoracia rusticana*, *Atriplex* spp., *Aubrieta* spp., *Aubrieta columnae*, *Alyssum argentium*, *Brassica* spp., *Dianthus* spp., *Polygonum convolvulus*, *Gypsophila acutifolia*, *Gypsophila elegans*, *Oryza sativa* (padi, paddy), *Thlaspi arvense*, *Phytolacca acinosa*, *Vigna* spp. (buncis, cowpea), *Pisum sativum* (kapri, sweet pea), *Polygonum* spp., *Portulaca oleracea*, *Raphanus maritimus*,	II	akar (root), umbi (tuber/ corm), tanah (soil)	Europe: Albania, Austria, Belgium, Bulgaria, Croatia, Czech, Denmark, Estonia, Hungary, Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Netherlands, Poland, Portugal, Rumania, Russia, Spain, Sweden, Switzerland, Ukranie, UK Asia: Azerbaijan, China, India, Iran, Iraq, Israel, Jordan,

		Raphanus raphanistrum, Raphanus sativus (lobak, radish), *Rheum hybridum, Rorippa amphibia, Rorippa islandica, Rumex* spp., *Saponaria ocymoides, Saponaria officinalis, Sesbania macrocarpa, Sesbania exaltata, Silene armeria, Silene maritima, Silene nutans, Silene quadrifida, Silene saxifraga, Sinapis arvensis, Sinapis eruca, Sisymbrium austriacum, Sisymbrium* spp., *Solanum sarrachoides, Spinacia glabra, Spinacia oleracea, Tetragonia tetragonioides, Tropaeolum perigrinum, Vaccaria hispanica, Vicia benghalensis, Vigna catjang*.			Kazakstan, South Korea, Kirzikistan, Pakistan, Syria, Turkey Africa: Algeria, Cape Verde, Gambia, Libia, Morocco, Senegal, South Africa, Tunisia, America: Chile, Canada, Mexico, Peru, USA, Uruguay Oceania: Australia, New Zealand
23	*Heterodera trifolii* Goffart; Heteroderidae; clover cyst nematode, clover cyst eelworm	(P): Poaceae, *Beta vulgaris* var. *saccharifera* (bit gula, sugar beetroot), *Dianthus caryophyllus*	II	akar (root), tanah (soil)	Asia: India, Iran Oceania: Australia.

		(anyelir, carnation), *Solanum tuberosum* (kentang, potato), *Trifolium* spp., *Trifolium pratense, Trifolium repens,* Leguminosae			
24	*Heterodera vigni* Edward & Mura; *(=Heterodera cajani)*; Heteroderidae; pea cyst nematode	(P):*Vigna sinensis (*kacang panjang, cowpea), *Cajanus cajan* (kacang gude, pigeon pea), *Cyamopsis tetragonoloba, Lablab purpureus, Vigna aconitifolia, Vigna radiata* (kacang hijau, mungbean), *Vigna mungo, Vigna* spp. (buncis, cowpea), *Pisum sativum* (kapri, sweet pea), *Sesamum indicum* (wijen, sesame), *Vigna cylindrica* (kacang tunggak, long bean) (S): *Crotalaria juncea, Sesbania cannabina*	II	akar (root), tanah (soil)	Asia: India, Pakistan Africa: Egypt.

25	*Heterodera zeae* Koshy,Swarup & Sethi; Heteroderidae; corn/maize cyst nematode	(P): *Zea mays* (jagung, corn, maize) (S): *Avena sativa* (oat, oats), *Hordeum vulgare* (barli, barley), *Oryza sativa* (padi, paddy), *Setaria italyca*, *Sorghum Sudanense*, *Sorghum bicolor* (sorgum, sorghum), *Triticum aestivum* (gandum, wheat), *Zea mexicana*	II	akar (root), tanah (soil)	America: USA Asia: India, Pakistan, Nepal, Thailand Africa : Egypt.
26	*Hirschmanniella spinicaudata* (Schuurmans Steekhoven) Luc & Goodey; *(=Hirschmannia spinicaudata =Radopholus lavabri =Tylenchorhynchus spinicaudatus)*; Pratylenchidae; rice root tip nematode, root lesion nematode	(P): *Oryza sativa* (padi, paddy), *Saccharum officinarum* (tebu, sugarcane) (S): *Fimbristylis dichotoma*	II	umbi (tuber/corm), planlet, akar (root), tanah (soil)	Africa: Benin, Burkina Faso, Cameroon, Congo, Ivory Coast, Gambia, Ghana, Nigeria, Senegal, Togo, Zambia America: Brazil, Costa Rica, Cuba, USA, Venezuela

27	*Hirschmanniella miticausa* Bridge Mortimer & Jackson; Pratylenchidae; miti miti disease	(P): *Colocasia esculenta* (talas, taro)	II	umbi (tuber/corm), tanah (soil)	Oceania: Papua New Guinea, Solomon Islands Islands.
28	*Hoplolaimus columbus* Sher.; Hoplolaimidae; Coltuber/Columbia lance nematode	(P): *Glycine max* (kedelai, soybean), *Gossypium barbadens* (kapas, cotton), *Saccharum officinarum* (tebu, sugarcane), *Sorghum bicolor* (sorgum, sorghum), *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, corn, maize)	II	akar (root), tanah (soil).	Asia: India, Pakistan Africa: Egypt America: USA.
29	*Hoplolaimus indicus* Sher.; *(=Basirolaimus arachidis =Basirolaimus indicus =Hoplolaimus arachidis)*; Hoplolaimidae; lance nematode	(P): *Oryza sativa* (padi, paddy) (S): *Abelmoschus moschatus* (okra, lady's finger), *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Basella* spp., *Brassica oleracea botrytis (*bunga kol, cauliflower), *Brassica oleracea*	II	akar (root), tanah (soil).	Asia: Bangladesh, China, India, Iran.

		capitata (kubis, cabbage), *Cajanus cajan* (kacang gude, pigeon pea), *Chrysanthemum* spp. (krisan, chrysant), *Citrus jambhiri*, *Cyamopsis tetragonoloba*, *Capsicum annuum* (paprika, bell-pepper), *Capsicum annuum* (cabai rawit, hot pepper, chilies, red pepper), *Cucumis sativus* (mentimun, cucumber), *Eleusine coracana*, *Gossypium barbadens* (kapas, cotton), *Ipomoea batatas* (ubi jalar, Sweet potato), *Lycopersicum esculentum* (tomat, tomato), *Mangifera indica* (mangga, mango), *Musa* spp. (pisang, banana), *Pennisetum glaucum*, *Vigna radiata* (kacang hijau, mungbean), *Vigna mungo*, *Pisum sativum*			

		(kapri, sweet pea), *Poncirus trifoliata*, *Prunus persica* (persik, peach), *Psidium* spp., *Raphanus sativus* (lobak, radish), *Solanum melongena* (terung, eggplant, aubergine), *Solanum tuberosum* (kentang, potato), *Sorghum bicolor* (sorgum, sorghum), *Trifolium alexandrinum*, *Triticum aestivum* (gandum, wheat), *Vigna cylindrica* (kacang tunggak, long bean), *Zea mays* (jagung, corn, maize), *Senna siamea, Pinus roxburghii*, *Saccharum officinarum* (tebu, sugarcane)			
30	*Hoplolaimus pararobustus* (Schuurmans stekhoven & Teunissen) Sher. In Coomans; *(=Gottholdsteineria pararobusta =Hoplolaimus angustulatus*	(P): *Musa* spp. (pisang, banana) (S): *Coffea* spp. (kopi, coffee), *Camellia sinensis*	II	akar (root), tanah (soil).	Asia: China, Pakistan, Sri Lanka Africa: Angola, Burkina Faso,

	=H.capensis =H.casparus =H. kittenbergeri =H.pararobustus =Rotylenchus pararobustus =Tylenchorhynchus pararobustus); Hoplolaimidae; lance nematode	(teh, tea), *Psidium guajava* (jambu biji, guava),*Saccharum officinarum* (tebu, sugarcane), *Elaeis guineensis* (kelapa sawit, oilpalm), *Gossypium hirsutum*, *Mangifera indica* (mangga, mango), *Carica papaya* (pepaya, pawpaw), *Oryza sativa* (padi, paddy), *Dioscorea* spp., *Ananas comosus* (nenas, pineapple), *Triticum aestivum* (gandum, wheat), *Vigna cylindrica* (kacang tunggak, long bean), *Vitis vinifera* (anggur, grapevine), *Citrus*, *Sorghum bicolor* (sorgum, sorghum), *Eleusine coracana*, kakao, *Rosa* spp. (mawar, rose)			Cameroon, Congo, Egypt, Gambia, Guinea, Ivory Coast, Kenya, Madagascar, Malawi, Mozambique, Niger, Nigeria, Réunion, Sao Tome & Principe, South Africa, Tanzania, Togo, Uganda, Zimbabwe America: Dominica, Grenada, St. Lucia, St. Vincent and the Grenadines.

31	*Longidorus elongatus* (de Man) Thorne & Swanger; *(=Dorylaimus elongatus =Dorylaimus tenuis =Longidorus menthasolanus =Longidorus monohystera =Trichodorus elongatus)*; Longidoridae; needle nematode, tomato black ring eelworm	(P): *Beta vulgaris* (bit, beetroot), *Daucus carota* (wortel, carrot), *Fragaria vesca* (arbei, strawberry), *Lolium perenne, Mentha piperita* (S): *Allium* spp., seladeri, *Avena sativa* (oat, oats) , *Brassica oleracea* var. *gemmifera*, *Brassica oleracea capitata* kubis, cabbage), *Ficus carica*, *Hordeum vulgare* (barli, barley), *Lycopersicum esculentum* (tomat, tomato), *Medicago sativa* (alfalfa, lucerne), *Raphanus sativus* (lobak, radish), *Ribes nigrum, Ribes rubrum, Trifolium pratense, Urtica dioica, Vitis vinifera*, *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Brassica rapa subspec.*	II	akar (root), tanah (soil). (Vector: raspberry ringspot virus, *Lycopersicum esculentum* (tomat, tomato black ring virus)	Europe: Belgium, Netherlands, Bulgaria, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Moldova, Norway, Poland, Portugal, Rumania, Russia, Slovakia, Spain, Sweden, Switzerland, Ukranie, UK Asia: Georgia, India, Kazakhtan, Pakistan, Tajikistan, Uzbekistan, Vietnam Africa: South Africa America: Canada, USA Oceania: New Zealand.

		rapa (turnip, turnip), *Polygonum convolvulus*, *Malus domesticum (*apel, apple*)*, *Pyrus communis (*pir, pear*)*, *Ranunculus acris*, *Rosa* spp. (mawar, rose), *Rubus idaeus*			
32	*Longidorus leptocephallus* Hooper; Longidoridae; needle nematode	(P): cerealia, *Daucus carota* (wortel, carrot), *Solanum tuberosum* (kentang, potato)	II	akar (root), tanah (soil). (Vector: raspberry ringspot virus, *Prunus cerrasus* (ceri, cherry leaf roll virus)	Europe
33	*Longidorus attenuatus* Hooper; Longidoridae; needle nematode	(P): *Hordeum vulgare* (barli, barley), *Fragaria vesca* (arbei, strawberry), *Beta vulgaris* var *saccharifera* (bit gula, sugar beetroot)	II	akar (root), tanah (soil). (Vector: *Lycopersicum esculentum* (tomat, tomato black ring virus)	Europe: Europe, Russia

34	*Longidorus caespiticola* Hooper; Longidoridae; needle nematode	(P): *Fragaria vesca* (arbei, strawberry), *Rosa spp. (*mawar, rose)	II	akar (root), tanah (soil). (Vector: raspberry ringspot virus, *Prunus cerrasus* (ceri, cherry leaf roll virus)	Europe: Western Europe
35	*Longidorus macrosoma* Hooper; Longidoridae; needle nematode	(P): *Rosa* spp. (mawar, rose), *Fragaria vesca* (arbei, strawberry), *Vitis vinifera* (anggur, grapevine)	II	akar (root), tanah (soil). (Vector: rasberry ringspot virus)	Europe
36	*Meloidogyne acronea* Coetzee; *(=Hypsoperine (Hypsoperine) acronea =Hypsoperine acronea)*; Meloidogynidae; African cotton root nematode	(P): *Gossypium barbadens* (kapas, cotton) (S): *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Cajanus cajan* kacang gude, pigeon pea), *Cassia* spp., *Chloris gayana*, *Cyamopsis tetragonoloba*, *Croton*	II	akar (root), tanah (soil)	Africa: Malawi, South Africa.

		tiglium, Eleusine coracana, *Eragrostis* spp., *Helianthus annuus* (bunga matahari, sunflower), *Hibiscus sabdariffa*, *Lycopersicum esculentum* (tomat, tomato), *Pennisetum glaucum*, *Vigna* spp. (buncis, cowpea), *Solanum tuberosum* (kentang, potato), *Sorghum bicolor* (sorgum, sorghum)			
37	*Meloidogyne brevicauda* Loos; Meloidogynidae; Indian rootknot nematode, tea rootknot nematode	(P): *Camellia sinensis* (teh, tea), *Crocus sativus*	II	akar (root), tanah (soil)	Asia: Azerbaijan, India, Srilanka.
38	*Meloidogyne chitwoodi* Golden O' Bannon, Santo & Finley; Meloidogynidae; Coltuber/corma root-knot nematode	(P): *Daucus carota* (wortel, carrot), *Lycopersicum esculentum* (tomat, tomato), *Medicago sativa* (alfalfa, lucene), *Solanum tuberosum* (kentang, potato)	II	akar (root), umbi (tuber/corm), tanah (soil)	Europe: Belgium, Germany, Netherland Africa: South Africa America: Argentina, Canada, Mexico, USA.

		(S): *Vigna* spp. (buncis, cowpea), *Pisum sativum* (kapri, sweet pea), *Scorzonera hispanica*, *Zea mays* (jagung, corn, maize)			
39	*Meloidogyne coffeicola* Lordello & Zamith; Meloidogynidae; rootknot nematode	(P): *Coffea* spp. (kopi, coffee)	II	akar (root), tanah (soil)	America: Brazil
40	*Meloidogyne decalineata* Whitehead; Meloidogynidae; African coffee rootknot nematode	(P): *Coffea* spp. (kopi, coffee)	II	akar (root), tanah (soil)	Africa: Tanzania America: Sao Tome & Principe.
41	*Meloidogyne exigua* Goeldi; *(=Heterodera exigua)*; Meloidogynidae; coffee rootknot nematode, Brazilian pyroid coffee nematode, root-knot nematode	(P): *Allium ascalonicum* (bawang merah, shallot), *Bidens pilosa*, *Citrus aurantium* (jeruk nipis, lime), *Citrullus vulgaris* (semangka, watermelon), *Capsicum annuum* (paprika, bell-pepper), *Cucumis sativus* (mentimun, cucumber), *Cyphomandra betacea*, *Lycopersicum esculentum*	II	akar (root), tanah (soil)	America: Bolivia, Brazil, Chile, Colombia, El Salvador, Dominica, Guatemala, Guadeloupe, Guyana, Honduras, Martini, Nicaragua, Puerto Rico, Peru, Suriname, Trinidad, Venezuela.

		(tomat, tomato), *Musa* spp. (pisang, banana), *Oryza sativa* (padi, paddy), *Pilea* spp., *Poncirus trifoliata*, *Saccharum officinarum* (tebu, sugarcane), *Solanum nigrum*, *Stachys arvensis*, *Coffea* spp. (kopi, coffee), *Ipomoea acuminata*.			
42	*Meloidogyne naasi* Franklinl; Meloidogynidae; rootknot nematode	(P): *Hordeum vulgare* (barli, barley), *Trifolium repens*, *Triticum aestivum* (gandum, wheat), *Beta vulgaris* var. *sacchraifera* (bit gula, sugar beetroot), cerealea, *Glycine max* (kedelai, soybean) (S): turfgrasses	II	akar (root), tanah (soil)	Europe: France, Hungary, UK.
43	*Meloidogyne oteifae* Elm iligy; Meloidogynidae; rootknot nematode	(P): *Coffea* spp. (kopi, coffee), *Peuraria* spp.	II	akar (root), tanah (soil)	Africa: Angola, DR Congo

44	*Nacobbus aberrans* (Thome) Thorne & Allen; *(=Nacobbus batatiformis =N.serendipiticus bolivianus =Pratylenchus aberrans =Nacobbus serendipiticus =Anguillulina aberrans)*; Pratylenchidae; false rootknot nematode, potato rosery nematode	(P): *Solanum tuberosum* (kentang, potato), *Lycopersicum esculentum* (tomat, tomato), *Beta vulgaris* var. *sacchraifera* (bit gula, sugar beetroot), *Brassica* spp., *Amaranthus hybridus* (bayam, spinach), *Atriplex confertifolia*, *Beta vulgaris* (bit, beetroot), *Chenopodium album*, *Capsicum annuum* (paprika, bell-pepper), *Cucumis sativus* (mentimun, cucumber), *Cucurbita maxima*, *Cucurbita pepo* (labu kuning, zucchini), *Daucus carota* (wortel, carrot), *Gaillardia* spp., *Kochia* spp., *Lactuca* sativa (selada, lettuce), *Opuntia* spp., *Pisum sativum* (kapri, sweet pea), *Sisymbrium irio*, *Solanum*	II	umbi (tuber/corm), akar (root), tanah (soil)	Europe: Finland, Italy, Netherlands, Russia, UK Asia: India. America: Argentina, Bolivia, Chile, Ecuador, Mexico, Peru, USA

		melongena (terung, eggplant), *Spergula arvensis*, *Spinacia oleracea*, *Tribulus terrestris*, *Tragopogon porrifolius*, *Solanum nigrum*, *Ullucus tuberosus*			
45	*Pratylenchus goodeyi* Sher & Allen; *(=Anguillulina musicola =Tylenchus musicola)*; Pratylenchidae; banana lesion nematode	(P): *Musa* spp. (pisang, banana), *Musa paradisiaca* (pisang kepok, plantain) (S): *Zea mays* (jagung, corn, maize), *Vigna* spp. (buncis, cowpea), *Commelina benghalensis*, *Sesbania grandiflora* (turi, agati), *Lycopersicum esculentum* (tomat, tomato), *Solanum tuberosum* (kentang, potato), *Sorghum bicolor* (sorgum, sorghum)	II	akar (root), tanah (soil)	Europe: Greece, Portugal, Spain Africa: Burundi, Cameroon, Egypt, Ethiopia, Kenya, Ruwanda, Tanzania, Uganda.

46	*Pratylenchus loosi* Loof; Pratylenchidae; lesion nematode, meadow nematode, Loos' root lesion nematode	(P): *Camellia sinensis* (teh, tea), *Coffea* spp. (kopi, coffee) (S): *Abelmoschus moschatus* (okra, lady's finger), *Citrus* spp. (jeruk, orange), *Cinnamomum camphora*, *Convallaria* spp., *Dioscorea* spp., *Diospyros kaki* (kesemek, persimmon), *Fragaria vesca* (arbei, strawberry), *Malus domesticum (*apel, apple*),* *Mangifera indica* (mangga, mango), *Musa paradisiaca* (pisang kepok, plantain), *Pisum sativum* (kapri, sweet pea), *Poncirus trifoliata*, *Prunus avium, Pyrus communis (*pir, pear*)*, *Saccharum officinarum* (tebu, sugarcane), *Solanum tuberosum* (kentang, potato),	II	akar (root), tanah (soil)	Asia: Bangladesh, China, India, Japan, Sri Lanka Africa: Senegal.

		Sorghum bicolor (sorgum, sorghum), *Vigna cylindrica* (kacang tunggak, long bean), *Zea mays* (jagung, corn, maize)			
47	*Pratylenchus neglectus* (Rensch)Fili&Schuur.Steekh.; Pratylenchidae; California root lesion nematode, California meadow nematode	(P): *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, corn, maize), *Agropyron cristatum*, *Brassica oleracea capitata* (kubis, cabbage), *Fragaria vesca (arbei, strawberry)*, *Malus domesticum (*apel, apple*)*, *Medicago sativa* (alfalfa, lucerne), *Solanum tuberosum* (kentang, potato)	II	akar (root), tanah (soil)	Europe: Croatia, Estonia, Rusia, Spain Asia: Pakistan Africa: Morocco, South Africa America: Canada, Mexico, USA Oceania: Australia,
48	*Pratylenchus scribneri* Steiner; Pratylenchidae; lesion nematode	(P): *Gossypium barbadens* (kapas, cotton), *Malus domesticum (*apel, apple*)*, *Mentha spicata*, *Parthenium argentatum*, *Solanum tuberosum*	II	akar (root), tanah (soil)	Europe: Italy Asia: Pakistan Africa: Cameroon, South Africa

		(kentang, potato), *Sorghum halepense*, *Zea mays* (jagung, corn, maize), *Fragaria vesca* (arbei, strawberry), *Hippeastrum* spp. (amarilis, amaryllis).			America: USA.
49	*Pratylenchus thornei* Sher. & Allen; Pratylenchidae; Thorne's root lesion nematode	(P): *Triticum aestivum* (gandum, wheat), *Cicer arietinum*, *Zea mays* (jagung, corn, maize), *Pinus merkusii* (tusam, pinetree), *Quercus* spp. (S): *Rosa* spp. (mawar, rose), Fabaceae, *Agrostis* spp., *Allium ascalonicum* (bawang merah, shallot), *Apium graveolens* (seladeri, celery), *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Avena sativa* (oat, oats), *Beta vulgaris* (bit, beetroot), *Citrullus vulgaris* (semangka,	II	akar (root), tanah (soil)	Europe: Belgium, Bulgaria, Netherlands, Croatia, Cyprus, Denmark, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Germany, Greece, Italy, Portugal, Russia, Spain, UK Asia: Afghanistan, India, Iran, Israel, Japan, Jordan, Saudi Arabia, Syria, Turkey Africa: Egypt, Libia, Malawi, Morocco

		watermelon), *Cupressus* spp., *Cynara scolymus* (artisyok, artichoke), *Daucus carota* (wortel, carrot), *Fragaria vesca* (arbei, strawberry), *Glycine max* (kedelai, soybean), *Hordeum vulgare* (barli, barley), *Iberis* spp., *Juglans regia* (walnut), *Lens esculenta* (lentil), *Lathyrus odoratus*, *Medicago sativa* (alfalfa, lucerne), *Mentha piperita*, *Mentha spicata*, *Vigna* spp. (buncis, cowpea), *Pisum sativum* (kapri, sweet pea), *Prunus* spp., *Saccharum officinarum* (tebu, sugarcane), *Solanum tuberosum* (kentang, potato), *Sorghum bicolor* (sorgum, sorghum), *Trifolium* spp., *Vicia faba*, *Vigna*			America: Argentina, Mexico, USA Oceania: Australia.

		cylindrica (kacang tunggak, long bean), *Vitis vinifera* (anggur, grapevine)			
50	*Pratylenchus vulnus* (Allen & Jensen); Pratylenchidae; walnut root lesion nematode; root lesion nematode; meadow nematode	(P): *Actinidia arguta* (tara vine), *Actinidia deliciosa* (kiwi, kiwifruit), *Araucaria araucana* (monkey puzzle), *Berberis thunbergii* (Japanese barberry), *Brassica oleracea var. capitata* (cabbage), *Buxus sempervirens* (common boxwood), *Carya illinoinensis* (pecan), *Citrus aurantium* (sour orange), *Citrus sinensis* (navel orange), *Citrus x paradisi* (grapefruit), *Corylus avellana* (hazel), *Crotalaria juncea* (sunn hemp), *Crotalaria spectabilis* (Showy rattlepod), *Cydonia*	II	Akar (root), bibit tanaman (seedling)	Europe: Belgium, Bulgaria, Denmark, Finland, France, Germany, Greece, Italy, Netherlands, Norway, Russia, Russia, Spain, UK Asia: China, India, Iran, Israel, Japan, Korea, Kyrgyzstan, Pakistan, Sri Lanka Africa: Cameroon, Egypt, Kenya America: Argentina, Brazil, Cuba, Canada, USA, Uruguay Oceania: Australia, New Zealand

		oblonga (quince), *Cytisus scoparius* (broom), *Daucus carota* (wortel, carrot), *Eriobotrya japonica* (loquat), *Ficus carica* (ara), *Forsythia intermedia* (Golden bells), *Fragaria ananassa* (strawberry), *Gossypium hirsutum* (kapas, Bourbon cotton), Hamamelis (witchhazel), *Impatiens balsamina* (garden balsam), *Juglans hindsii* (californian black walnut), *Juglans major* (arizona walnut), *Juglans microcarpa* (River walnut tree), *Juglans nigra* (black walnut), *Juglans regia* (walnut), *Juniperus chinensis* (Chinese juniper), *Lathyrus odoratus* (sweet pea), *Ligustrum ovalifolium* (california privet), *Lilium*			

		longiflorum (Easter lily), *Lilium speciosum* (Showy lily), *Lotus corniculatus* (bird's-foot trefoil), Mahonia (holly grape), *Malus sylvestris* (crab-apple tree), *Medicago sativa* (lucerne), *Melilotus alba* (honey clover), *Nicotiana tabacum* (tobacco), *Olea europaea subsp. europaea* (olive), *Papaver somniferum* (Opium poppy), *Persea americana* (avocado), *Phaseolus lunatus* (lima bean), *Phaseolus vulgaris* (common bean), *Pistacia vera* (pistachio), *Pisum sativum* (pea), *Prunus amygdalus , Prunus armeniaca* (apricot), *Prunus avium* (sweet cherry), *Prunus besseyi* (bessey cherry), *Prunus cerasifera* (myrobalan			

		plum), *Prunus domestica* (plum), *Prunus dulcis* (almond), *Prunus mahaleb* (mahaleb cherry), *Prunus persica* (peach), *Pterocarya stenoptera* (chinese wing nut), *Pyrus communis* (European pear), Rosa (roses), *Rosa canina* (Dog rose), *Rosa chinensis* (China rose), *Rosa multiflora* (Multiflora rose), Rubus (blackberry, raspberry), *Rubus idaeus* (raspberry), *Taxus baccata* (English yew), *Vicia benghalensis* (purple vetch), *Vicia faba* (broad bean), *Vigna catjang* , *Vitis rupestris* (sand-grape), *Vitis vinifera* (grapevine), *Zea mays* (maize), *Bambusa* sp. (Bamboo, Bambu)			

51	*Punctodera punctata* (Thorne) Mulvey & Stone; (=*Heterodera punctata*); Heteroderidae; grass cyst nematode, grass cyst eelworm	(P): *Agrostis stolonifera* var. *palustris*, *Agrostis stolonifera*, *Agrostis capillaris*, *Festuca rubra*, *Lolium perenne*, *Poa annua*, *Poa pratensis* (S): *Avena sativa* (oat, oats), *Hordeum vulgare* (barli, barley), *Triticum aestivum* (gandum, wheat)	II	akar (root), tanah (soil)	Europe: Austria, Belgium, Chech, Denmark, Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Netherlands, Norway, Poland, Portugal, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukranie, UK Asia: Israel, Japan Africa: Morocco America: Argentina, Canada, Chile, Mexico, USA.

52	*Radopholus similis citrophilus* (Huettel, Dickson & Kaplan); Pratylenchidae; burrowing nematode	*Citrus* spp. (jeruk, orange)	II	benih (seeds of) dan tanah (soil)	America : USA .
53	*Scutellonema bradys* (Steiner & Le Hew) Andrassy; *(=Anguillulina bradys =Hoplolaimus bradys =Rotylenchus blaberus =R.bradys =Scutellonema blaberum =S.dioscorea)*; Hoplolaimidae; yam dry rot nematode, yam nematode	(P): *Dioscorea* spp., *Vigna cylindrica* (kacang tunggak, long bean), *Zea mays* (jagung, corn, maize), *Manihot esculenta* (ubi kayu, cassava), *Quercus* spp. (S): *Abelmoschus moschatus* (okra, lady's finger), *Cajanus cajan* (kacang gude, pigeon pea), *Cocos nucifera* (kelapa, coconut), *Celosia argentea*, *Corchorus olitorius*, *Hibiscus cannabinus* (kenaf), *Hibiscus sabdariffa*, *Luffa acutangula* (gambas, angled loofa), *Lycopersicum esculentum* (tomat, tomato), *Manihot*	II	umbi (tuber/corm), akar (root), tanah (soil).	Asia: India, South Korea, Pakistan Africa: Cameroon, Ivory Coast, Gambia, Ghana, Guinea, Nigeria, Senegal, Togo America: Barbados, Brazil, Cuba, Dominica, Guadeloupe, Guatemala, Haiti, Jamaica, Martini, Puerto Rico, Trinidad and Tobago, USA, Venezuela

		esculenta (ubi kayu, cassava), *Pachyrhizus erosus* (bangkuang, yam-bean), *Vigna radiata* (kacang hijau, mungbean), *Pueraria phaseoloides*, *Sesamum indicum* (wijen, sesame), *Sorghum bicolor* (sorgum, sorghum), *Urena lobata*, *Synedrella nodiflora*			
54	*Trichodorus similis* Seinhorst; Trichodoridae; stubby root nematode	(P): *Solanum tuberosum* (kentang, potato), sorgum, *Beta vulgaris* var. sa*ccharifera* (bit gula, sugar beetroot)	II	akar (root), tanah (soil). (Vector : tobacco rattle virus)	Europe: Belgium, Netherlands, France, Germany, Italy, Norway, Poland, Sweden, UK America: USA.
55	*Trichodorus viruliferus* Hooper; Trichodoridae; stubby root nematode	(P): *Beta vulgaris* var. sa*ccharifera* (bit gula, sugar beetroot), *Vitis vinifera* (anggur, grapevine), *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, corn, maize)	II	akar (root), tanah (soil). (Vector : pea early browning virus, tobacco rattle virus)	Europe: Bulgaria, France, Germany, Italy, Netherlands, Poland, Slovakia, Spain, UK

56	*Tylenchorhynchus claytoni* Steiner; Dolichodoridae; stunt nematode; tobacco stunt nematode	(P) : *Arachniodes adiantiformis* (Leatherleaf fern), *Avena sativa* (oats), Azaleas , Glycine max (kedelai, soyabean), *Gossypium sp.* (kapas, cotton), Lolium (ryegrasses), *Medicago sativa* (lucerne), Nandina , *Nicotiana tabacum* (tembakau, tobacco), *Olea europaea* subsp. *europaea* (olive), *Oryza sativa* (padi, rice), Peony , *Photinia glabra* , *Pinus resinosa* (red pine), *Pisum sativum* (pea), Poaceae (grasses), *Prunus persica* (peach), Rhododendron (Azalea), *Rhododendron indicum* (Satsuki azalea), *Rhododendron japonicum* (Japanese azalea), *Rhododendron obtusum* (Kirishima azalea), *Saccharum officinarum*	II	Akar (Root) dan organ vegetatif	Europe : Belgium, Bulgaria, Cyprus, Denmark, Germany, Netherlands, UK. Asia : China, Japan, India (Arunachal Pradesh, Tamil Nadu), Korea Africa : South Africa America : Honduras, Canada, USA Oceania : Australia

		(tebu, sugarcane), *Secale cereale* (rye), *Solanum tuberosum* (kentang, potato), Trifolium spp., *Zea mays* (jagung, maize) (S) : *Arachis hypogaea* (kacang tanah, groundnut), *Aucuba japonica* (Japanese aucuba), *Cajanus cajan* (pigeon pea), *Citrus aurantium* (sour orange), *Citrus limon* (lemon, lemon), *Citrus x paradisi* (grapefruit), *Eleusine coracana* (finger millet), *Ipomoea batatas* (ubi jalar, sweet potato), *Litchi chinensis* (lichi), *Lycopersicon esculentum* (tomat,tomato), *Picea abies* (common spruce), *Pinus echinata* (shortleaf pine), *Pinus elliottii* (slash pine), *Pinus palustris* (longleaf pine), *Pinus*			

		taeda (loblolly pine), Rubus (blackberry, raspberry), *Rubus fruticosus* (blackberry), *Solanum melongena* (terong, aubergine), *Vaccinium myrtillus* (blueberry), *Agrostis stolonifera* var. *palustris* (bent grass), *Arctium lappa* (burdock), *Bouteloua curtipendula* (Side-oats grama), *Bouteloua gracilis* (blue grama), *Camellia japonica* (camellia), *Chamaecyparis pisifera* (sawara false cypress), *Cynodon dactylon* (Bermuda grass), *Echinochloa colona* (junglerice), *Enkianthus perulatus* (white enkianthus), Erica (heaths), Festuca (fescues), *Festuca*			

		arundinacea (reed fescue), Osmanthus fragrans , Pieris japonica (Lily-of-the-valley shrub), Poa pratensis (smooth-stalked meadowgrass)			
57	*Xiphinema index* Thorne & Allen; *(=Diversiphinema index)*; Xiphinematidae; dagger nematode, fanleaf virus nematode	(P): *Vitis vinifera* (anggur, grapevine), *Ficus carica* (ara, fig) , *Muscadinia rotundifolia, Vitis* spp. (S): *Citrus* spp. (jeruk, orange), *Ampelopsis aconitifolia, Anacardium occidentale* (jambu mete, cashew-nut), *Citrus aurantium* (jeruk nipis, ime), *Cydonia oblonga* (kwinsi, quince), *Juglans regia* (walnut), *Jasminum officinale*, *Lycopersicum esculentum* (tomat, tomato), *Malus domesticum (*apel, apple*)*, *Morus alba*, *Olea europea subsp. europea* (zaitum,	II	akar (root), tanah (soil). (Vector: : fanleaf virus pada *Vitis vinifera* (anggur, grapevine)	Europe: Albania, Austria, Bulgaria, Croatia, Cyprus, Czech, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Hungary, Italy, Malta, Moldova, Poland, Portugal, Rumania, Russia, Slovakia, Slovenia, Spain, Switzerland, Ukranie Asia: Armenia, Azerbaijan, Georgia, India, Iran, Iraq, Israel,

		olive), *Opuntia* sp., *Parthenicissus tricuspidata*, *Petunia hybrida*, *Vigna* spp. (buncis, cowpea), *Pistacia mutica*, *Pistacia vera*, *Prunus americana* (aprikot, apricot), *Prunus cerrasus* (ceri, cherry), *Prunus* spp., *Pyrus communis (*pir, pear*)*, *Rosa* spp. (mawar, rose), *Solanum tuberosum* (kentang, potato)			Pakistan, Tajikistan, Turkey, Turkmenistan, Uzbekistan Africa: Algeria, South Africa, Tunisia America: Argentina, Brazil, Chile, Peru, USA Oceania: Australia, New Zealand.
58	*Xiphinema diversicaudatum* (Micoletzky) Thorne; *(=Dorylaimus (Longidorus) diversicaudatus =D.elongatus =Longidorus diversicaudatus =Xiphinema (Diversiphinema) diversicaudatum =X.amarantum =X.basiri =X.israeliae =X. paraelongatum =X.sahelense =X.seredouense)*; Xiphinematidae; dagger nematode	(P): *Beta vulgaris* (bit, beetroot), *Fragaria vesca* (arbei, strawberry), *Prunus* spp., *Rosa* spp. (mawar, rose), *Rubus fruticosa*, *Rubus idaeus*, *Vitis vinifera* (anggur, grapevine)	II	akar (root), tanah (soil). (Vector: arabic mosaic virus, *Fragaria vesca* (arbei, strawberry latent ringspot virus)	Europe: Austria, Belgium, Netherlands, Bulgaria, Croatia, Czech, Denmark, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Ireland, Italy,

					Moldova, Norway, Poland, Portugal, Russia, Slovakia, Spain, Sweden, Switzerland, Ukranie, UK Asia: India, Israel Africa: Algeria, South Africa America: USA, New Zealand.
59	*Xiphinema americanum* Cobb.; *(=Tylencholaimus americanus =Xiphinema taylori =Xiphinema californicum)*; Xiphinematidae; American dagger nematode, tobacco ring spot nematode	(P): *Citrus* spp. (jeruk, orange), *Coffea* spp. (kopi, coffee), *Malus domesticum (*apel, apple*)*, *Rubus idaeus*, *Vaccinium* spp., *Vitis vinifera* (anggur, grapevine), *Zea mays* (jagung, corn, maize), *Lycopersicum esculentum* (tomat, tomato), *Avena sativa* (oat, oats), *Cocos nucifera* (kelapa, coconut), *Citrus*	II	akar (root), tanah (soil). (Vector: tobacco ring spot virus, *Lycopersicum esculentum* (tomat, tomato) ring spot virus, *Prunus persica* (persik, peach yellow bud virus, *Prunus*	Europe: Hungary, Poland, Russia, Spain, UK Asia: China, India, Japan, Kazakhtan, North Korea, Oman, Pakistan, Philippines, Sri Lanka, Tajikistan, Turkey, Uzbekistan Africa: Nigeria America: Argentina, Brazil, Canada, Chile,

		sinensis (jeruk manis, navel orange), *Ficus carica* (ara), *Fragaria vesca* (arbei, strawberry), *Glycine max* (kedelai, soybean), *Gossypium barbadens* (kapas, cotton), *Juglans regia* (walnut), *Dimocarpus litchii* (leci, lychee), *Linum usitatissimum*, *Mangifera indica* (mangga, mango), *Nicotiana tabacum* (tembakau, tobacco), *Oryza sativa* (padi, paddy), *Prunus* spp., *Psidium guajava* (jambu biji, guava), *Rubus* spp., *Saccharum officinarum* (tebu, sugarcane), *Solanum tuberosum* (kentang, potato), *Sorghum bicolor* (sorgum, sorghum), *Vaccinium* spp., *Vitis vinifera*		*cerrasus* (ceri, cherry rasp leaf virus)	Ecuador, Guatemala, Mexico, Panama, Peru, USA, Uruguay, Venezuella Oceania: Australia.

		(anggur, grapevine) (S): *Mentha* spp. *Pinus* spp., *Achras (= Manilkara) zapota* (sawo, sapodilla), *Onobrychis viciifolia*, *Petunia hybrida*, *Picea* spp., *Plantago* spp., *Poncirus trifoliata*, *Potentilla* spp., *Rosa* spp. (mawar, rose), *Shorea robusta*, *Tectona grandis* (jati, teakwood), *Trifolium* spp., *Zoysia japonica*, *Agropyron* spp., Bambucaceae, *Codiaeum variegatum*, *Callicarpa americana*, *Nerium oleander*			
60	*Xiphinema italie* Meyl.; Xiphinematidae; dagger nematode	(P): *Citrus* spp., *Vitis vinifera* (anggur, grapevine), *Olea europea* subsp. *europea* (zaitum, olive)	II	akar (root), tanah (soil). (Vector: : grapevine fanleaf virus)	Europe: Greece, Italy, Spain Africa: Cameroon, Egypt, Libia, Nigeria, South Africa, Tunisia.

III. CENDAWAN / FUNGAL

NO.	NAMA ILMIAH/SINONIM/KLAS/ NAMA UMUM/ SCIENTIFIC NAME/SYNONIM/CLASS/COMMON NAME	INANG/ HOST	GOL / GROUP	MEDIA PEMBAWA / PATHWAY	DAERAH SEBAR/ GEOGRAPHICAL DISTRIBUTION
1.	*Acremonium strictum* (W.Gams); (= *Acremonium stricta* = *Cephalosporium acremonium* = *Tilachlidium medietatis*); Anamorphic fungi; acremonium wilt, black bundle disease of maize, kernel rot of maize	(S): *Avena sativa* (gandum, oats), *Glycine soja*, *Sorghum bicolor*, (sorghum), *Zea mays* (jagung, maize)	II	benih (seed), bagian tanaman (part of plant)	Europe : Czech Republic and Slovakia, Italy, Netherlands, Poland, Russia, Spain. Asia : China, India, Iran, Pakistan, Syria, Turkey. Africa : Egypt, Nigeria, South Africa. America : USA. Oceania : Australia

2.	*Aecidium cantense* Arthur; Urediniomycetes; Aecidium potato rust, deforming potato rust, deforming rust, Peruvian rust	(P): *Solanum tuberosum* (kentang, potato), *Lycopersicum esculentum* (tomat, tomato), *Ullucus tuberosus*	I	tanaman (plant), umbi (tuber)	America: Peru
3.	*Alternaria citri* Ellis & N. Pierce; stalk end rot, stem end rot, navel end rot, core rot of citrus, black rot of citrus fruit, brown spot of citrus, black rot of *Citrus* spp., fruit rot of *Citrus* spp., core rot of *Citrus* spp.	*Citrus* , *Citrus jambhiri* (rough lemon), *Citrus junos* (yuzu), *Citrus limon* (lemon), *Citrus medica* (citron), *Citrus reticulata* (mandarin), *Citrus sinensis* (navel orange)	I	Buah (fruits), polong (pods) dan daun (leaves).	Europe: Bulgaria, Cyprus, France, Greece, Italy, Malta, Portugal, Russia, Spain Asia: Bhutan, China, India, Iran, Iraq, Israel, Japan, Korea Republic of (South Korea), Myanmar, Nepal, Pakistan, Turkey, Vietnam Africa: Egypt, Kenya, Libya, Malawi, Morocco, Mozambique, Nigeria, South Africa, Sudan, Tanzania, Uganda, Zambia, Zimbabwe

					America : Cuba, Jamaica, Puerto Rico, North America, Mexico, USA, Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana, Argentina, Paraguay, Uruguay Oceania : Australia, New Zealand
4.	*Armillaria heimii* (Pegler); (= *Clitocybe elegans*) Basidiomycetes; armillaria root rot;honey root rot	(P) : *Anacardium occidentalis* (jambu mede, cashew nut), *Camellia cinensis* (teh, tea), *Coffea arabica* (kopi, arabica coffe), *Coffea canephora* (kopi, robusta coffea), *Hevea brasiliensis* (karet, rubber), *Manihot esculenta* (ubi kayu, cassava), *Pinus ellioti*	II	benih (seed), bagian tanaman (part of plant)	Africa: Angola, Cameroon, DR Congo, Congo, Ivory Coast, Ethiopia, Gabon, Kenya, Madagascar, Mozambique, Nigeria, Reunion, South Africa, Tanzania, Uganda, Zambia, Zimbabwe

		(slash pine), *Pinus radiate* (radiate pine), *Pinus taeda* (loblolly pine), *Prunus domestica* (plum), *Prunus persica* (Japanese plum), *Tectona grandis* (teak), *Theobromoa cacao* (coklat, cocoa) (S) : *Acacia mearnsii* (black wattle), *Acacia melanoxylon* (Australian blackwood), *Araucaria cunninghamii* (colonial pine), *Casuarina equisetifolia* (casuarinas), *Cinnamamum camphora* (camphor laurel), *Cocos nucifera* (kelapa, coconut), *Delonix regia* (gold mohar), *Eriobotrya japonica* (loquat), *Eucalyptus citriodora* (lemon-scented gum), *Grevillea robusta* (silky oak), *Jacaranda mimosifolia* (Brazilian			

		rosewood), *Musa paradisiaca* (pisang kepok, plantain), *Pinus strobes* (eastern white pine), Prunus (buah batu, stone fruit), Schinus molle (false pepper tree), swietenia (mahogany).			
5.	*Armillaria luteobubalina* (Watling & Kile); Basidiomycetes: Marasmiaceae; armillaria root rot; honey root rot	(P): *Acacia dealbata* (acacia bernier), Acacia melanoxylon (Australian blackwood), Actinidia chinensis (Chinese gooseberry), Prunus persica (persik, peach), Citrus reticulata (jeruk mandarin, mandarin orange), Citrus sinensis (jeruk, navel orange), Cotoneaster , Cycas revoluta (sago cycas), Hibiscus (rosemallows), Malus (ornamental species apple), Melia azedarach (Chinaberry),	II	daun (leaf), akar (root), batang (stem), bibit tanaman (seedling)	Oceania: Australia

		Nerium oleander (oleander), Pinus radiata (radiata pine), Prunus (buah batu, stone fruit), Prunus dulcis (almond), Rhododendron indicum (Satsuki azalea), Salix (willows), Taxus (yew), Viburnum , Vitis vinifera (anggur, grapevine)			
6.	*Aphanomyces euteiches* Drechsler; Oomycetes; Aphanomyces root rot, common root rot, root rot	(P): *Vigna* spp. (buncis, cowpea), *Pisum sativum* (kapri, sweet pea), polong-polongan lain (legumes)	I	tanaman (plant), bagian tanaman (part of plant), media tanam (planting medium)	Europe: Czech, Denmark, Finland, Rusia, France, Italy, Netherlands, Norway, Poland, Slovakia, Sweden, Ukraine Asia: China , India,Japan America: Canada, USA Oceania: Australia, New Zealand
7.	*Ascochyta boltshauseri* Sacc. (*Stagonosporopsis hortensis =Stagonospora hortensis*	(P): *Vigna* spp. (buncis, cowpea)	I	benih (seed), buah (fruit), bagian	America: Colombia

	=Ascochyta hortensis); Anamorphic fungi; bean blotch, bean leaf spot	(S): Fabaceae, Poaceae		tanaman lain (part of plant), tanah (soil)	
8.	*Ascochyta gossypii* (Woronichin) Syd.; Anamorphic fungi; ascochyta blight of cotton, ascochyta leaf spot, ascochyta seedling blight, ashen spot, wet weather blight of cotton	(P): *Gossypium barbadens* (kapas, cotton) (S): *Capsicum annuum* (cabai, hot pepper, chilies, red pepper), *Abelmoschus moschatus* (okra, lady's finger), *Solanum melongena* (terung, eggplant , aubergine), *Nicotiana tabacum* (tembakau, tobacco), *Glycine max* (kedelai, soybean), *Vigna unguiculata*, *Hibiscus* spp., *Vigna* spp. (buncis, cowpea)	II	benih (seed), buah (fruit), daun (leaf) , batang (stem)	Europe: Greece Asia: Armenia, Azerbaijan, China, Taiwan, Georgia, India, Japan, Korea, Laos, Malaysia, Philippines Africa: Benin, DR Congo, Ethiopia, Kenya, Mauritius,Nigeria, South Africa, Sudan, Tanzania, Uganda, Zambia, Zimbabwe America: Argentina, Brazil, Chile, Colombia, Guatemala, Jamaica, Mexico, Panama, Puerto Rico, USA ,Venezuela Oceania: Australia, Papua New Guinea

9.	*Botryosphaeria ribis* Grossend & Duggar; *(=Dothiorella gregaria =D.ribis =Fusicoccum aesculi =Fusicoccum tingens =Botryosphaeria berengiana =B.mali);* Ascomycetes; cane blight, canker, dieback, fruit rot, gummosis, panicle and shoot blight, batang (stem) blight, tip dieback, white rot	(P): *Persea americana* (alpokat, avocado), *Juglans* spp., *Malus domesticum (*apel, apple*)*, *Macadamia* sp.	I	tanaman (plant), bagian tanaman (part of plant), media tanam (planting medium)	Europe: Cyprus, France, Greece, Italy, Portugal Asia: Bangladesh, China, Taiwan, India, Iran, Israel, Japan, South Korea, Malaysia, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand, Turkey Africa: Ethiopia, Ghana, Guinea, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Niger, South Africa, Tanzania, Togo, Uganda, Zambia America: Argentina, Brazil, Chile, Colombia, Dominica, Jamaica, Mexico, Trinidad and Tobago, USA Oceania: Australia, Fiji, New Zealand, Solomon Islands

10.	*Botryotinia draytonii* (Buddin & Wakefield) Seaver; *(=Sclerotinia draytonii* Buddin & Wakefield = *Botrytis gladiolorum*); Ascomycetes; corm rot	(P): *Gladiolus* spp.	I	umbi (corm), tanaman (plant)	Asia: Pakistan
11.	*Botryotinia fuckeliana* (de Bary) Whetzel [teleomorph] = *Botrytis cinerea* Pers.: Fr [anamorph] = *Haplaria grisea* Link [anamorph] = *Polyactis vulgaris* Link [anamorph] = *Phymatotrichum gemellum* Bonord. [anamorph] = *Botrytis fuckeliana* N.F. Buchw. [anamorph] = *Sclerotinia fuckeliana* (de Bary) Fuckel [teleomorph] = *Peziza fuckeliana* de Bary [teleomorph]; grey mould-rot; grey mould-rot of crucifers; grey rot; Botrytis rot; bunch rot; slipskin; grey mould; brownish-grey mildew	(P): *Actinidia chinensis* (Chinese gooseberry), *Actinidia deliciosa* (kiwifruit), *Allium cepa* (onion), *Annona cherimola* (cherimoya), Brassicaceae (cruciferous crops), *Chrysanthemum morifolium* (chrysanthemum (florists')), *Cucumis sativus* (cucumber), *Cyclamen , Cynara cardunculus* L. var. *scolymus* (globe artichoke), *Dianthus caryophyllus* (carnation), *Euphorbia pulcherrima* (poinsettia), *Fragaria ananassa* (strawberry),	I	Umbi (onion), Daun (Leaves) dan batang (stems).	Europe : Austria, Belarus, Belgium, Czech Republic and Slovakia, Denmark, Finland, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia , France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia and Montenegro, Slovakia, Slovenia,

		Helianthus annuus (sunflower), *Hibiscus cannabinus* (kenaf), *Humulus lupulus* (hop), *Lactuca sativa* (lettuce), *Linum usitatissimum* (flax), *Lycopersicon esculentum* (tomato), *Malus domestica* (apple), *Ocimum basilicum* (basil), *Phaseolus* (beans), *Pinus pinaster* (maritime pine), *Pisum sativum* (pea), *Prunus salicina* (Japanese plum), *Pyrus communis* (European pear), *Ribes* (currants), *Ribes uva-crispa* (gooseberry), Rosa (roses), *Rubus idaeus* (raspberry), *Vaccinium* (blueberries), *Vitis vinifera* (grapevine) (S): *Aleurites , Allium chinense* (spring onion), Allium fistulosum (Welsh onion), *Anagallis arvensis*			Spain, Sweden, Switzerland, Ukraine, UK Asia : Armenia, Azerbaijan, Bangladesh, China, Taiwan, India, Israel, Japan, Korea Republic of (South Korea), Lebanon, Nepal, Pakistan, Turkey Africa : Egypt, Morocco, South Africa, Tunisia America : Canada, USA, Argentina, Brazil, Chile, Colombia, Venezuela Oceania : Australia, New Zealand

		(scarlet pimpernel), *Apium graveolens* (celery), *Arachis hypogaea* (groundnut), *Asparagus officinalis* (asparagus), *Bouvardia* , *Brassica rapa* subsp. *pekinensis* (Pe-tsai), *Calendula officinalis* (Pot marigold), *Capsicum* (peppers), *Carthamus tinctorius* (safflower), *Chenopodium quinoa* (quinoa), Chrysanthemum (daisy), *Cicer arietinum* (chickpea), Cucurbita (pumpkin), *Cydonia oblonga* (quince), *Daucus carota* (carrot), *Diospyros* (malabar ebony), *Eleusine indica* (goose grass), *Eucalyptus* (Eucalyptus tree), *Eucalyptus globulus* (Tasmanian blue gum), *Ficus carica* (fig), *Fragaria* (strawberry),			

		Glycine max (soyabean), *Lens culinaris* ssp. *culinaris* (lentil), *Lilium* (lily), *Medicago sativa* (lucerne), *Nicotiana tabacum* (tobacco), *Paeonia* (peonies), *Pelargonium* (pelargoniums), *Phaseolus vulgaris* (common bean), *Phoenix canariensis* (palm (Canary Island)), *Picea pungens* (blue spruce), *Pinus* (pines), *Pistacia vera* (pistachio), *Prunus armeniaca* (apricot), *Prunus domestica* (plum), *Punica granatum* (pomegranate), *Rubus* (blackberry, raspberry), *Rubus fruticosus* (blackberry), *Sesbania cannabina* (corkwood tree), *Solanum melongena* (aubergine), *Triticum*			

		aestivum (wheat), *Vicia faba* (broad bean), *Vicia sativa* (common vetch), *Vigna angularis* (adzuki bean), *Zinnia elegans* (zinnia)			
12.	*Botryotinia porri* (H.J.F. Beyma) Whetzel = *Sclerotinia porri* H.J.F. Beyma = *Botrytis porri* N.F. Buchw. [anamorph]; Ascomycetes; Botrytis rot of garlic; Botrytis rot of leek; seedling damping-off of onion; neck rot of onion; mycelial: onion neck rot	(P): *Allium* (onions, garlic, leek, etc.), *Allium cepa* (onion), *Allium porrum* (leek)	I	Umbi (bulbs/tubers), organ vegetatif (vegetative organ)	Europe : Finland, Germany, Hungary, Norway, UK America : Canada, USA, Chile Oceania : Australia, New Zealand
13.	*Botryotinia squamosa* Vienn.-Bourg.= *Sclerotinia squamosa* (Vienn.-Bourg.) Dennis = *Botrytis squamosa* J.C. Walker [anamorph]; leaf blight of onion; neck rot of onion; small sclerotial neck rot; onion leaf blight; onion neck rot	(P): *Allium* (onions, garlic, leek, etc.), *Allium cepa* (onion) (S): *Allium chinense* (spring onion), *Allium fistulosum* (Welsh onion), *Allium schoenoprasum* (chives), *Allium tuberosum* (Oriental garlic)	I	Umbi (onion)	Europe : Belgium, Bulgaria, Czech Republic, France, Germany, Ireland, Italy, Netherlands, Poland, UK, Scotland Asia : China, Japan, Korea, DPR, Korea Republic of (South Korea)

					Africa : Mauritius America : Canada, USA, Brazil Oceania : New Caledonia, New Zealand
14.	*Botrytis aclada* Fresen.= *Botrytis allii* Munn = *Botrytis septospora* El-Helaly et al.; grey mould of onion; neck rot of onion; leaf rot of onion; small sclerotial neck rot fungus; neck rot fungus; grey mould neck rot of onion; small sclerotial onion neck rot	(P): *Allium* (onions, garlic, leek, etc.), *Allium cepa* (onion), *Allium cepa* var. *aggregatum* (shallot) (S): *Allium porrum* (leek), *Allium sativum* (garlic)	I	Umbi (onion), Inflorescence dan organ vegetative	Europe : Austria, Belgium, Bulgaria, Cyprus, Czech Republic and Slovakia , Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Italy, Netherlands, Norway, Poland, UK Asia : Afghanistan, Bangladesh, China, Taiwan, India, Iran, Iraq, Israel, Japan, Korea Republic of (South Korea) , Nepal, Pakistan, Saudi Arabia, Turkey,

					Vietnam Africa : Egypt, Kenya, Morocco, South Africa, Tanzania, Zambia America : Costa Rica, Guatemala, Jamaica, Panama, Canada, USA, Brazil, Chile, Colombia, Venezuela Oceania : Australia, New Zealand
15.	*Botrytis tulipae* Lind = *Sclerotium tulipae* Lib.; tulip fire	(P): *Tulipa* (tulip) (S): *Allium cepa* (onion), *Lilium* (lily)	I	Umbi	Europe : Austria, Belgium, Bulgaria, Czech Republic and Slovakia , Denmark, Finland, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia , Serbia,

					Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Guernsey, Hungary, Italy, Jersey, Netherlands, Norway, Portugal, Romania, Switzerland, UK Asia : Iraq, Japan, Korea, DPR, Korea Republic of (South Korea), Philippines America : Canada, USA, Argentina, Chile Oceania : Australia, New Zealand
16.	*Cephalosporium (=Acremonium) gregatum* Alling & Chamb; brown batang (stem) rot	(P): *Glycine max* (kedelai, soybean)	II	benih (seed)	America: Canada, Mexico, USA Africa: Egypt Asia: Japan Europe: Serbia,

					Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia
17.	*Cercospora duddiae* Welles; Anamorphic fungi; leaf spot of onion and garlic, withertip onion of and garlic, leaf spot: garlic, leaf spot: onion	(P) *Allium ascalonicum* (bawang merah, shallot), *Allium schoenoprasum* (bawang daun/leeks, chives)	II	tanaman (plant), bagian tanaman vegetatif (part of vegetatif)	Asia: India America: Barbados, Jamaica
18.	*Cercospora elaeidis* Steyaert; Anamorphic fungi; cercospora leaf spot, freckle of oil palm, leaf spot of oil palm, oil palm leaf spot	(P): *Elaeis guineensis* (kelapa sawit, oilpalm)	II	buah (fruit), benih (seed), bunga (flower), bagian tanaman (part of plants), media tanam (planting medium)	Africa: Angola, Benin, Cameroon, DR Congo, Congo, Gabon, Ghana, Guinea-Bissau, Guinea, Ivory Coast, Liberia, Nigeria, Sao Tome & Principe, Senegal, Sierra Leone, Sudan, Tanzania, Togo, Zimbabwe, Antilles Netherlands, Suriname Oceania: Australia

19.	*Cercospora epipactidis*; *(=C.massal)*; Anamorphic fungi; leaf spot	(P): Orchidaceae (anggrek, orchids)	I	tanaman (plant), bagian tanaman (part of plant)	Europe: Italy, Germany, Rusia.
20.	*Claviceps africana* (Fr.) ; (= *Claviceps sesleriae = Claviceps setulosa = Cordyceps setulosa =.Sphacelia segetum =Claviceps microcephala)*; Ascomycetes	(P): *Sorghum bicolor* (sorgum, sorghum) (S): *Sorghum halepense* (Johnson grass)	I	benih (seed), bagian tanaman (part of plant)	Asia: India, Japan, Thailand, Yemen. Africa: Angola, Botswana, Burundi, Ethiopia, Ghana, Kenya, Lesotho, Malawi, Mozambique, Nigeria, Rwanda, Senegal. Swaziland, Tanzania, Uganda, Zambia, Zimbabwe. America: Argentina, Bolivia, Brazil, Colombia, Dominica, Haiti, Honduras, Jamaica, Mexico, Puerto Rico, Paraguay, USA, Uruguay, Venezuela. Oceania: Australia.

21.	*Claviceps gigantea* (Fuentes), de la Ista, Ullstrup & Rodrigues; *(=Sphacelia gigantean)*; Ascomycetes; ergot of maize, horse's tooth	(P): *Zea mays* (jagung, corn, maize)	I	benih (seed), bagian tanaman (part of plant), media tanam (planting medium)	America: Mexico
22.	*Claviceps purpurea* (Mantle); (=*Sphacelia sorghi*); Ascomycetes; sugary disease	(P): *Agrostis* (bentgrasses), *Avena sativa* (oat, oats), *Cynodon* (quickgrass), *Festuca* (fescues), *Hordeum* (barleys), *Hordeum vulgare* (barley), *Lolium* (rye grasses), *Lolium perenne* (perennial rye grass), *Phleum* (timothies), *Poa* (meadow grass), *Poa pratensis* (smooth-stalked meadowgrass), *Poaceae* (grasses), *Secale* (rye), *Secale cereale* (rye),	I	benih (seed), bagian tanaman (part of plant)	Europe: Austria, Belgium, Bulgaria, Czech, Denmark, Faroe Islands, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina,

		Sorghum bicolor (sorgum, sorghum), *Triticum* (wheat), *Triticum aestivum* (gandum, wheat) (S): *Bromus* (bromegrasses), *Echinochloa* spp. , *Panicum* (millets), *Pennisetum* (feather grass)			Montenegro, Macedonia Asia: Armenia, China, India, Iran, Israel, Japan, Kazakhstan, South Korea, Kyrgyzstan, Nepal, Philippines, Turkey. Africa: Algeria, Ethiopia, Guinea, Kenya, Malawi, Mauritania, Mauritius, Morocco, South Africa (Sudan, Tanzania, Zimbabwe). America: Canada, Mexico, USA, Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana Oceania: Australia, New Zealand.

23.	*Colletotrichum kahawae* J.M Waller & Bridge; *(=Colletotrichum coffeanum =C.coffeanum* 'var. *virulans')*; Anamorphic fungi; anthracnose of coffee, brown blight of coffee, coffee berry disease	(P): *Coffea* spp. (kopi, coffee)	I	bagian tanaman (part of plant), tanah (soil)	Africa: Angola, Burundi, Cameroon, Central Africa, DR Congo,Congo, Ethiopia, Kenya, Malawi, Mozambique, Rwanda,Tanzania, Uganda, Zambia, Zimbabwe America: Cuba
24.	*Colletotrichum sublineolum* (Henn); Ascomycetes; sorghum anthracnose; stalk red rot of sorghum; red leaf spot of sorghum;head blight of sorghum	(P): *Sorghum bicolor* (sorgum, sorghum) (S): *Poaceae* (grasses), *Zizania aquatica* (annual wildrice)	I	benih (seed), bagian tanaman (part of plant), tanah (soil)	Europe: Romania, UK. Asia: Afghanistan, Bangladesh, Cambodia, China, , Taiwan, India, Japan, South Korea, Lebanon, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand. Africa: Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central Africa, Chad, DR Congo, Ethiopia,

					Ghana, Guinea, Kenya, Malawi, Mali, Mozambique, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe. America : Argentina, Brazil, Barbados, Canada, Colombia, Costa Rica, Cuba, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Puerto Rico, Trinidad and Tobago, USA, Guyana, Venezuela Oceania: Australia, Papua New Guinea, Solomon Islands

25.	*Coniothyrium wernsdorffiae* Laubert; *(=Coniothyrium cystotricha)*; Anamorphic fungi; rose brand canker	(P): *Rosa* spp. (mawar, rose)	I	tanaman (plant), bagian tanaman (part of plant)	Europe: Austria, Bulgaria, Denmark, France, Germany, Greece, Italy, Lithuania, Netherlands, Poland, Rusia, Sweden, Ukraine, UK America: Canada, USA Oceania: Australia
26.	*Crinipellis perniciosa* (Stahel) Singer; *(=Moniliophthora perniciosa)*; Basidiomycets; cocoa witches' broom disease	(P): *Theobroma cacao* (kakao, cocoa), (S): *Bixa orellana*	I	bagian tanaman (part of plant)	America: Belize, Bolivia, Brazil, Colombia, Dominica, Ecuador, Grenada, Guyana, Panama, Peru,St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, Venezuela
27.	*Didymella bryoniae* (Auersw.) Rehm; *(=Phoma cucurbitacearum =Mycosphaerella citrullina =M.melonis =Didymosphaeria melonis =D. effusa =Didymella melonis =Ascochyta cucumis*	(P): Cucurbitaceae, *Citrullus vulgaris* (semangka, watermelon), *Cucumis melo* (melon, melon), *Cucumis sativus* (mentimun, cucumber),	I	benih (seed), bagian tanaman (part of plant), media tanam	Europe: Austria, Bulgaria ,Czech, Denmark, Rusia, Germany, Greece, Ireland, Italy, Netherlands, Norway,

	=A.melonis =Phyllosticta citrullina); Ascomycetes; gummy batang (stem) blight, leaf spot of cucurbits, cercospora leafspot of squash, cucumber black rot, cucurbits stem blight, cucurbits leaf spot, cucurbits stem-end rot	*Cucurbita* spp., *Momordica charantia* (paria, bitter gourd), *Sechium edule* (labu siam), *Solanum tuberosum* (kentang, potato)		(planting medium)	Poland, Romania, Rusia, Slovakia, Sweden, Switzerland, Ukraine, UK Asia: Bangladesh, Brunei, China,Taiwan, India, Iraq, Israel, Japan, South Korea, Laos, Malaysia, Myanmar, Pakistan, Philippines, Sri Lanka, Thailand Africa: Ethiopia, Gabon, Kenya, Malawi, Mauritius, Morocco, Nigeria, South Africa, Uganda, Zambia, Zimbabwe America: Argentina, Barbados, Belize, Bermuda, Bolivia, Brazil, Canada, Chile, Costa Rica, Cuba, Dominica, El Salvador, Jamaica, Mexico, Nicaragua, Peru, Puerto

					Rico, Trinidad and Tobago, USA Oceania: Samoa America, Australia, Fiji, France Polynesia, New Caledonia, New Zealand, Pitcairn, Samoa, Solomon Islands,Tonga
28.	*Diplodia laelio-cattleyae* Sibilia; Anamorphic fungi; leaf spot	(P): *Cattleya* sp. (anggrek cattleya, cattleya)	I	tanaman (plant), bagian tanaman (part of plant)	America
29.	*Elsinoe ampelina Shea r = Sphaceloma ampelinum de* Bary [anamorph] = *Gloeosporium ampelophagum* (Pass.) Sacc. [anamorph] = *Ramularia ampelophaga* Pass. [anamorph] = *Torula meyeni* Ber. & Terv. [anamorph] = *Ramularia meyeni* Gar. & Catt. [anamorph] =	(P): *Vitis vinifera* (grapevine) (S) : *Rubus fruticosus* (blackberry), *Rubus idaeus* (raspberry), *Vitis labrusca* (fox grape), *Vitis rupestris* (sand-grape)	I	Buah (fruits), polong (pods), titik tumbuh (growing points), inflorescence, daun	Europe : Austria, Belgium, Bulgaria, France, Germany, Greece, Italy, Malta, Netherlands, Poland, Portugal, Romania, Russia, Serbia and Montenegro, Slovenia, Spain, Switzerland, UK

	Gloeosporium venetum Speg. [anamorph] = *Manginia ampelina* (de Bary) Viala & Pacottet [anamorph] = *Uleomyces parasiticus* Henn. [teleomorph] = *Plectodiscella veneta* Burkh. [teleomorph] = *Elsinoë viticola* Racib. [teleomorph]; Ascomycetes; grape anthracnose; grape black spot; grape black rot; bird's eye spot; bird's eye rot; vine black spot; bird's eye fungus; anthracnose of grapevine; bird's eye disease of grapevine; black spot of grapevine			(leaves), batang (stems) dan seluruh tanaman (whole plant).	Asia : Afghanistan, Cambodia, China, India, Iran, Japan, Korea Republic of (South Korea), Myanmar, Pakistan, Turkey Africa : Kenya, Madagascar, Mauritius, Morocco, Mozambique, South Africa, Tanzania, Zambia, Zimbabwe America : Barbados, Bermuda, Costa Rica, Cuba, Dominican Republic, Haiti, Jamaica, Puerto Rico, Canada, Mexico, USA, Argentina, Brazil, Chile, Colombia, Paraguay, Uruguay, Venezuela Oceania : Australia, New Zealand, Papua New Guinea

30.	*Elsinoe brasiliensis* bitanc & Jenkins; *(=Sphaceloma manihoticola =Elsinoë jatrophae)*; Ascomycetes; superelongation disease of cassava, cassava root enlargement	(P): *Manihot esculenta* (ubi kayu, cassava)	I	bagian tanaman (part of plant), umbi (tuber), akar (root)	America: Barbados, Brazil, Colombia, Mexico, Panama, Venezuela Oceania: Cook Islands
31.	*Elsinoe mangiferae* bitanc & Jenkins; *(=Sphaceloma mangiferae)*; Ascomycetes; mango scab	(P): *Mangifera indica* (mangga, mango)	I	bagian tanaman (part of plant), buah (fruit)	Asia: Taiwan, India, Nepal, Philippines Africa: Kenya America: Brazil, Canada, Cuba, Dominica, Haiti, Jamaica, Panama, Puerto Rico, USA Oceania: Australia
32.	*Elsinoe rosa rum* Jenk. & bitanc; Ascomycetes; Kudis	(P): *Rosa* spp. (mawar, rose)	I	tanaman (plant), bagian tanaman (part of plant)	America: USA.

33.	*Exobasidium reticulatum* Ito & Sawada; Basidiomycetes; net blister blight of tea	(P) : *Camellia sinensis* (teh, tea)	I	bagian tanaman (part of plant)	Asia: China, Taiwan, Japan, Malaysia
34.	*Fomitopsis pinicola* (Sw.) P. Karst. 188, Basidiomycetes = *Fomes pinicola* (Sw.) Fr. 1849 = *Fomes marginatus* (Pers.) Fr. 1849 = *Boletus ungulatus* Schaeff. 1774 = *Boletus marginatus* Pers. 1794 = *Boletus pinicola* Sw. 1810 = *Polyporus* pinicola (Sw.) Fr. 1821 = *Polyporus marginatus* (Pers.) Fr. 1821 = *Fomes ungulatus* (Schaeff.) Sacc. 1879 = *Ungulina marginata* (Pers.) Pat. 1900; brown crumbly rot; pinicola conk; red belt fungus; root rot conifers; brown rot of conifers; brown cubical heart rot of fir	(P): *Abies alba* (silver fir), *Abies amabilis* (Pacific silver fir), *Abies concolor* (Rocky Mountain white fir), *Abies holophylla* (Manchurian fir), *Abies magnifica* (red fir), *Abies nephrolepis* (Khingan fir), *Abies procera* (noble fir), *Abies religiosa* (sacred fir), *Acer macrophyllum* (broadleaf maple), *Agathis , Betula papyrifera* (paper birch), *Larix gmelinii* (Dahurian larch), *Picea abies* (common spruce), *Picea glauca* (white spruce), *Picea jezoensis* (Yeddo spruce), *Picea koraiensis* (Korean spruce), *Picea*	I	Buah (cherry fruits), batang (stems) dan seluruh tanaman (whole plant).	Europe: Austria, Belarus, Bulgaria, Czech Republic, Denmark, Estonia, Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Ukraine, UK Asia : Armenia, Azerbaijan, China, Taiwan, India, Iran, Israel, Japan,

		mariana (black spruce), *Picea obovata* (Siberian spruce), *Picea rubens* (red spruce), *Picea sitchensis* (Sitka spruce), *Pinus contorta* (lodgepole pine), *Pinus edulis* (pinyon), *Pinus flexilis* (limber pine), *Pinus koraiensis* (fruit pine), *Pinus sylvestris* (Scots pine), *Prunus persica* (peach), *Prunus sargentii* (sargent's cherry), *Prunus serotina* (black cherry), *Pseudotsuga menziesii* (Douglas-fir), *Tsuga heterophylla* (western hemlock), *Tsuga mertensiana* (Patton's hemlock), *Vitis* (grape) (S): *Abies balsamea* (balsam fir), *Abies grandis* (grand fir), *Abies lasiocarpa* (rocky mountain fir), *Abies*			Kazakhstan, Nepal, Pakistan, Philippines, Thailand, Turkey Africa : Egypt, Morocco America : Guatemala, Canada, Mexico, USA, Brazil Oceania : Australia,

		nordmanniana (Nordmann fir), *Acer pictum* (painted maple), *Alnus glutinosa* (European alder), *Alnus incana* (grey alder), *Betula alleghaniensis* (yellow birch), *Betula pendula* (common silver birch), *Betula platyphylla* (Manchurian birch), *Betula populifolia* (gray birch), *Calocedrus decurrens* (bastard cedar), *Carpinus betulus* (hornbeam), *Carpinus cordata* (heart-leaved hornbeam), *Carya* (hickories), *Castanea* (chestnuts), *Chamaecyparis nootkatensis* (Alaska cedar), *Corylus avellana* (hazel), *Fagus grandifolia* (American beech), *Fagus sylvatica* (common			

		beech), *Larix kaempferi* (Japanese larch), *Larix komarovii , Larix laricina* (American larch), *Magnolia , Malus domestica* (apple), *Picea engelmannii* (Engelmann spruce), *Picea pungens* (blue spruce), *Pinus lambertiana* (big pine), *Pinus monophylla* (single-leaf pinyon pine), *Pinus ponderosa* (ponderosa pine), *Pinus sibirica* (Siberian stone pine), *Pinus strobus* (eastern white pine), *Pinus tabuliformis* (chinese pine), *Platanus occidentalis* (sycamore), *Platanus orientalis* (plane), *Populus grandidentata* (Bigtooth aspen), *Populus maximowiczii* (Japanese poplar), *Populus nigra*			

		(black poplar), *Populus tremula* (aspen (European)), *Populus tremuloides* (trembling aspen), *Prunus avium* (sweet cherry), *Prunus salicina* (Japanese plum), *Salix alba* (white willow), *Salix caprea* (pussy willow), *Salix fragilis* (crack willow), *Sequoia sempervirens* (coast redwood), *Sorbus aucuparia* (mountain ash), *Thuja occidentalis* (Eastern white cedar), *Thuja plicata* (western redcedar), *Tilia cordata* (small-leaf lime), *Tsuga canadensis* (eastern hemlock)			
35.	*Fusarium chlamydosporum* (Wollenw & Reinking); (= *Fusarium chlamydosporum var. chlamydosporum);* Ascomycetes; wilt cotton	*Morus* (mulberrytree), *Pennisetum glaucum* (pearl millet), *Sorghum bicolor* (sorgum, sorghum)	I	benih (seed), bagian tanaman (part of plant)	Asia: China, India (Haryana), Saudi Arabia. Africa: widespread, Nigeria

					America: USA. Oceania: Australia
36.	*Fusarium oxysporum* f.sp. *elaeidis* Toovey; Ascomycetes; fusarium wilt of oil palm, vascular oil palm wilt	(P): *Elaeis guineensis* (kelapa sawit, oilpalm) (S): *Amaranthus spinosus*, *Chromolaena odorata*, *Imperata cylindrica* (ilalang, bedding grass)	I	benih (seed), buah (fruit), bunga (flower), (pollen), bagian tanaman (part of plant), media tanam (planting medium)	Africa: Benin, Cameroon, DR Congo, Congo, Ivory Coast, Ghana, Nigeria America: Brazil, Colombia, Ecuador, Suriname, Costa Rica Oceania : Papua New Guinea
37.	*Fusarium sporotrichioides* Sherb.; Ascomycetes *(= Fusarium sporotrichiella var. sporotrichioides* (Sherb.) Bilai [anamorph] = *Fusarium sporotrichioides var. minus* Wollenw. [anamorph] = *Fusarium sporotrichioides var. minor* Wollenw. [anamorph] = *Fusarium tricinctum* (Corda) Sacc. (emend	(P): *Avena sativa* (oats), *Hordeum vulgare* (barley), *Lolium perenne* (perennial ryegrass), *Triticum aestivum* (wheat), *Zea mays* (maize) (S): *Glycine max* (soyabean), *Medicago sativa* (lucerne), *Pinus strobus* (eastern white	I	Benih (seed)	Europe : Austria, Cyprus, Czech Republic, Denmark, Germany, Ireland, Italy, Poland, Portugal, Russia, UK Asia : China, India, Japan, Pakistan, Thailand, Turkey Africa : Egypt, Kenya, Sierra Leone, South

	Snyder & Hansen, pro parte) [anamorph] = *Fusarium sporotrichioides subsp. minus* (Wollenw.) Raillo [anamorph] = *Fusarium sporotrichiella* Bilai); *kernel rot of maize, blight of grasses, foot rot of carnation*	pine), *Pisum sativum* (pea), turfgrasses , *Zizania palustris* (northern wild rice (USA)			Africa, Tanzania America: Barbados, Canada, USA, Brazil Oceania : Australia, New Zealand
38.	*Gibberella avenaceae* (R.J. Cook) (= *Fusarium avenaceum* =*Fusarium roseum* var. *avenaceum* = *Fusarium avenaceum* f.sp. *fabae* =*Fusarium avenaceum subsp. aywerte);* Ascomycetes; Fusarium blight; head blight; stem base disease; scab	(P) : *Albizia julibrissin* (silk tree) (S) : *Clausena lansium* (wampi), *Cucurbita* (pumpkin), *Fraxinus excelsior* (ash), *Gossypium* (cotton), *Ipomea batatas*, (sweet potato), *Morus* (melberrytree), *Oryza sativa* (rice), *Piper betle* (betel pepper), *Pseudotsuga menziesii* (Douglas-fir), *Pyrus communis* (European pear), *Solanum tuberosum* (potato), *Theobroma cacao* (cocoa)	II	benih (seed), bagian tanaman (part of plant), media tanam (planting medium)	Europe : Hungary, Poland, Slovenia, UK Asia : China, India, Iran Africa : Kenya, Nigeria America : Brazil, Chile, Mexico, Puerto Rico, Peru, USA Oceania : Australia, New Zealand.

39.	*Gibberella xylarioides* R. Heim & Saccas; *(=Fusarium oxysporum* f.sp *xylarioides =F.xylarioides* [anamorph]); Ascomycetes; coffee wilt, sudden death of coffee, tracheomycosis of coffee, vascular wilt of coffee	(P): *Coffea* spp. (kopi, coffee) (S): *Gossypium barbadens* (kapas, cotton), *Lycopersicum esculentum* (tomat, tomato), *Musa paradisiaca* (pisang kepok, plantain)	II	benih (seed), bagian tanaman (part of plant), media tanam (planting medium)	Africa: Angola, Burkina Faso, Cameroon, Central Africa, Congo, DR Congo, Ivory Coast, Ethiopia, Gabon, Gambia, Ghana, Guinea-Bissau, Guinea, Niger, Nigeria, Rwanda, Senegal, South Africa, Sudan, Swaziland, Tanzania, Togo,Uganda, Zimbabwe America: El Salvador
40.	*Gibberella zeae* (Schwan); (= *Gibberella saubinetii =Fusarium roseum* f.sp. *cerealis = Sphaeria zeae Schwein);* Ascomycetes; headblight of maize; scab of maize; root rot of maize; stalk rot of maize; ear rot of maize; gibberella stalk rot; gibberella ear rot; red ear rot; pink ear rot; fusarium root and stalk rot; cobweb disease	(P): *Alopecurus pratensis* (Meadow foxtail), *Avena sativa* (oats), *Glycine max* (kedelai, soyabean), *Hordeum vulgare* (barley), *Linum usitassimum* (flax), *Lupinus* (lupins), *Nicotiana tabacum* (tembakau, tobacco), *Oryza sativa* (padi, rice), *Pennisetum glaucum*	II	benih (seed), bagian tanaman (part of plant), media tanam (planting medium)	Europe : Austria, Bulgaria, Croatia, Czech, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Russia, Serbia-Montenegro, Slovakia, Slovenia, Spain,

		(pearl millet), *Secale cereale* (rye), *Sorghum bicolor* (sorghum), *Triticum aestivum* (wheat), *Zea mays* (jagung, maize) (S): *Acacia mearnsii* (black wattle), *Azadirachta indica* (neem tree), *Brassica*, *Dianthus* (carnation), *Gardenia jasminoides* (cape jasmine), *Gossypium* (cotton), *Lycopersicon*, *Mangifera indica* (mangga, mango), *Medicago* (medic), *Medicago littoralis* (strand medick), *Musa x paradisiaca* (plantain), *Panicum miliaceum* (millet), *Phaseolus vulgaris* (common bean), *Pinus sylvestris* (Scots			Sweden, Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Asia : China, Iran, Japan, Kazakhstan, South Korea, Lebanon, Pakistan, Saudi Arabia, Sri Lanka, Turkey. Africa : widespread, Egypt, Gambia, Kenya, Malawi, Nigeria, South Africa, Tunisia, Zambia, Zimbabwe. America: Costa Rica, Dominica, Grenada, Honduras, St. Lucia, St. Vincent and the Grenadines, Windward Island, Canada, Mexico, USA., Argentina,

		pine), *Pisum* (pea), *Rubus idaeus* (raspberry), *Solanum* (nightshade), *Trifolium* (clovers), *Triticale*, *Vicia faba* (Broad bean), *Zingiber officinale* (jahe, ginger)			Bolivia, Brazil, Colombia, Paraguay, Peru, Uruguay. Oceania : Australia, Fiji, New Zealand. Papua New Guinea, Solomon Islands Islands.
41.	*Gaeumannomyces graminis* var. *graminis* (Sacc.) Arx & Olivier; *(=Gaeumannomyces graminis graminis =Ophiobolus oryzinus)*; Ascomycetes; crown sheath rot, crown sheath rot of rice, patch disease of turf, white-heads of grasses	(P): *Oryza sativa* (padi, paddy), *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, corn, maize), *Zizania* spp., *Avena* spp., secale, Poaceae, *Cynodon* spp., *Eremochloa ophiuroides*, *Pennisetum clandestinum*, *Stenotaphrum secundatum*, *Zoysia japonica*	I	bagian tanaman (part of plant)	Asia: India, Philippines Africa: Egypt, South Africa America: Peru, USA
42.	*Gloeodes pomigena* (Schwein.) Colby *(=Dothidea pomigena* Schwein. *=Phyllachora pomigena =Marssonina mali.);* Anamorphic fungi; sooty blotch on twig & fruit	(P): *Malus domesticum* (apel, apple) (S): *Citrus* spp., *Magnolia* spp., *Vitis vinifera* (anggur, grapevine), Orchidaceae (anggrek, orchid), *Querqus* spp.	I	cabang (branch), buah (fruit), pasca panen (post harvest)	Europe: Germany Asia: India, Japan America: Brazil ,USA

43.	*Gloeocercospora sorghi* (Bain & Edgertan); (= *Ramulispora andropogonis=Titaeospora andropogonis);* Anamorphic fungi; zonate leaf spot	(P): *Sorghum bicolor* (sorgum, sorghum) (S): *Agrostis capillaris* (brown bentgrass), *Agrostis stolonifera* var. *palustris* (bent grass), *Cynodon dactylon* (Bermuda grass), *Pennisetum glaucum* (pearl millet), *Pennisetum purpureum* (elephant grass), *Saccharum officinarum* (tebu, sugarcane), *Sorghum halepense* (Johnson grass), *Sorghum sudanense* (Sudan grass), *Zea mays* (jagung, maize)	I	benih (seed), bagian tanaman (part of plant)	Europe: Russia Asia: China, Taiwan, India, Japan, North Korea, Malaysia, Philippines, Thailand. Africa: Benin, Burkina Faso, Central African Republic, Chad, Congo, Eritrea, Ethiopia, Gambia, Ghana, Kenya, Mali, Niger, Nigeria, Rwanda, Senegal, Somalia, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe. America : Belize, El Salvador, Guatemala, Haiti, Nicaragua, Panama, Mexico, USA, Argentina, Brazil, Venezuela. Oceania: American, Samoa, Australia, Samoa, Tonga.

44.	*Guignardia bidwellii* (Ellis) Viala & Ravaz Depazea labruscae Englem[anamorph]; *(=Naemospora ampelicida =Phoma ustulata =P.uvicola =P.uvicola var. labruscae =Phyllosticta ampelicida =P.ampelopsidis =P.viticola =P.vulpinae =Phyllostictina clemensae =P.uvicola =P.viticola =Sacidium viticolum =Septoria viticola =Botryosphaeria bidwellii =Carlia bidwellii =Laestadia bidwellii =Physalospora bidwellii =Sphaeria bidwellii)*; Ascomycetes; black rot	(P): *Vitis vinifera* (anggur, grapevine) (S): *Ampelopsis, Cissus, Parthenocissus, Citrus* spp.	I	bagian tanaman (part of plant)	Europe: Austria, Bulgaria, Cyprus, France, Germany, Italy, Romania, Rusia, Slovakia, Switzerland, Ukraine, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: China,Taiwan, India, Iran, Japan, North Korea, Pakistan, Philippines, Turkey Africa: Morocco, Mozambique, Sudan America: Argentina, Barbados, Brazil, Canada, Chile, Cuba, El Salvador, Guyana, Haiti, Jamaica, Martinique, Mexico, Panama, USA Oceania: Christmas Island

45.	*Helicobasidium brebissonii* (Desm.) Donk; *(=Helicobasidium purpureum =Rhizoctonia crocorum =R.violacea =Sclerotium crocorum)*; Basidiomycetes; Asparagus offiPR officinalis root rot, apple violet root rot, sweet potato violet root rot	(P): *Beta vulgaris* var *saccharifera* (bit gula, sugar beetroot) (S): *Daucus carota* (wortel, carrot), *Ipomoea batatas* (ubi jalar, sweet potato), *Solanum tuberosum* (kentang, potato), *Morus* spp. (murbei, mulberry)	I	umbi/umbi akar (tube/tuber-root), bagian tanaman (part of plant)	Europe: Austria, Belgium, Bulgaria, Czech, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Netherlands, Norway, Poland, Romania, Rusia, Slovakia, Sweden, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: China, India, Iran, Japan, Philippines, Turkey, Vietnam Africa: Algeria, Ethiopia, Kenya, Malawi, Morocco, South Africa, Tanzania, Tunisia, Zambia, Zimbabwe America: Argentina, Barbados, Canada,

					Colombia, Dominica, Mexico, Trinidad and Tobago, USA, Uruguay Oceania: Australia, New Zealand
46.	*Hemileia coffeicola* Maubl & Roger; (=*Uredo coffeicola*); Basidiomycetes; grey rust of coffee powdery rust of coffee, coffee rust	(P): *Coffea* spp. (kopi, coffee)	I	daun (leaf), bagian tanaman (part of plant)	Africa: Cameroon, Central Africa, DR Congo, Ivory Coast, Nigeria, Sao Tome & Principe, Togo, Uganda
47.	*Heterosporium allii-cepae* Ranojevic; *(=Mycosphaerella allii-cepae =Cladosporium allii-cepae =Heterosporium allii =Heterosporium allii* var. *cepivorum)*; Ascomycetes; leafspot	(P): *Allium ascalonicum* (bawang merah, shallot)	I	bagian tanaman (part of plant), tanah (soil)	Europe: Germany, Switzerland, UK Asia: South Korea America: Brazil
48.	*Hypoxylon nummularium* Bull ex Fr.; busuk root (Tarry root rot)	(P): *Camellia sinensis* (teh, tea)	I	tanaman (plant), bagian tanaman (part of plant)	Africa: South Africa (East Cape, Graham's town, West cape, Nature's valley)

49.	*Hypoxylon serpens* (Pers.: Fr.) Kicks (=*Hypoxylon subluteum)*; Ascomycetes; tea wood rot, tea root rot	(P): *Camellia sinensis* (teh, tea), *Malus domesticum (*apel, apple*)*, *Pyrus communis (*pir, pear*)* (S): *Vitis vinifera* (anggur, grapevine)	I	cabang (branch)	Europe: UK Asia: Japan Africa: Kenya
50.	*Leptosphaeria coniothyrium* (Fuckel) Sacc.; *(=Coniothyrium fuckelii =Melanomma coniothyrium =Sphaeria coniothyrium =Coniothyrium rosa rum)*; Ascomycetes; cane blight, rose blight, apple canker, pine needle blight, rose stem canker	(P): *Rubus* spp., *Rosa* spp. (mawar, rose). (S): *Ribes, Vaccinium,* Fragaria, Bambusa, Juniperus, *Malus domesticum (*apel, apple*)*, *Pinus sylvestris*, buah batu (stone fruit), *Taxus, Thuja*	I	tanaman (plant), bagian tanaman (part of plant)	Europe: Austria, Bulgaria, Cyprus, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, Rusia, Slovakia, Spain, Switzerland, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Asia: Bangladesh,

					Brunei, China, India, Japan, Kuwait, Malaysia, Nepal, Pakistan, Thailand, Turkmenistan Africa: Kenya, Malawi, Morocco, Nigeria, South Africa, Uganda, Zambia, Zimbabwe America: Argentina, Brazil, Colombia, Cuba, Canada, USA Oceania: Australia, Fiji, New Zealand, Papua New Guinea
51.	*Leptosphaeria taiwanensis* Yen & Chi; *(=Cercospora taiwanensis)*; Ascomycetes; sugar cane leaf blight	(P): *Saccharum officinarum* (tebu, sugarcane)	I	bagian tanaman (part of plant)	Asia: Taiwan
52.	*Marasmiellus cocophilus* Pegler; Basidiomycetes; basal stem break, lethal bole rot of coconut	(P): *Cocos nucifera* (kelapa, coconut) (S): *Cynodon dactylon*, *Echinochloa colona*, *Eleusine indica*	I	buah (fruit), bagian tanaman (part of plant)	Africa: Kenya,Tanzania Oceania: Solomon Islands

53.	*Marasmiellus inoderma* (Berk.) Singer); Basidiomycetes; crown rot of rice, pre-emergence shoot rot, root rot of maize, sheath rot of maize	(P): *Oryza sativa* (padi, paddy) (S): *Zea mays* (jagung, corn, maize), *Musa* spp. (pisang, banana), Orchidaceae (anggrek, orchids)	I	akar (root), tanaman (plant), tanah (soil).	Africa: Egypt Oceania: Samoa America, Samoa
54.	*Microcyclus ulei* (Henn.) Arx; *(=Fusicladium macrosporum =Dothidella ulei =Melanopsammopsis ulei =Aposphaeria ulei =Passalora heveae)*; Ascomycetes; American leaf blight of rubber	(P): *Hevea brasiliensis* (karet, rubber tree)	I	tanaman (plant), bagian tanaman (part of plant), alat angkut (means of transportation), alat pertanian (agricultural tool)	America: Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador ,El Salvador, Guyana France, Guatemala, Guyana, Haiti, Honduras, Mexico, Nicaragua, Panama, Peru, Suriname, Trinidad and Tobago, Venezuela
55.	*Microthyriella rubi* Petr.; *(=Scizothyrium* sp.*)*; fly speck	(P): *Vitis vinifera* (anggur, grapevine), *Malus domesticum (*apel, apple*)*, *Citrus* spp.(jeruk, orange) (S): *Dianthus* spp. (anyelir, carnation)	I	tanaman (plant), bagian tanaman (part of plant)	Asia: China, India, Japan America: USA

56.	*Monilinia laxa* (Aderh. & Ruhland) Honey [teleomorph]; Ascomycetes; = *Monilia laxa* (Ehrenb.) Sacc. & Voglino [anamorph] = *Sclerotinia cinerea* (Bonord.) J. Schröt. [anamorph] = *Monilia oregonensis* Barss [anamorph] = *Monilia cinerea* Bonord. [teleomorph] = *Sclerotinia laxa* Aderh. & Ruhland [teleomorph] = *Sclerotinia cerasi* Woronin [teleomorph]; blossom blight; mummufying fruit; blossom wilt; brown rot of stone fruits; spur blight; twig canker; wither tip	(P): *Prunus armeniaca* (apricot), *Prunus avium* (sweet cherry), *Prunus cerasus* (sour cherry), *Prunus domestica* (plum), *Prunus dulcis* (almond), *Prunus persica* (peach) (S): *Cydonia oblonga* (quince), *Malus domestica* (apple), *Prunus triloba* (Rose tree of China), *Pyrus communis* (European pear)	I	Buah (Fruits), polong (pods), titik tumbuh (growing points), inflorescence, daun (leaves), batang (stems) dan seluruh tanaman (whole plant).	Europe : Austria, Belgium, Bulgaria, Czech Republic, Czech Republic and Slovakia , Denmark, Finland, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Hungary, Ireland, Italy, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland,

					Ukraine, UK Asia: Afghanistan, Bhutan, China, India, Iraq, Israel, Japan, Lebanon, Turkey, Africa : Morocco, South Africa America : Guatemala, Canada, USA, Argentina, Brazil, Chile, Uruguay, Oceania : Australia, New Zealand
57.	*Moniliophthora roreri* (Ciferri) H.C Evant et al.; *(=Monilia roreri);* Anamorphic fungi; frosty pod rot, monilia pod rot, pod rot of cocoa, quevedo disease, watery pod rot of cocoa	(P): *Theobroma cacao* (kakao, cocoa)	I	buah (fruit), benih (seed)	America: Brazil, Colombia ,Costa Rica, Ecuador, Guatemala, Honduras, Nicaragua, Panama, Peru, Venezuela
58.	*Monilochaetes infuscans* Harter; Anamorphic fungi; scurf of sweet potato, manure stain, scurf: sweet potato, tanah (soil)s stain	(P): *Ipomoea batatas* (ubi jalar, sweet potato)	I	umbi (tuber) , bagian tanaman (part of	Europe: Italy, Portugal Asia: China, Taiwan, Israel, Japan, Korea, Sri Lanka

				plant), media tanam (planting medium)	Africa: Sierra Leone, South Africa, Zimbabwe America: Argentina, Brazil, USA Oceania: Australia, Palau, Cook Islands, Micronesia, New Zealand, Northern Mariana Island, Papua New Guinea, Vanuatu
59.	*Monographella nivalis* (Schaffnit); *(= Micronectriella nivalis =Calonectria nivalis =Griphosphaeria nivalis =Fusarium nivale =.Gerlachia nivalis = Fusarium nivale* f.sp. *graminicola =Fusarium nivale* var.*nivale =Fusarium nivale var. majus =Microdochium nivale =Calonectria graminicola F.Stevens);* Ascomycetes; foot rot of cereals; snow blight of cereals; head blight of cereals; pink snow mould of cereals; seedling blight of cereals; snow mould of cereals;	(P): *Avena sativa* (oat, oats), *Hordeum vulgare* (barley), *Secale cereale* (rye), *Triticum aestivum* (gandum, wheat). (S): *Agrostis canina* (velvet bentgrass), *Agrostis stolonifera* (creeping bentgrass), *Festuca rubra* (red fescue), *Oryza sativa* (padi, rice), *turfgrasses.*	I	benih (seed), bagian tanaman (part of plant)	Europe: Austria, Belgium, Czech, Denmark, Estonia, Finland, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia , Serbia, Slovenia, Croatia, Bosnia and Herzegovina,

	Fusarium patch of turf; Microdochium patch of turf; pink snow mould of turf				Montenegro, Macedonia, France, Germany, Iceland, Ireland, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Romania, Russia, Serbia-Montenegro, Slovakia, Sweden, Switzerland, Ukraine, UK. Asia : Bahrain, China, India, Japan, Pakistan. Africa : Egypt, Ethiopia, Senegal, Zambia. America : Canada, Mexico, USA, Bolivia, Brazil. Oceania : Australia, New Zealand
60.	*Mycena citricolor* (Brek & Curt) Sacc *(=Agaricus citricolor =Omphalia flavida =Stilbum flavidum =Mycena tricolor)*;	(P): *Coffea* spp. (kopi, coffee), (S): *Citrus*, *Cinchona offiChinalis* (kina, quinine	I	buah (fruit), bagian tanaman (part of	America: Bolivia, Brazil , Colombia, Costa Rica, Cuba, Dominica, Ecuador, El Salvador,

	Basidiomycetes; American leaf spot of coffee, American: coffee leaf spot, cock's eye spot, iron spot of coffee	tree) *Theobroma cacao* (kakao, cocoa)		plant)	Guyana France, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Nicaragua, Panama, Peru, Puerto Rico, Suriname, Trinidad and Tobago, USA
61.	*Mycosphaerella aleuritis* (Miyake) Ou *(=Pseudo cercospora aleuritis)*; Ascomycetes; angular leaf spot	(P): *Aleurites moluccana* (kemiri, candle-nut)	I	buah (fruit), bagian tanaman (part of plant)	Asia: China Oceania: Tonga, Cook Islands, New Zealand
62.	*Mycosphaerella fijiensis* (M. Morelet); *(Mycosphaerella fijiensis* var. *difformis)*; Black sigatoka	*Musa* spp. (pisang, banana)	I	benih (seed)	Asia : Bhutan, China (Fujian, Hainan, Taiwan), Malaysia, Philippines, Singapore, Thailand, Vietnam. Africa : Benin, Burundi, Cameroon, Central African Republic, Comoros, DR Congo, Congo, Ivory Coast,

					Gabon, Ghana, Guinea-Bissau, Kenya, Madagascar, Malawi, Niger, Nigeria, Rwanda, Sao Tome and Principe, Tanzania , Togo, Uganda, Zambia. America : Belize, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Netherlands Antilles, Nicaragua, Panama, Peru, USA, Hawaii, Venezuela. Oceania : American Samoa, Australia , Cook Islands, Federated states of Micronesia, Fiji, French Polynesia, New Caledonia, Niue,

					Norfolk Island, Northern Mariana Islands, Papua New Guinea, Samoa, Solomon Islands, Tonga, Vanuatu, Wallis and Futuna.
63.	*Oidium anacardii* ; Anamorphic fungi; powdery mildew	(P): *Anacardium occidentale* (jambu mete, cashew-nut)	I	tanaman (plant), bagian tanaman (part of plant)	Africa: Malawi, Tanzania
64.	*Oospora pustulans* Owen & Wakef; *(=Polyscytalum pustulans)*; Anamorphic fungi; potato skin spot	(P): *Solanum tuberosum* (kentang, potato) (S): *Solanum* spp.	I	umbi (tuber)	Europe: Estonia, Germany, Ireland, Lithuania, Norway, Romania, Russia, UK Africa: South Africa America: Canada,USA Oceania: Australia, New Zealand
65.	*Pachymetra chaunorhiza* Croft & Dick; pachymetra root rot	(P): *Saccharum officinarum* (tebu, sugarcane), *Zea mays*	I	tanaman (plant), bagian	Australia

		(jagung, corn, maize), *Sorghum bicolor* (sorgum, sorghum)		tanaman (part of plant), media tanam (planting medium)	
66.	*Periconia manihoticola* (Vincens) Viegas; Anamorphic fungi; Periconia blight	(P): *Hevea brasiliensis* (karet, rubber tree), *Acasia* spp., *Pisum* spp., *Manihot esculenta* (ubi kayu, cassava)	I	tanaman (plant), bagian tanaman (part of plant)	Asia: India Oceania: Fiji, Papua New Guinea, Solomon Islands, Vanuatu
67.	*Peronospora hyoscyami* f.sp. *tabacina* (D.B. Adam) Skalicky; *(=Peronospora tabacina =P.hyoscyami = .nicotianae)*; Oomycetes; angular tobacco leaf spot, blue mould of tobacco, downy mildew, tobacco black fire, tobacco blue mould, tobacco wildfire	(P): *Nicotiana tabacum* (tembakau, tobacco) (S): *Capsicum annuum* (paprika, bell-pepper), *Lycopersicum esculentum* (tomat, tomato), *Solanum melongena* (terung, eggplant , aubergine)	I	bagian tanaman (part of plant)	Europe: Albania, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Cyprus, Czech, France, Germany, Greece, Hungary, Italy , Latvia, Lithuania, Luxembourg, Macedonia, Moldova, Netherlands, Poland, Portugal, Romania, Rusia, Spain, Slovakia, Switzerland, Ukraine,

					UK , Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: Armenia, Azerbaijan, Taiwan, Georgia, Iran, Iraq, Israel, Jordan, Lebanon, Myanmar, Syria, Turkey , Uni Arab Emirat, Yemen, Algeria, Egypt, Libya, Morocco, Tunisia America: Argentina, Brazil, Chile, Costa Rica, Cuba, Dominica, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Puerto Rico, USA , Uruguay, Venezuela Oceania: Australia

68.	*Peronospora sparsa* Berk; Oomycetes; downy mildew	(P): *Rosa* spp. (mawar, rose)	I	daun (leaf)	America: USA, Canada, Brazil, Colombia Europe: Finland, Ireland, France, Scandinavia, UK, Russia, Russia Asia: Israel Africa: Egypt Oceania: Australia.
69.	*Peronospora viciae* f.sp *pisi* (Sydow) Boerema & Verhoeven; Oomycetes; pea downy mildew	(P): *Pisum sativum* (kapri, sweet pea), *Vicia faba*	I	benih (seed), bagian tanaman (part of plant)	Europe: Scandinavia Asia: India
70.	*Phaeolus manihotis* Henn; Basidiomycetes; root rot	(P): *Solanum tuberosum* (kentang, potato), *Lycopersicum esculentum* (tomat, tomato)	I	umbi (tuber), bagian tanaman (part of plant)	Africa: Madagascar
71.	*Phaeosphaeria nodorum* (E.Mull.) Hedjar; *(=Phoma hennebergii =Septoria glumarum =S.nodorum =Stagonospora*	(P): *Triticum aestivum* (gandum, wheat), Secale cereale (rye) , *Hordeum vulgare* (barli, barley)	I	benih (seed), bagian tanaman (part of	Europe: Austria, Belgium, Bulgaria, Czech, Denmark, Finland, France,

	nodorum =Leptosphaeria nodorum); Ascomycetes; glum blotch	(S): Agropyron, *Bromus inermis*, *Cynodon dactylon*, *Lolium perenne*, *Triticale*		plant)	Germany, Greece, Iceland, Ireland, Italy, Netherlands, Norway,Poland, Portugal, Romania, Rusia, Slovakia, Spain, Sweden, Switzerland, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Asia: Armenia, Bhutan, China,Taiwan, India , Israel, Japan, Korea, Lebanon, Nepal, Pakistan, Philippines, Saudi Arabia Africa: Angola, Ethiopia, Kenya, Malawi, Morocco, South Africa, Tanzania, Uganda, Zambia, Zimbabwe America: Argentina,

					Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, USA Oceania: Australia, New Zealand
72.	*Phialophora cinerescens* (Wollenweb.) JHF Beyma *(=Verticillium cinerescens)*; Anamorphic fungi; phialophora wilt, vascular wilt of carnation, wilt of carnation	(P): *Diathus* spp. (S): *Helianthus annuus* (bunga matahari, sunflower), *Fragaria* spp.	I	tanaman (plant), bagian tanaman (part of plant), media tanam (planting medium)	Europe: Belgium, Bulgaria, Croatia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Romania, Rusia, Spain, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: China America: Canada, Colombia, USA Oceania: New Zealand

73.	*Phoma exigua* var. *linicola* (Naumov& Vassiljevsky) P.W.T Maas; *(=Ascochyta linicola =Phoma exigua* f.sp. *linicola =P.linicola)*; Ascomycetes; foot rot of flax	(P): *Linum ussitatissimum* (flax) (S): *Vigna* spp. (buncis, cowpea)	I	benih (seed), bagian tanaman (part of plant)	Europe: Belgium, Czech, Denmark, Estonia, France, Germany, Italy, Latvia, Netherlands, Russia, Spain, Slovakia America: Canada Oceania: Australia, New Zealand
74.	*Phoma tracheiphila* (Petri) Kantachveli & Gikachvili; *(=Deuterophoma tracheiphila =Bakerophoma tracheiphila)*; Ascomycetes; mal secco disease of *Citrus*, wilt of *Citrus*, *Citrus* wilt, *Citrus* mal secco	(P): *Citrus* spp. (S*): Fortunella, Poncirus*	I	benih (seed), bagian tanaman (part of plant)	Europe: Albania, Cyprus, France, Greece, Italy, Russia Asia: Georgia, Iraq, Israel, Lebanon, Syria, Turkey, Yemen Africa: Algeria,Tunisia
75.	*Phomopsis perceae* Serova; Ascomycetes; fruit rot	(P): *Persea americana* (alpokat, avocado)	I	buah (fruit)	America: USA.
76.	*Phomopsis viticola (S*acc.) Sacc. [anamorph] = *Phoma viticola* Sacc.= *Phoma flaccida* Viala & Ravaz = *Cryptosporella viticola* Shear [teleomorph] = *Diaporthe viticola* Nitschke [teleomorph] =	(P): *Vitis vinifera* (grapevine) (S) : *Parthenocissus quinquefolia* (creeper), *Vitis labrusca* (fox grape),	I	Buah (fruits), polong (pods), titik tumbuh (growing	Europe : Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Serbia, Slovenia, Croatia, Bosnia and

	Fusicoccum viticolum Reddick = *Diplodia viticola* Desm.*;* Anamorphic fungi; Phomopsis cane and leaf spot; Phomopsis cane and leaf blight; black knot: grapevine; black rot: grapevine; dead-arm: grapevine; necrosis of grapevine	*Vitis rupestris* (sand-grape)		points), inflorescence, daun (leaves) dan batang (stems).	Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Hungary, Italy, Jersey, Macedonia, Moldova, Netherlands, Poland, Portugal, Romania, Russia, Serbia and Montenegro, Slovenia, Spain, Switzerland, Ukraine, UK Asia : Brunei Darussalam, China, Taiwan, India, Japan, Turkey Africa : Egypt, Kenya, South Africa, Zimbabwe America : Canada, Mexico, USA, Brazil, Chile, Venezuela Oceania : Australia, New Zealand

77.	*Phragmidium mucronatum* (Pers.) Schlect.; *(=Phragmidium disciflorum)*; Basidiomycetes; rust	(P): *Rosa* spp. (mawar, rose)	I	tanaman (plant), bagian tanaman (part of plant)	Europe: Bulgaria, Germany, Italy Asia: Japan Africa: Egypt America: Chile
78.	*Phyllachora huberi* Henn; Ascomycetes; black spot/ tar spot	(P): *Hevea brasiliensis* (karet, rubber tree)	I	tanaman (plant), bagian tanaman (part of plant), daun (leaf)	America: Brazil, Guyana
79.	*Phyllosticta phaseolina* Sacc.; Anamorphic fungi; leaf spot, fruit blotch, twig canker	(P): *Glycine max* (kedelai, soybean), *Phaseolus* spp. (S): *Vanilla* sp.	I	tanaman (plant), bagian tanaman (part of plant)	America: Barbados, Jamaica
80.	*Phyllosticta solitaria* Ellis & Everh; Anamorphic fungi; apple blotch	(P): *Malus domesticum (*apel, apple) (S): *Crataegus* sp., *Pyrus coronaria*	I	buah (fruit), bagian tanaman (part of plant)	America: Canada, USA

81.	*Phyllostictina pyriformis* Cash & Watson; Ascomycetes; leaf spot	(P): Orcidaceae (anggrek, orchids)	I	tanaman (plant), bagian tanaman (part of plant)	America: Hawaii
82.	*Phytophthora cryptogea* (Pethybr. & Laff.); Oomycetes: Pythiaceae; tomato foot rot; damping off; gerbera foot rot; black neck of chrysanthemum; tulip shanking; corm, stem and leaf rot of gloxinia; pink rot of potato; stem rot; root rot; damping-off	(P): *Actinidia chinensis* (Chinese gooseberry), *Actinidia deliciosa* (kiwifruit), *Allium cepa* (bawang bombay, onion), *Antirrhinum majus* (snapdragon), *Apium graveolens* (seledri, celery), *Asparagus officinalis* (asparagus), Aster , *Brassica oleracea var. botrytis* (bunga kol, cauliflower), *Cajanus cajan* (pigeon pea), Calathea , *Calendula officinalis* (Pot marigold), *Callistephus chinensis* (China aster), *Capsicum annuum* (bell pepper),	I	daun (leaf), akar (root), batang (stem), bibit tanaman (seedling)	Europe: Austria, Bulgaria, Croatia, Czech, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Russia, Serbia-Montenegro, Slovakia, Spain, Sweden, UK Asia: China, Iran, Japan, Jordan, Korea Africa: Egypt, South Africa, Zimbabwe America: Canada, USA, Argentina, Brazil, Chile Oceania: Australia, New Zealand, Papua New

		Castanea (chestnuts), *Celosia argentea* (celosia), Chrysanthemum (daisy), *Chrysanthemum frutescens* (marguerite), *Chrysanthemum vestitum* , Cichorium (chicory), *Cichorium intybus* (chicory), *Citrullus lanatus* (semangka, watermelon), Citrus , Clarkia (satin flowers), *Consolida ambigua* (rocket larkspur), Cotoneaster , *Cucumis melo* (melon), *Cucumis sativus* (ketimun, cucumber), Cucurbita (pumpkin), *Cucurbita maxima* (giant pumpkin), *Cucurbita moschata* (labu, pumpkin), *Cucurbita pepo* (ornamental gourd), Cupressus (cypresses), *Cyamopsis tetragonoloba*			Guinea

		(guar), *Cyphomandra betacea* (tree tomato), Dahlia , *Daucus carota* (wortel, carrot), *Dianthus barbatus* (sweet williams), *Dianthus caryophyllus* (anyelir, carnation), Erica (heaths), *Erysimum cheiri* (wallflower), *Eucalyptus spp.* , *Euphorbia pulcherrima* (poinsettia), Fragaria (strawberry), Gerbera (Barbeton daisy), *Gerbera jamesonii* (African daisy), *Gladiolus hybrids* (sword lily), *Glycine max* (kedelai, soyabean), *Gynura bicolor* , *Gypsophila paniculata* (babysbreath), Hebe , *Helianthus annuus* (sunflower), *Humulus lupulus* (hop), *Juglans regia* (walnut), *Juniperus chinensis* (Chinese			

		juniper), *Lactuca sativa* (lettuce), *Liatris spicata* (spike gayfeather), *Limonium sinuatum* (sea pink), *Lupinus spp.* , *Lycopersicon esculentum* (tomat, tomato), *Malus domestica* (apel, apple), Maranta (arrowroot), *Matthiola incana* (stock), *Medicago sativa* (lucerne), *Nasturtium officinale* (watercress), *Nicotiana tabacum* (tembakau, tobacco), *Onobrychis viciifolia* (sainfoin), *Papaver nudicaule* (Iceland poppy), *Parthenium argentatum* (Guayule), *Pericallis cruenta* (common cineraria), *Persea americana* (avocado), *Petroselinum crispum* (parsley), *Petunia hybrida* , *Phaseolus*			

		vulgaris (common bean), Picea (spruces), Pinus (pines), *Pinus lambertiana* (big pine), *Pinus mugo* (mountain pine), *Pinus nigra* (black pine), *Pinus radiata* (radiata pine), *Pisum spp*. , *Populus simonii* (Simon poplar), *Prunus armeniaca* (aprikot, apricot), *Prunus avium* (sweet cherry), *Prunus cerasus* (sour cherry), *Prunus dulcis* (almond), *Prunus mahaleb* (mahaleb cherry), *Prunus persica* (peach), *Prunus salicina* (Japanese plum), *Rubus idaeus* (raspberry), *St.paulia ionantha* (African violet), *Salvia officinalis* (common sage), *Simmondsia chinensis* (jojoba), *Solanum melongena*			

		(terung, aubergine), *Solanum tuberosum* (potato), *Spinacia oleracea* (bayam, spinach), *Syzygium samarangense* (water apple), *Tagetes erecta* (African marigold), *Tanacetum cinerariifolium* (Pyrethrum), *Triticum aestivum* (gandum, wheat), Tulipa (tulip), *Vicia villosa* , Viola (violet), *Vitis vinifera* (anggur, grapevine), *Zinnia elegans* (zinnia)			
83.	*Phymatotrichopsis omnivora* (Duggar) Hennebert; *(=Ozonium auricomum =O.omnivorum = hymatotrichum omnivorum =Hydnum omnivorum)*; Anamorphic fungi; cotton root rot, root rot of cotton, soft rot of cotton, cotton soft rot, grapevine root rot	(P): Fabaceae, *Juglandaceae*, Malvaceae, *Rosa* ceae, Umbelliferae, *Abelmoschus moschatus* (okra, lady's finger), *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Beta vulgaris* var	I	bagian tanaman (part of plant), media tanam (planting medium)	America: Mexico, USA , Venezuela

		*sacchari*fera (bit gula, sugar beet) *Carya illinoinensis*, *Ficus carica* (ara), *Glycine max* (kedelai, soybean), *Gossypium barbadens* (kapas, cotton), *Juglans regia*, *Malus domesticum (*apel, apple*)*, *Medicago sativa*, *Phaseolus*, *Populus*, *Prunus* spp., *Pyrus communis (*pir, pear*)*, *Salix*, *Ulmus*, *Vitis vinifera* (anggur, grapevine)			
84.	*Pyricularia setariae* (Y. Nisik); (= *Pyricularia grisea* f. sp. *eleusines*); Anamorphic fungi; blast of millet; leaf spot of millet	(P): *Eleusine coracana* (finger millet), *Setaria italica* (foxtail millet) (S): *Avena sativa* (oat, oats), *Hordeum vulgare* (barley), *Pennisetum glaucum* (pearl millet), *Zea mays* (jagung, maize)	I	benih (seed), bagian tanaman (part of plant	Asia: China, India, Japan, Malaysia, Sri Lanka Africa : Tanzania, Uganda

85.	*Pythium irregulare* (Buisman); Oomycetes: Saprolegniales; dieback: carrot; cavity spot: carrot; rootlet disease: alfalfa root-forking disease: alfalfa replant disease: apple; seedling death: damping-off; root rot	(P): Beta , Brassica , Fabaceae (leguminous plants), Poaceae (grasses) (S): Allium (garlic, leek), *Allium cepa* (bawang bombay, onion), Alstroemeria (Inca lily), *Arctium lappa* (burdock), *Cajanus cajan* (pigeon pea), Capsicum (peppers), *Capsicum frutescens* (chilli), *Carthamus tinctorius* (safflower), *Carya illinoinensis* (pecan), *Cicer arietinum* (chickpea), *Citrullus lanatus* (semangka, watermelon), *Cucumis sativus* (ketimun, cucumber), *Daucus carota* (wortel, carrot), *Dianthus caryophyllus* (anyelir, carnation), Eucalyptus (Eucalyptus tree), Fragaria (stroberi,	I	Akar (root), batang (stem), bibit tanaman (seedling)	Europe: Belgium, Bulgaria, Finland, France, Germany, Netherlands, Poland, Russia, Serbia-Montenegro, Spain, Ukraine, UK Asia: China, Taiwan, India,Iraq, Israel, Japan, Korea, Lebanon, Malaysia, Philippines, Vietnam Africa: Egypt, South Africa, Tunisia America: Canada, USA, Argentina Oceania: Australia, New Zealand, Papua New Guinea

		strawberry), Gerbera (Barbeton daisy), *Glycine max* (kedelai, soyabean), Gossypium (kapas, cotton), *Hordeum vulgare* (barley), Juniperus (junipers), *Lactuca sativa* (lettuce), *Lens culinaris ssp. culinaris* (lentil), *Lycopersicon esculentum* (tomat, tomato), *Malus domestica* (apel, apple), *Medicago sativa* (lucerne), *Nicotiana tabacum* (tembakau, tobacco), *Olea europaea subsp. europaea* (olive), *Oryza sativa* (padi, paddy, rice), *Petroselinum crispum* (parsley), Phacelia , Phaseolus (beans), *Phaseolus vulgaris* (common bean), *Picea abies* (common spruce), Pinopsida (conifers), Pinus (pines),			

		Pisum sativum (pea), *Prunus avium* (sweet cherry), Salix (willows), *Solanum melongena* (terung, aubergine), *Spinacia oleracea* (bayam, spinach), *Stylosanthes guyanensis* , *Trifolium vesiculosum* (Arrowleaf clover), *Triticum aestivum* (gandum, wheat), Tulipa (tulip), *Vitis vinifera* (anggur, grapevine), *Zea mays* (jagung, maize)			
86.	*Pythium splendens* (Braun); Oomycetes; blast of oil palm; damping-off; root rot	(P): *Anacardium, Ananas cornosus* (nenas, pineapple), Anona, Anthurium, Aralia, Degonia, Begonia, Brassica, Cajanus, Caladium, Cavalia, *Carthamus tinctorius* (Safflower), *Catlleya, Celosia*, *Chrysantemum*	I	bagian tanaman (part of plant)	Europe : Belgium, France, Germany, Ireland, Italy, Netherlands, Portugal, UK Asia : China, India, Iran, Japan, Malaysia, Singapore, Vietnam Africa : Congo, Ivory Coast, Madagascar,

		(daisy), Citrus, Coleus, *Colocasia esculenta* (talas, taro), Corchorus (jutes), Cucumis (melons, cucumbers, gerkins), *Elaeis guineensis* (kelapa sawit, oil palm), Eucalyptus (Eucalyptus tree), Fatsia, Geranium (cranesbill), gerbera (barbeton daisy), Gossypium (kapas, cotton), Helianthus (sunflowers), *Hevea brasiliensis* (karet, rubber), Hordeum (barleys), Ipomoea (morning glory), *Mangifera indica* (mangga, mango), Manihot, Madicago (medic), Nerium (oleander), *Nicotiana tabaccum* (tembakau, Tobacco), Pawlonia, Pelargonium			Nigeria, South Africa, Tanzania America: Jamaica, Martinique, Puerto Rico, Trinidad and Tobago, USA, Brazil, Colombia Oceania Australia, Fiji, New Caledonia, New Zealand, Papaua New Guinea, Samoa, Solomon Islands

		(pelargoniums), Persea, Phaseolus (beans), Philodendron, Pinus (pines), Piper (pepper), Pisum (pea), Polytictus, *Pyrus communis* (European pear), Saccharum, Schefflera (umbrella tree), Scindapsus, Solanum (nightshade), Theobroma, Tithonia, Triticum (wheat), Vicia (vetch), Vigna (cowpea), Vitis (grape), *Xanthosoma sagittifolium* (yautia (yellow)), *Zea mays* (jagung, maize), Zingiber (jahe, ginger)			
87.	*Phytophthora megasperma* Drechsler = *Pythiomorpha miyabeana* S. Ito & Nagai; Oomycetes; root rot; crown rot; trunk canker; collar rot; apoplexy; sudden wilt; fruit rot; stem blight;	(P): *Actinidia deliciosa (*kiwifruit), *Asparagus officinalis (*asparagus*)*, *Brassica oleracea (*cabbages, cauliflowers*)*, *Brassica oleracea var.*	I	Umbi (tubers, bulb), buah (fruits), polong (pods), daun	Europe : Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France,

	seed-piece rot; tuber rot; pod rot; black rot; blight; spear rot	*botrytis* (cauliflower*), Brassica oleracea var. capitata (*cabbage*), Brassica oleracea var. gemmifera (*Brussels sprouts*), Brassica rapa subsp. pekinensis (*Pe-tsai), *Daucus carota (*carrot*), Juglans regia (*walnut*), Lycopersicon esculentum* (tomato*), Malus domestica* (apple*), Prunus armeniaca (*apricot), *Prunus avium (*sweet cherry*), Prunus cerasus (*sour cherry*), Prunus domestica (*plum), *Prunus dulcis* (almond*), Prunus mahaleb (*mahaleb cherry*), Prunus persica (*peach*), Prunus salicina (*Japanese plum*), Pseudotsuga menziesii (*Douglas-fir*), Solanum tuberosum (*potato*)* (S): *Aesculus*		(leaves), akar (roots), batang (stems), organ vegetatif (vegetative organs) , seedling (micropropagated plants) dan seluruh tanaman (whole plant).	Greece, Ireland, Italy, Spain, UK, Scotland Asia : China, India, Iran, Japan, Korea Republic of (South Korea), Philippines America : Canada, USA, Argentina, Chile Oceania : Australia, New Zealand

		*hippocastanum (*buckeye*), Alcea rosea (Hollyhock), Banksia , Buddleia (*Butterflybush*), Carthamus tinctorius (*safflower*), Castanea sativa (chestnut), Chamaecyparis lawsoniana (*Port Orford cedar*), Cicer arietinum (*chickpea*), Cytisus (*Broom), *Dahlia , Dianthus caryophyllus (*carnation*), Eucalyptus (*Eucalyptus tree*), Matthiola incana (*stock*), Narcissus (*daffodil*), Parthenium argentatum (*Guayule*), Pinus (*pines*), Ribes uva-crispa (*gooseberry*), Rubus idaeus (*raspberry*), Saccharum officinarum (*sugarcane*), Sorbus aria (*whitebeam*), Sorbus aucuparia (*mountain ash*), Vicia faba (*broad bean*)*			

88.	*Phytophthora megrootya* Brasier & M.J Griffin; Oomycetes; black pod of cocoa, seedling blight of cocoa, trunk canker of cocoa	(P): *Theobroma cacao* (kakao, cocoa)	I	buah (fruit), bagian tanaman (part of plant)	Africa: Cameroon, Equatorial Guinea, Gabon, Ghana, Guinea, Nigeria, Togo
89.	*Phytophthora phaseoli* Thaxter; Oomycetes; Phaseolus leaf blight, collar rot of lima bean	(P): *Phaseolus lunatus*	I	benih (seed), bagian tanaman (part of plant)	Europe: Italy ,Rusia Asia: Sri Lanka, Philippines Africa: DR Congo America: Mexico, Puerto Rico, USA
90.	*Plenodomus destruens* Harter; foot rot of sweet potato	(P): *Ipomoea batatas* (ubi jalar, sweet potato)	I	benih (seed), umbi (tuber)	America: Brazil, Caribbean, USA
91.	*Podosphaera clandestina* var. *clandestina* (Wallr.) Lév. = *Podosphaera oxyacanthae* (DC.) de Bary = *Alphitomorpha clandestina* Wallr. = *Erysiphe clandestina* (Wallr.) Fr. = *Erysiphe oxyacanthae* DC.*;* Ascomycetes; powdery mildew of cherry; powdery mildew of hawthorn; mildew of quince	*Crataegus monogyna* (hawthorn), *Cydonia oblonga* (quince), *Prunus armeniaca* (apricot), *Prunus avium* (sweet cherry), *Prunus domestica* (plum), *Prunus salicina* (Japanese plum)	I	Daun (leaves) dan buah (fruit)	Europe : Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France,

					Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Ukraine, UK Asia : Armenia, Azerbaijan, China, India, Iran, Iraq, Japan, Kazakhstan, Korea Republic of (South Korea), Kyrgyzstan, Lebanon, Turkey, Turkmenistan, Uzbekistan Africa : Libya, Mauritius, Morocco, Zimbabwe America : Canada, USA Oceania : Australia, New Zealand

92.	*Puccinia asparagi* DC.; Basidiomycetes;,asparagus rust	(P): *Asparagus officinalis* (asparagus, asparagus)	I	bagian tanaman (part of plant)	Europe: Austria, Belgium, Bulgaria, Cyprus, Czech, Denmark, Finland, France, Germany, Hungary, Italy, Latvia, Lithuania, Netherlands, Norwagia, Poland, Portugal, Romania, Russia Asia: Azerbaijan, China , Taiwan , Georgia, India, Iran, Israel, Japan, Kazakhstan, Philippines, Turkey, Turkmenistan, Uzbekistan Africa: Angola, Ethiopia, Kenya, Morocco, South Africa, Tanzania, Uganda, Zambia America: Canada, Cuba, Dominica, Mexico, USA

93.	*Puccinia coronata* Corda; *(= Puccinia lolii =Puccinia sertata =Puccinia coronata var. lolii =Puccinia coronata var. sertata =Puccinia alpiniae-coronata =Puccinia mediterranea =Puccinia coronata f. holci =Puccinia coronata var. calamagrosteos =Puccinia coronata var. bromi = Aecidium alaterni =Aecidium cathartici =Aecidium frangulae =Aecidium rhamni =Aecidium rhamni-alipnae=Aecidium rhamni-infectoriae =Puccinia coronata var. intermedia =Puccinia pumilae-coronata =Puccinia alpinae-coronata =Puccinia coronata var. avenae);* Uredinales: Pucciniaceae; crown rust, crown rust of oat, oat crown rust, leaf rust of oats	(P): *Agrostis capillaris* (brown bentgrass), *Agrostis gigantea* (black bent), *Agrostis stolonifera* (creeping bentgrass), *Alopecurus aequalis* (Dent foxtail), *Arrhenatherum elatius* (false oatgrass), *Avena sativa* (oats), *Bromus erectus* (upright brome(grass)), *Bromus tectorum* (downy brome), *Calamagrostis epigejos* , *Festuca arundinacea* (reed fescue), *Festuca ovina* (sheeps fescue), *Festuca pratensis* (English bluegrass), *Festuca rubra* (red fescue), *Lolium rigidum* (rigid ryegrass), *Phalaris canariensis* (Canarygrass), *Phleum pratense* (timothy), *Secale cereale* (rye), *Trisetum*	II	Titik tumbuh (Growing points), inflorescence, daun (leaves) dan tanaman (whole plant)	Europe: Austria, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech, Denmark, Estonia, Finland, France, Corsica, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia-Montenegro, Slovakia, Spain, Canary Islands, Sweden, Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Asia: India, Israel, Japan, Kazakhstan, Mongolia, Uzbekistan Africa: Algeria, Egypt,

		flavescens (yellow oatgrass) (S): *Rhamnus caroliniana* (Carolina buckthorn), *Rhamnus cathartica* (buckthorn), *Rhamnus frangula* (alder buckthorn), turfgrasses			Ethiopia, Kenya, Morocco, Tanzania America: Canada, Mexico, USA, Argentina, Brazil, Chile, Uruguay Oceania: Australia, New Zealand
94.	*Pyrenochaeta terrestris* (Hans) Gorenz, Walker& Larson; Anamorphic fungi; *onion* pink root	(P): *Allium* spp. (S): *Asparagus officinalis* (asparagus, asparagus), *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, corn, maize)	I	tanaman (plant), bagian tanaman (part of plant), media tanam (planting medium)	Europe: Netherlands, Greece, Poland, Israel Africa: Senegal America: Argentina ,USA, Venezuela Oceania: Australia
95.	*Rosellinia necatrix* Prill.; *(= Dematophora necatrix)*; Ascomycetes; dematophora root rot, white root rot of trees	(P): *Actinidia deliciosa* (kiwi, kiwi fruit), *Begonia*, *Boehmeria nivea (*rami, ramie), *Camellia sinensis* (teh, tea), *Citrus* spp., *Cydonia oblonga*, *Cynara scolymus*	I	tanaman (plant), bagian tanaman (part of plant), media tanam	Europe: Austria, Bulgaria, Cyprus, France, Germany, Greece, Italy, Portugal, Romania, Southern Russia, Spain, Switzerland, Ukraine,

		(artisyok, artichoke), *Cyclamen, Dianthus*, *Eriobotrya japonica*, *Ficus carica*, *Fragaria vesca* (arbei, strawberry), *Jasminum sambac (*melati, jasmine), *Malus domesticum (*apel, apple*)*, *Morus, Narcissus, Olea europea* sub sp. *europea* (zaitum, olive), *Paeonia*, *Populus*, *Prunus cerrasus* (ceri, cherry), *Pyrus communis (*pir, pear*)*, *Rosa* spp. (mawar, rose), Viola, *Vitis vinifera* (anggur, grapevine) (S): cerealia, *Abies alba*, *Acacia, Acer, Aesculus, Annona, Asparagus officinalis* (asparagus, asparagus), *Beta vulgaris* var *saccharifera* (bit gula, sugar beet), *Berberis*, *Brassica oleracea capitata* (kubis, cabbage), *Ceanothus megacarpus*,		(planting medium)	UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Asia: China,Taiwan, Georgia, India, Iran, Iraq, Israel, Japan, South Korea, Lebanon, Philippines, Turkey Africa: Central Africa, DR Congo, Ethiopia, Kenya, Morocco, Mozambique, Nigeria, South Africa, Réunion America: Argentina, Brazil, Colombia, Dominica, Mexico, USA Oceania: New Zealand

		Cedrus atlantica, *Coffea* spp. (kopi, coffee), *Castanea sativa*, *Cotoneaster*, *Carya*, *Corylus avellana*, *Cyperus esculentus*, *Daucus carota* (wortel, carrot), *Diospyros*, *Eucalyptus*, *Fagus*, *Feijoa sellowiana*, *Fragaria*, *Gladiolus* hybrids, *Helianthus annuus* (bunga matahari, sunflower), *Humulus lupulus*, *Hyacinthus*, *Ilex aquifolium*, *Iris*, *Juglans*, *Juglans regia*, *Ixia*, *Lavandula*, *Larix decidua*, *Ligustrum vulgare*, *Laurus nobilis*, *Malus*, *Manihot esculenta* (ubi kayu, cassava), *Macadamia*, *Medicago sativa*, *Mangifera indica* (mangga, mango), *Passiflora quadrangularis* (markisa, passion- fruit, granadilla), *Persea americana* (alpokat,			

		avocado), *Pelargonium*, *Phaseolus*, *Pistacia vera*, *Picea abies*, *Piper nigrum* (lada, pepper), *Pinus merkusii* (tusam, pinetree), *Platanus*, buah batu (stone fruit), *Protea*, *Punica granatum* (delima, pomegranate), *Pyracantha*, *Pyrus communis (*pir, pear*)*, *azalea*, *Ribes*, *Rubus* spp., *Rumex*, *Salix*, *Solanum tuberosum* (kentang, potato), *Sorbus aucuparia*, *Theobroma cacao* (kakao, cocoa), *Crocosmia crocosmiiflora*, *Tulipa*, *Ulmus*, *Viburnum*, *Vicia*, *Vitis*, *Zea mays* (jagung, corn, maize), *Ziziphus jujuba*, *Zantedeschia*			

96.	*Sclerospora graminicola* (Sacc.) J. Schrot; (= *Sclerospora graminicola* var. *setariae-italicae = Protomyces graminicola = Peronospora graminicola = Peronospora setariae = Ustilago urbani*); Oomycetes; downy mildew of pearl millet; green ear	(P): *Pennisetum glaucum* (pearl millet), *Zea mexicana* (teosinte) (S): *Saccharum officinarum* (sugarcane), *Zea mays* (maize)	II	Bagian tanaman (part of plant)	Europe: Bulgaria, Czech, Slovakia, France, Germany, Hungary, Italy, Netherlands, Poland, Romania, Russia, Russia (Europe), Spain, Switzerland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Asia: China, Taiwan, India, Iran, Israel, Japan, Kazakhstan, South Korea, Pakistan, Yemen Africa: Burkina Faso, Chad, Ivory Coast, Egypt, Gambia, Ghana, Malawi, Mauritania, Mozambique, Niger, Nigeria, Senegal, Sierra Leone, South Africa, Sudan, Tanzania, Togo, Uganda, Zimbabwe

					America: Puerto Rico, Canada, Mexico, USA, Hawaii, Argentina Oceania: Fiji
97.	*Sclerophthora macrospora* (Sacc.) *Thirum., C.G. Shaw & Naras; (=Sclerospora oryzae = Phytophthora macrospora = Sclerospora kriegeriana =Nozemia macrospora = Sclerospora macrospora);* Oomycetes; downy mildew; crazy top of maize; yellow wilt of rice; witches' broom on maize	(P): *Avena sativa* (oat, oats), *Eleusine coracana* (finger millet), *Hordeum vulgare* (barley), *Oryza sativa* (padi, paddy, rice), *Pennisetum glaucum* (pearl millet), *Saccharum officinarum* (tebu, sugarcane), *Sorghum bicolor* (sorgum, sorghum), *Triticum* (wheat), *Tritcum aestivum* (gandum, wheat), *Zea mays* (jagung, maize). (S): *Bromus inermis* (Awnless brome), *Digitaria sanguinalis* (large crabgrass), *Echinochloa crus-galli* (barnyard grass), *Eleusine indica* (goose grass) *Elymus repens* (quackgrass) *Eragrostis*	II	Media tanam (Growing Medium Accompanying Plants), Bunga (Flowers/Inflorescences/Cones/Calyx), daun (Leaves), akar (Roots), batang (Stems (above Ground)/Shoots/Trunks/Branches), benih (True Seeds (inc. Grain))	Europe : Austria, Bulgaria, Germany, Italy, Poland, Serbia-Montenegro, Slovenia, Switzerland. Asia : China, India, Iran, Iraq, Japan, Kazakhstan, Korea, Pakistan, Syria, Thailand, Turkey. Africa : Ethiopia, Mauritius, South Africa, Uganda. American: Cuba, Canada, Mexico, USA, Brazil, Peru, Venezuela. Oceania : Australia, New Zealand

		(lovegrasses), *Lolium temulentum* (darnel), *Panicum capillare* (tumble panicgrass), *Poa* (meadow grass), *Setaria viridis* (green foxtail), *Stenotaphrum secundatum* (buffalograss)			
98.	*Sclerotium cepivorum* Berk. [anamorph] = *Stromatinia cepivorum (*Berk.) Whetzel [teleomorph]; white rot of onion and garlic; onion white root rot; bulb rot of onion; Allium white rot; onion white rot	(P): *Allium* (onions, garlic, leek, etc.), *Allium cepa* (onion), *Allium cepa* var. *aggregatum* (shallot*)*, *Allium fistulosum* (Welsh onion), *Allium porrum* (leek), *Allium sativum* (garlic), *Allium schoenoprasum* (chives)	I	Umbi (bulb), Titik tumbuh (Growing points), daun (leaves), akar (roots), batang (stems) dan seluruh bagian tanaman (whole plant).	Europe : Austria, Bulgaria, Cyprus, Czech Republic and Slovakia , Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Romania, Russia, Serbia and Montenegro, Spain, Sweden, Switzerland, UK Asia : China, India, Iran, Japan, Philippines Africa : Egypt, Libya, South Africa, Uganda,

					Zimbabwe America : Canada, Mexico, USA, Argentina, Bolivia, Brazil, Chile, Colombia, Guyana, Uruguay, Venezuela Oceania : Australia, New Zealand
99.	*Septoria pisi* Westend; Anamorphic fungi; septoria blight/blotch	(P): *Pisum sativum* (kapri, sweet pea), *Vicia faba*	I	benih (seed), bagian tanaman (part of plant)	Europe: Denmark, Finland, Ireland, Norway, Sweden America: Canada, USA Oceania: New Zealand
100	*Septoria selenophomoides* Cash & Watson; Anamorphic fungi; leaf spot	(P): Orchidaceae	I	tanaman (plant), bagian tanaman (part of plant)	America

101	*Sphaceloma arachidis* bitanc & Jenkins; Anamorphic fungi; groundnut scab, peanut scab, scab of groundnut, scab: groundnut	(P): *Arachys hypogaea* (kacang tanah, groundnut, peanut)	I	tanaman (plant), bagian tanaman (part of plant)	Asia: China, Japan Africa: Swaziland America: Argentina, Brazil, Colombia
102	*Sphacelotheca reiliana* (J. G. Kühn) Clinton; *(=Cintractia reiliana =Sorosporium holci-sorghi =Sorosporium reilianum =Sphacelotheca holci-sorghi =Sporisorium holci-sorghi =S.reilianum =Ustilago holci-sorghi =Ustilago reiliana)*; Basidiomycetes; head smut of maize, loose smut	(P): *Sorghum Sudanense*, *Sorghum bicolor* (sorgum, sorghum), *Zea mays* (jagung, corn, maize) (S): *Andropogon*, *Zea mexicana*	I	benih (seed), bagian tanaman (part of plant), media tanam (planting medium)	Europe: Austria, Bulgaria, Cyprus, Czech, Slovakia, Estonia, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Greece, Hungary, Italy, Portugal, Romania, Rusia, Spain, Switzerland, Ukraine Asia: Bhutan, China, India, Iran, Iraq, Israel, Japan, Kazakhstan, Korea, Malaysia, Myanmar, Nepal, Pakistan, Philippines,

					Yemen Africa: Burkina Faso, Burundi, Cameroon, Chad, DR Congo, Egypt, Erythrea, Ethiopia, Ghana, Kenya, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Niger, Nigeria, Rwanda, Senegal, Somalia, South Africa, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe America: Argentina, Barbados, Bolivia, Brazil, Canada, Chile, Colombia, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Panama, USA, Uruguay Oceania: Australia, New Zealand, Papua New Guinea

103	*Sphenospora saphena* Cummins; Basidiomycetes; rust	(P): *Oncydium orchids*	I	tanaman (plant), bagian tanaman (part of plant)	America: USA
104	*Sphenospora kevorkianii* ; Basidiomycetes; rust	(P): Orchidaceae (*Cattleya*, *Epidendrum*)	I	tanaman (plant), bagian tanaman (part of plant)	America: USA, Nicaragua, Bahama, Brazil, Bolivia, Colombia.
105	*Sporisorium cruentum* (J.G. Kühn) Vanky; *(=Sphacelotheca cruenta =S.holci =Ustilago cruenta);* Basidiomycetes; loose kernel smut, loose smut, sorghum loose kernel smut	(P): *Sorghum bicolor* (sorgum, sorghum) (S): *Saccharum officinarum* (tebu, sugarcane)	I	biji (grain), bagian tanaman (part of plant), media tanam (planting medium)	Europe: Bulgaria, Cyprus, Czech, Slovakia, Germany, Greece, Hungary, Italy, Poland, Rusia, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: Afghanistan, China, Taiwan, India, Iran, Iraq, Israel, Japan,

					South Korea, Lebanon, Myanmar, Pakistan, Turkey, Yemen Africa: Botswana, Burundi, Cameroon, Central Africa, Chad, DR Congo, Ethiopia, Gambia, Ghana, Kenya, Malawi, Mauritius, Morocco, Mozambique, Niger, Nigeria, Rwanda, Senegal, Somalia, South Africa, Sudan, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe America: Argentina, Barbados, Brazil, Cuba, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Puerto Rico, USA ,Venezuela

106	*Stemphylium vesicarium* (Wallr.) E.G. Simmons = *Pleospora allii* (Rabenh.) Ces. & De Not. [teleomorph]; Anamorphic fungi; onion leaf blight; garlic leaf blight; purple spot of asparagus; brown spot of pear; garlic leaf spot; onion leaf spot; asparagus leaf spot; Stemphylium blight of onion; leaf blight: onion; purple spot: Asparagus spp.	(P): *Allium cepa* (onion), *Allium cepa* var. *aggregatum* (shallot), *Allium sativum* (garlic), *Asparagus officinalis* (asparagus), *Glycine max* (soyabean), *Lycopersicon esculentum* (tomato), *Mangifera indica* (mango), *Medicago sativa* (lucerne), *Medicago tribuloides* (barrel medic), *Pyrus communis* (European pear) (S): Aster	I	Umbi (bulb), buah (fruits), polong (pods), daun (leaves) dan batang (stems).	Europe : Belgium, Cyprus, France, Greece, Italy , Netherlands, Portugal, Spain, Sweden, UK Asia : China, India, Iraq, Israel, Japan, Korea Republic of (South Korea) , Malaysia, Saudi Arabia, Sri Lanka, United Arab Emirates, Africa : Egypt, Senegal , South Africa, America : Jamaica, Canada, USA, Argentina, Brazil, Chile, Venezuela Oceania : Australia, New Zealand, Tonga, Vanuatu
107	*Stenocarpella maydis* (Berk) B. Sutton; (= *Diplodia zeae = Diplodia maydis= Macrodiplodia zeae =*	(P): *Zea diploperennis*, *Zea mays* (jagung, maize), *Zea may*s subsp. *mays*	I	benih (seed), bagian tanaman (part of	Europe: Austria, Bulgaria, Czech, Italy, Serbia-Montenegro, UK.

	Hendersonia zeae =Diplodia zeae-maydis =Sphaeria maydis =Sphaeria zeae =Diplodia maydicola = Phaeostagonosporopsis zeae); Oomycetes; ear rot of maize; leaf spot of maize; stalk rot of maize; seedling blight of maize; leaf blight of maize; leaf blight of Sorghum spp.; leaf spot of grasses; Diplodia ear and stalk rot; white ear rot of maize	*(sweetcorn)*		plant)	Asia: China, India, Iran, Japan, South Korea, Nepal, Pakistan, Thailand. Africa: Congo, DR Congo, Ethiopia, Ghana, Kenya, Malawi, Nigeria, South Africa, Swaziland, Tanzania, Zambia, Zimbabwe America: Belize, Honduras, Canada, Mexico, USA, Argentina, Brazil, Colombia, Ecuador. Oceania: Australia, New Zealand.
108	*Stromatinia gladioli* (Drayton) Whetzel; *(=Sclerotinia gladioli =Sclerotium gladioli);* Ascomycetes; gladiolus dry rot	(P): *Gladiolus* spp.	I	bagian tanaman (part of plant)	Europe: UK Africa: South Africa

109	*Synchytrium endobioticum* (Schilb.) Percival; *(=Chrysophlyctis endobiotica =Synchytrium solani)*; Chytridiomycetes; black wart of potato, potato black scab, potato wart disease, wart disease of potato	(P): *Solanum tuberosum* (kentang, *potato*) (S): *Solanum nigrum*, *Solanum dulcamara*, *Hyoscyamus niger*, *Nicandra physalcides*, *Lycopersicum esculentum* (tomat, tomato)	I	umbi (tuber/corm), bagian tanaman (part of plant), media tanam (planting medium)	Europe: Austria, Belarus, Belgium,Czech, Denmark, Estonia,Faroe Islands, Finland, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Rusia, Slovakia, Slovenia, Sweden, Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: Armenia, Bhutan, India, Nepal Africa: Algeria, South Africa, Tunisia America: Bolivia, Canada, Chile, Ecuador, Falkland Islands, Peru, USA, Oceania: New Zealand

110	*Thecaphora solani* (Thirum & M.J. O'Brien) Mordue; *(=Angiosorus solani)*; Basidiomycetes; potato smut, thecaphora smut	(P): *Solanum tuberosum* (kentang, potato)	I	umbi (tuber), bagian tanaman (part of plant), media tanam (planting medium)	America: Bolivia,Chile, Colombia, Ecuador, Mexico, Panama, Peru, Venezuela

111.	*Tilletia indica* Mitra; *(=Neovossia indica)*; Basidiomycetes; Karnal bunt of wheat, Indian bunt of wheat, partial bunt of wheat, new bunt	(P): *Triticum aestivum* (gandum, wheat)	I	biji (grain), bagian tanaman (part of plant)	Asia: Afghanistan, India, Iran, Iraq, Nepal, Pakistan Africa: South Africa, Mexico, USA
112.	*Tilletia laevis* J. G. Kühn; *(=Tilletia foetens =Tilletia foetida =Ustilago foetens)*; Basidiomycetes; common bunt, complete bunt, covered smut, hill bunt, smooth-spored wheat bunt, stinking bunt, stinking wheat smut	(P): *Triticum aestivum* (gandum, wheat) .	I	biji (grain), bagian tanaman (part of plant)	Europe: Austria, Belgium, Bulgaria, Cyprus, Czech, Denmark, Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia,France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Romania, Rusia, Slovakia, Slovenia, Spain, Switzerland, Ukraine Asia: Afghanistan,

					Armenia, Azerbaijan, China, India, Iran, Iraq, Israel, Japan, Kazakhstan, Korea, Lebanon, Mongolia, Nepal, Pakistan, Saudi Arabia, Syria, Turkey, Turkmenistan, Uzbekistan Africa: Algeria, Angola, Egypt, Ethiopia, Kenya, Lesotho, Libya, Morocco, Somalia, South Africa, Tunisia, Zimbabwe America: Argentina, Canada, Chile, Colombia, Mexico, Peru, USA, Uruguay, Venezuela, Oceania : Australia, New Zealand

113.	*Tilletia tritici* (Bjerk.) G. Winter; *(=Tilletia caries = Uredo caries);* Basidiomycetes; complete bunt, covered smut, hill bunt, rough-spored wheat bunt, stinking smut, wheat bunt, common bunt	(P): *Triticum aestivum* (gandum, wheat) (S): *Agropyron* spp., *Bromus* spp., *Elymus* spp., *Festuca* spp., *Hordeum* spp., *Poa* spp.	I	benih (seed), bagian tanaman (part of plant)	Europe: Austria, Belgium ,Bulgaria, Croatia, Cyprus, Czech, Slovakia, Denmark, Estonia, Finland, France, Germany,Greece ,Ireland, Italy, Latvia, Lithuania, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Rusia, Spain, Sweden, Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: Afghanistan, Armenia, Azerbaijan, Bhutan, China, Taiwan, India, Iran, Iraq, Israel, Japan, Jordan, Kazakhstan, Korea, Kyrgyzstan, Lebanon, Mongolia, Pakistan,

					Saudi Arabia, Syria, Turkey, Uzbekistan Africa: Algeria, Egypt, Ethiopia, Lesotho, Libya, Morocco, South Africa, Tunisia, Uganda, Zimbabwe America: Argentina, Canada, Chile, Colombia, Ecuador, Guatemala, Mexico, Nicaragua, Peru, USA, Uruguay, Venezuela Oceania: Australia, New Zealand
114.	*Trachysphaera fructigena* Tabor & Bunting; Oomycetes; cigar end rot of banana, berry rot of coffee, fungus rot of banana, mealy pod of cacao, fruit rot of coffee, pod rot of cacao	(P): *Theobroma cacao* (kakao, cocoa), *Musa* spp. (S): *Pyrus*, *Prunus*, *Malus* and *Citrus*, *Coffea* spp. (kopi, coffee), *Persea americana* (alpokat, avocado)	I	buah (fruit)	Africa: Cameroon,Central Africa, Chad, DR Congo, Congo, Ivory Coast, Equatorial Guinea, Gabon, Ghana, Guinea, Madagascar, Nigeria, Sierra Leone

115.	*Uredo behnickiana* Henn; Basidiomycetes; rust	(P): Orchidaceae	I	tanaman (plant), bagian tanaman (part of plant)	America: USA, Cuba.
116.	*Uredo epidendri* Henn.; Basidiomycetes; rust	(P): Orchidaceae	I	tanaman (plant), bagian tanaman (part of plant)	America: USA
117.	*Uredo nigropuncta* Henn (=Sphenospora kevorkianii); Basidiomycetes; rust	(P): Orchidaceae	I	tanaman (plant), bagian tanaman (part of plant)	America: Argentina, Brazil , USA
118.	*Urocystis agropyri* (Preuss) J. Schröt.; *(=Tuburcinia tritici =Uredo agropyri =Urocystis occulta =Urocystis tritici*	(P): *Triticum aestivum* (gandum, wheat) (S): *Agropyron*, *Elymus repens*, *Agropyron smithii*,	I	benih/biji (seed/grain), bagian tanaman	Europe: Baltic area, Bulgaria, Cyprus, Czech, Slovakia, Denmark, Estonia,

	=Tuburcinia agropyri); Basidiomycetes; flag smut, flag smut of wheat, batang (stem) smut, stripe smut	*Agrostis stolonifera* var. *palustris*, *Agrostis capillaris*, *Alopecurus*, *Avena sativa* (oat, oats) , *Bromus carinatus*, *Bromus marginatus*, *Carex*, *Dactylis glomerata*, *Elymus*, *Festuca rubra*, *Lolium*, *Phleum pratense*, *Poa* spp., *Trisetum*		(part of plant)	Finlania, France, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Rusia, Spain, Sweden, Switzerland, Ukraine, UK Asia: Afghanistan, China,Taiwan, India, Iran, Iraq, Israel, Japan , Kazakhstan, Korea, Mongolia, Nepal ,Pakistan, Syria, Turkey, Uzbekistan Africa: Algeria, Egypt,Morocco, South Africa, Tunisia America: Argentina, Canada, Chile, Falkland Islands, Greenland, Guatemala, Mexico, USA, Uruguay, Venezuela Oceania: Australia, New Zealand

119.	*Urocystis cepulae* Frost.; *(=Tuburcinia cepulae = Urocystis colchici* var. *cepulae =Urocystis magica =Urocystes cepulae);* Basidiomycetes; leek smut, *onion* smut	(P): *Allium* spp.	I	umbi (corm), bagian tanaman (part of plant)	Europe: Austria, Belgium, Bulgaria, Czech, Slovakia, Malta, Denmark, Finlania, France, Germany, Greece, Italy, Netherlands, Norway, Romania, Rusia, Slovakia,Sweden, Switzerland, UK,Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: China, Taiwan, India, Iran, Iraq, Japan, Kazakhstan, Korea, Nepal, Pakistan, Philippines, Tajikistan, Thailand Africa: Egypt, Gabon, Morocco America: Canada,Chile, Cuba, Mexico, Peru, Puerto Rico, St. Lucia, USA Oceania: Australia, New Zealand

120.	*Urocystis gladiolicola* Ainsworth; Basidiomycetes; smut	(P): *Gladiolus* spp.	I	tanaman (plant), bagian tanaman (part of plant)	Asia: Iran
121.	*Ustilago nuda* f.sp *tritici* (Schaffnit); (= *Ustilago nuda* f.sp. *hordei*); Basidiomycetes; barley loose smut	(P): *Triticum aestivum* (gandum, wheat)	I	benih (seed), bagian tanaman (part of plant)	Europe: Ireland, Rusia, Switzerland, UK Asia: China, India, Pakistan Africa: Egypt America: Canada, USA Oceania: Australia
122.	*Ustilago violacea* (Pers.) Roussel; *(=Microbotryum violaceum)*; Basidiomycetes; Caryophyllaceae anther smut	(P): *Silene pratensis*, *Cerastium*, *Dyanthus*, Caryophyllaceae	I	tanaman (plant), bagian tanaman (part of plant)	Europe: Sweden, America: North America, USA

123.	*Zygophiala jamaicensis* Mason *(=Schizothyrium pomi = Leptothyrium pomi)*; Basidiomycetes, greasy blotch, flyspeck	(P): *Citrus*, *Diospyros*, *Malus domesticum (*apel, apple*)*, *Pyrus communis (*pir, pear*)*	I	tanaman (plant), bagian tanaman (part of plant)	Asia: China, India,Japan America: USA
124.	*Venturia inaequalis* (Cooke) G.Winter; *(=Sphaerella cinerascens =Sphaeria cinerascens =Fusicladium pomi =Helminthosporium* pir*inum =Spilocaea pomi)*; Ascomycetes; apple scab, apple black spot, apple scab	(P): *Malus domesticum (*apel, apple*)* (S): *Crataegus laevigata*, *Cotoneaster*, *Malus*, *Pyracantha*, *Pyrus communis (*pir, pear*)*, *Sorbus*, *Viburnum*	I	buah (fruit), bagian tanaman (part of plant)	Europe: Austria, Belgium, Bulgaria, Cyprus, Czech, Slovakia, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Malta, Netherlands, Norway, Poland, Portugal, Romania, Rusia, Sweden, Switzerland, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: Afghanistan, Bhutan, China, India, Iran, Iraq , Israel, Japan,

					Jordan, Korea, Lebanon, Pakistan, Saudi Arabia, Syria, Turkey Africa: Egypt, Ethiopia, Ghana, Kenya, Libya, Morocco, South Africa, Zimbabwe America: Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Guatemala, Mexico, Peru, USA, Uruguay Oceania: Australia, New Zealand

IV. BAKTERI / BACTERIAL DAN FITOPLASMA / PHYTOPLASMA

NO.	NAMA ILMIAH/SINONIM/FAMILI/ NAMA UMUM/ SCIENTIFIC NAME/SYNONIM/TAXON/COMMON NAME	INANG/ HOST	GOL/ GROUP	MEDIA PEMBAWA / PATHWAY	DAERAH SEBAR/ GEOGRAPHICAL DISTRIBUTION
1.	*Acidovorax avenae* subsp.*citrulli* (Manns) Willems *et al*.; *(=Pseudomonas avenae* subsp. *citrulli = P.pseudoalcaligenes* sub sp. *citrulli);* Burkholderiales, Comamonadaceae; busuk buah, fruit blotch, fruit rot	(P): *Cucumis melo* (melon, melon), *Citrullus vulgaris* (semangka, watermelon), *Cucurbita maxima* (waluh, labu parang, pumpkin), *Cucumis sativus* (mentimun, cucumber)	I	benih/biji (seed/grain), buah (fruit), batang (stem)	Asia: Turkey. America: USA Oceania: Australia, Guam, Northern Mariana Island
2.	*Burkholderia gladioli* Yabuuchi *et al*.; *(= Pseudomonas gladioli)*; Burkholderiales: Burkholderiacea; leaf spot of orchids; soft rot of orchids; bacterial crown rot of lisianthus; busuk umbi	(P): G*ladiolus* spp.	I	umbi (tuber/corm) , tanah (soil)	Asia: China, Japan. Africa: Algeria. America: USA

3.	*Burkholderia andropogonis* (Smith) Gillis *et al*.; *(=Aplanobacter stizolobii =Bacterium andropogonis =B.stizolobii =B.woodsii =Phytobacterium andropogonis =P.stizolobii=P.woodsii =Phytomonas andropogonis, =P.stizolobii =P.woodsii =Pseudomonas andropogonis =P.andropogonis* pv. *stizolobii=P.stizolobii =P.woodsii);* Burkhoderiales: Burkholderiacea; bacterial leaf stripe, leaf striping	(P): *Zea mays* (jagung, corn, maize), *Triticum aestivum* (gandum, wheat), *Sorghum bicolor* (sorgum, sorghum), *Dianthus* spp. (anyelir, carnation), *Bougainvillea* spp. (bogenvil, baugenville)	I	bunga (flower), tunas (bud), meristem cultures.	Europe: Bulgaria, Hungary, Italy, Russia. Asia: China, Iraq, Japan, Pakistan, Philippines, Thailand. Africa: Ethiopia, Kenya, Mauritania, Nigeria, Rwanda, South Africa, Sudan, Togo, Uganda, Zambia, Zimbabwe. America: Argentina, Brazil, Canada, Colombia, Costa Rica, Cuba, El Salvador, Haiti, Honduras, Mexico, USA, Uruguay, Venezuela. Oceania: Australia, Federasi Micronesia, New Zealand.

4.	*Clavibacter michiganensis* subsp. *nebraskensis* (Vidaver & Mandel) Davis *et al*.; *(=Corynebacterium michiganense* pv. *nebraskensis =C.michiganense* subsp. *nebraskense =C.nebraskense);* Actynomycetales: Microbacteriaceae;bacterial stripe, leaf freckles and wilt	(P): *Zea mays* (jagung, corn, maize), *Saccharum officinarum* (tebu, sugarcane), *Sorghum bicolor* (sorgum, sorghum)	I	benih/bij (seed/grain), semua bagian tanaman (all parts of plants)	America: Canada, USA
5.	*Clavibacter michiganensis* subsp. *sepedonicus* (Spieckermann & Kotthoff) Davis et al.; *(=Aplanobacter sepedonicus =Bacterium sepedonicum =Corynebacterium michiganense* pv. *sepedonicum =C. michiganense* subsp. *sepedonicum =C.sepedonicum =Mycobacterium sepedonicum =Phytomonas sepedonica =Pseudobacterium sepedonicum)*; Actynomycetales : Microbacteriaceae; bacterial ring rot	(P): *Solanum tuberosum* (kentang, potato) (S): *Lycopersicum esculentum* (tomat, tomato), *Solanum melongena* (terung, eggplant)	I	umbi (tuber/corm) , benih/biji (seed/grain), media tanam (planting medium), bagian tanaman lainnya (other part of plant), tanah (soil)	Europe: Austria, Belarus, Croatia, Cyprus, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Crete, Latvia, Lithuania, Netherlands, Norway, Poland, Russia, Siberia, Sweden, Ukraine. Asia: China, Taiwan, Japan, Kazakhstan, Korea, Nepal, Uzbekistan. America: Canada, USA, Venezuela.

6.	*Curtobacterium flaccumfaciens* pv. *flaccumfaciens* (Hedges) Collins & Jones; *(=Bacterium flaccumfaciens = Corynebacterium flaccumfaciens* pv. *flaccumfaciens = C.flaccumfaciens =C.flaccumfaciens* ssp. *flaccumfaciens =Phytomonas flaccumfaciens =Pseudomonas flaccumfaciens)*; Actynomycetales: Microbacteriaceae; bacterial wilt	(P): *Glycine max* (kedelai, soybean), *Zea mays* (jagung, corn, maize), *Vigna radiata* (kacang hijau, mungbean), *Vigna* spp. (buncis, cowpea)	I	Benih/biji (seed/ grain), planlet, buah (fruit), batang (stem)	Europe: Romania, Russia. Africa: Mauritius, Tunisia America: Brazil, Colombia, USA, Venezuela. Oceania: Australia
7.	*Erwinia amylovora* (Burrill); *(=Bacillus amylovorus =Bacterium amylovorum =Erwinia amylovora* f.sp. *rubi =Micrococcus amylovorus)*; Enterobacteriales: Enterobacteriaceae, fire blight	(P): *Malus domesticum (*apel, apple*)*, *Prunus dulcis (*almon, almond), *Prunus americana* (aprikot, apricot), *Prunus cerrasus* (ceri, cherry), *Pyrus communis (*pir, pear*)*, *Prunus persica* (persik, peach), *Amelanchier* spp., *Cydonia oblonga*, *Rubus* spp., *Sorbus* spp.	I	tunas (bud), planlet, buah (fruit), bunga (flower), daun (leaf), batang (stem)	Europe: Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Macedonia, Moldova, Netherlands, Norway, Poland, Romania, Spain, Sweden, Switzerland, UK, Serbia, Slovenia,

					Croatia, Bosnia and Herzegovina, Montenegro, Macedonia. Asia: Armenia, Iran, Israel, Jordan, Libanon, Turkey. Africa: Egypt. America: Bermuda, Guatemala, Mexico, USA Oceania: New Zealand
8.	*Erwinia carotovora* subsp. *atroseptica* (Van Hall) Jennison; *(=Erwinia caricae =Bacillus atrosepticus = Bacillus melanogenes =B.phytophthorus =Bacterium atrosepticum =B.carotovorum =B.carotovorum* var. *atrosepticum =B.melanogenum =B.phytophthorum =Erwinia carotovora =E.carotovora* pv. *atroseptica =E.dahliae =E.melonis*	(P): *Solanum tuberosum* (kentang, potato) (S): *Saccharum officinarum* (tebu, sugarcane), Brassica ceae, *Allium ascalonicum* (bawang merah, shallot), *Asparagus officinalis* (asparagus, asparagus), *Carica papaya* (pepaya, pawpaw), *Coffea* spp. (kopi, coffee), *Cucumis*	I	umbi (tuber/corm), daun (leaf), akar (root), batang (stem), bagian lain dari tanaman (other part of plant), tanah (soil).	Europe: Austria, Bulgaria, Cyprus, Czech, Slovakia, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Romania, Russia, Spain, Sweden, Switzerland,

	=E.papayae =E.phytophthora =E.phytophthorus =Pectobacterium atrosepticum =P.carotovorum =P.carotovorum var. *atrosepticum =P.carotovorum* var. *carotovorum =P.phytophthorum =Erwinia atroseptica =E.carotovora* var. *atroseptica)*; Enterobacteriales: Enterobacteriaceae; blackleg	*sativus* (mentimun, cucumber), *Daucus carota* (wortel, carrot), *Glycine max* (kedelai, soybean), *Helianthus annuus* (bunga matahari, sunflower), *Iris* spp., *Lycopersicum esculentum* (tomat, tomato), *Musa* spp. (pisang, banana), *Nicotiana tabacum* (tembakau, tobacco), *Vigna* spp. (buncis, cowpea), *Zea mays* (jagung, corn, maize)			UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia. Asia: Azerbaijan, Bhutan, China, India, Iran, Israel, Japan, Kazakhstan, Libanon, Philippines, Turkey, Vietnam. Africa: Algeria, Egypt, Mauritius, Morocco, Mozambique, South Africa, Tanzania, Tunisia, Zimbabwe. America: Argentina, Belize, Bermuda, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominica, France West Indies, Guadeloupe, Honduras, Martinique, Mexico, Peru, St. Lucia,

					Grenadines, Suriname, Trinidad, Tobago, USA. Oceania: Australia, New Zealand.
9.	*Erwinia tracheiphila* (Holland) Smith; *(=Bacillus tracheiphilus* Smith *=Bacillus tracheiphilus* f.sp. *cucumis =Bacterium tracheiphilum =Erwinia amylovora* var. *tracheiphila)*; Enterobacteriales: Entero bacteriaceae; bacterial wilt	(P): *Cucumis sativus* (mentimun, cucumber), *Cucumis melo* (melon, melon), labu, *Cucurbita maxima* (waluh, labu parang, pumpkin), *Citrullus vulgaris* (semangka, watermelon), Cucurbitaceae lainnya	I	bunga (flower), daun (leaf), akar (root), batang (stem), bagian tanaman (part of plant), Vector: *Acalymma vittata*	Europe: Czech, Slovakia, Lithuania, Russia. Asia: China, Iraq, Japan, Korea, Thailand. Africa: DR Congo, South Africa, America: Canada, Honduras, Peru, USA. Oceania: Australia.
10.	*Pantoea agglomerans (=Bacterium herbicola =B.typhiflavum =Corynebacterium beticola =Enterobacter agglomerans =E.agglomerans* pv. *millettiae =Erwinia herbicola =E.herbicola* pv. *millettiae =E.lathyri*	*Ananas comosus* (nenas, pineapple), *Oryza sativa* (padi, paddy), *Zea mays* (jagung, corn, maize), *Medicago sativa* (alfalfa, lucerne), *Allium* spp. (bawang-bawangan), *Vitis*	I	buah (fruit), polong (pod), bagian tanaman (part of plant)	Europe : France, Germany, Poland, Spain, UK. Asia : Israel, Japan, Saudi Arabia. Africa : Egypt.

	=E.mangiferae =E.millettiae =E. vitivora =Flavobacterium herbicola =F.rhenanum =F.trifolii =Kurthia baccarinii =Pantoea agglomerans pv. *millettiae =Phytomonas itoana =Pseudomonas herbicola =P.itoana =P.trifolii =Xanthomonas cosmosicola =X.indica =X.itoana =X.maydis =X.oryzae =X.penniseti =X. rubrisorghi =X.tagetis =X.translucens* f.sp. *oryzae =X.trifolii);* Enterobacteriales : Enterobacteriaceae; bacterial grapevine blight, bacterial rice leaf blight, pink disease of pineapple	*vinifera* (anggur, grapevine) (P): *Ananas comosus* (nenas, pineapple), *Malus sylvestris* (apel, apple), *Pyrus communis* (pir, pear) (S): *Abelmoschus moschatus* (okra, lady's finger), *Citrus* spp. (jeruk, orange), *Impatiens balsamina*, *Lathyrus odoratus*, *Lycopersicum esculentum* (tomat, tomato), *Manihot esculenta* (ubi kayu, cassava), *Mangifera indica* (mangga, mango), *Oryza sativa* (padi, paddy), *Setaria italica*, *Vitis vinifera* (anggur, grapevine), *Zea mays* (jagung, corn, maize), *Allium sativum* (bawang putih, garlic), *Carthamus*			America : Barbados, Cuba, USA. Oceania : New Zealand.

		tinctorius, *Daucus carota* (wortel, carrot), *Glycine max* (kedelai, soybean), *Gossypium hirsutum* (kapas, cotton), *Hordeum vulgare*, *Morus*, *Nicotiana tabacum* (tembakau, tobacco), *Saccharum officinarum* (tebu, sugarcane), *Solanum tuberosum* (kentang, potato)			
11.	*Pantoea ananas* pv. a*nanas* Walcott et al. ; *(=Bacillus ananas =Bacterium ananas =Chromobacterium ananas = Erwinia ananas =E.herbicola* var. *ananas =Pectobacterium ananas;* Enterobacteriales : Entero bacteriaceae; brown rot, fruit let rot, pink disease	(P): *Ananas comosus* (nenas, pineapple), *Saccharum officinarum* (tebu, sugarcane), *Cucumis melo* (melon, melon) (S): *Oryza sativa* (padi, paddy)	I	tunas (bud), buah (fruit), biji (grain)	Asia: China, Taiwan, Malaysia, Philippines. Africa: Nigeria. America: Brazil, Guatemala, Guyana, Haiti, Mexico, Puerto Rico, USA. Oceania: Australia
12.	*Pantoea ananas* pv. *uredovora* Walcott *et al*., *(=Erwinia ananas* pv. *uredovora =E.urediniolytica =E.uredovora*	(P): *Avena sativa* (jelai, oat), *Secale cereale* (rye) , *Oryza sativa* (padi, paddy)	I	Benih/ biji (seed/ grain), tunas (bud)	Europe: Hungary Africa: Zimbabwe America: USA Oceania: Australia

	=Xanthomonas uredovora), Enterobacteriales : Enterobacteriaceae ; oats rust, rye rust				
13.	*Pantoea stewartii* (Smith) Mergaert *et al*.; *(=Aplanobacter stewartii =Bacillus stewartii =Bacterium stewartii =Erwinia stewartii =Pantoea stewartii* subsp. *stewartii =Phytomonas stewartii =Pseudobacterium stewartii =Pseudomonas stewartii =Xanthomonas stewartii)*; Enterobacteriales : Enterobacteriaceae, bacterial leaf blight of maize, bacterial wilt of maize, maize bacteriosis, Stewart's wilt	(P): *Zea mays* (jagung, corn, maize), *Zea mexicana* (teosinte) (S): *Saccharum officinarum* (tebu, sugarcane), *Sorghum bicolor* (sorgum, sorghum), *Triticum aestivum* (gandum, wheat), *Vigna radiata* (kacang hijau, mungbean), *Cucumis sativus* (mentimun, cucumber), *Agrotis alba, Avena sativa,, Coix lacryma, Echinochloa americana, Trapsacum* spp., *Panicum* spp.,	I	benih/biji (seed/grain), bunga (flower), daun (leaf), akar (root), batang (stem) Vector: *Agrotis manchus, Chaetocnema denticulata, C.pulicaris, Diabrotica nigricornis, D. undecimpuctata, D. versifera, Hylemya cilicrura*	Europe: Austria Asia: China, India, Malaysia, Thailand, Vietnam America: Bolivia, Brazil, Canada, Costa Rica, Guyana, Mexico, Peru, Puerto Rico, USA

14.	*Pectobacterium rhapontici* (Millard 1924) Patel & Kulkarni 1951 (=*Erwinia rhapontici = Erwinia carotovora var. rhapontici =Aplanobacter rhapontici = Bacillus rhapontici = Bacterium rhapontici = Phytomonas rhapontici = Pseudobacterium rhapontici = Xanthomonas rhapontici*); Enterobacteriales; Enterobacteriaceae; rhubarb crown rot; wheat pink seed; cereal pink grain	(P) : *Rheum hybridum* (rhubarb), *Triticum* (wheat), *Triticum aestivum* (wheat) (S) : *Allium cepa* (bawang bombay, onion), *Allium sativum* (bawang putih, garlic), *Beta vulgaris var. saccharifera* (sugarbeet), Cichorium (chicory), *Cyclamen persicum* (cyclamens), Dianthus (carnation), Hippeastrum , *Hyacinthus orientalis* (hyacinth), *Lycopersicon esculentum* (tomat, tomato), Morus (mulberrytree), *Morus alba* (mora), *Pisum sativum* (pea), Pyrus (pears), *Armoracia rusticana* (horseradish), *Amaranthus hybridus* (smooth pigweed)	I	Benih (seed)	Europe : Belgium, Czech Republic and Slovakia , France, Italy (Sardinia), Lithuania, Netherlands, Norway, Poland, Ukraine, UK (England, Wales) Asia : Iran, Israel, Jepan, Korea, Malaysia America : North America (Canada), Mexico, USA Oceania : Australia

15.	*Pseudomonas rubrisubalbicans* North. & Smith; *(=Bacterium rubrisubalbicans =Herbaspirillum rubrisubalbicans =Phytomonas rubrisubalbicans* *=Xanthomonas rubrisubalbicans)*;Pseudomonadales: Pseudomonadaceae; mottled stripe, bacterial leaf stripe	(P): *Saccharum officinarum* (tebu, sugarcane), *Sorghum bicolor* (sorgum, sorghum), *Zea mays* (jagung, corn, maize)	I	daun (leaf), batang (stem)	Asia: Sri Lanka Africa: Angola, Benin, Central Africa, Ivory Coast, Madagascar, Malawi, Mauritius, Nigeria, Réunion, South Africa, Tanzania America: Barbados, Brazil, Colombia, Guadeloupe, Jamaica, Martinique, Nicaragua, Peru, Puerto Rico, USA, Venezuela Oceania: Australia, Fiji, New Zealand
16.	*Pseudomonas savastanoi* pv. *phaseolicola* (Burkholder) Gardan *et al.(= Pseudomonas syringae* pv. *phaseolicola = Pseudomonas phaseolicola = Pseudomonas medicaginis = Pseudomonas medicaginis* var. *phaseolicola =*	(P) *: Phaseolus acutifolius* (tepary bean), *Phaseolus coccineus* (runner bean), *Phaseolus lunatus* (lima bean), *Phaseolus vulgaris (*common bean)	I	Buah (Fruits/pods) , growing points, daun (leaves), benih (seeds),	Europe : Austria, Belgium, Bulgaria, Czech Republic and Slovakia , Denmark, Frence, Germany, Greece, Serbia, Slovenia, Croatia,

	Bacterium medicaginis var. *phaseolicola = Phytomonas medicaginis* var. *phaseolicola = Phytomonas puerariae = Pseudomonas medicaginis* f.sp. *phaseolicola = Xanthomonas medicaginis* var. *phaseolicola = Pseudomonas vignae = Phytomonas vignae = Bacterium puerariae = Xanthomonas phaseolicola = Pseudomonas cerasi (=cerasus) = Pseudomonas holci ;* Pseudomonadales; Pseudomonadaceae; halo blight (of beans); grease spot (of beans)	(S) : *Cajanus cajan* (pigeon pea), Centrosema, Desmodium (tick clovers), *Glycine max* (kedelai, soyabean), *Lablab purpureus* (hyacinth bean), *Pisum sativum* (pea), *Pueraria* var. *lobata* (kudzu), *Vigna angularis* (adzuki bean), *Vigna radiata* (mung bean), *Vigna unguiculata* (cowpea)		batang (stems) and seluruh bagian tanaman (whole plant)	Bosnia and Herzegovina, Montenegro, Macedonia, Hungary, Ireland,Italy , Jersey, Lithuaina, Netherlands, Poland, Romania, Russia (Russia (Europe)), Spain, Sweeden, Switzerland, UK (Channel Islands) Asia : Georgia, India, Israel, Japan, Pakistan, Saudi Arabia, Turki, Yaman Africa : Burundi, DR Congo, Egypt, Ethiopia,Kenya, Lesotho, Madagascar, Malawi, Mauritius (Rodriguez Island), Morocco, Mozambique, South Africa, Rwanda, Swaziland,Tanzania, Uganda,Zambia,

					Zimbabwe. America : Central America & Caribbiean (Barbadis,Costa Rica, Guadeloupe, Dominican Republic, Martinique, Saint Vincent and the Grenadines), North America (Canada), Mexico, USA, Hawaii, Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana, Suriname, Venezuela Oceania : Australia, Fiji, New Zealand
17.	*Pseudomonas syringae* pv. *coriandricola* Toben & Rudolph; Pseudomonadales : Pseudomonadaceae; leaf blight, bacterial blight	(P): *Coriandrum sativum* (ketumbar, coriander)	I	benih (seed), bagian tanaman lain (other part of plant)	Europe: Germany Oceania: Australia

18.	*Pseudomonas syringae* pv. *garcae* Teix. & Pinh.; (= *P. garcae*); Pseudomonadales : Pseudomonadaceae;bacterial leaf spot, bacterial blight of coffee	(P): *Coffea* spp. (kopi, coffee). (S): *Gossypium barbadens* (kapas, cotton), *Glycine max* (kedelai, soybean), *Lycopersicum esculentum* (tomat, tomato), *Solanum tuberosum* (kentang, potato), *Vigna* spp. (kacang panjang, cowpea), *Hibiscus esculentus*, *Physalis florianda*	I	planlet, bagian tanaman (part of plant)	Africa: Kenya America: Brazil
19.	*Pseudomonas syringae* pv. *maculicola* (McCulloch) Young *et al.* ; *(=Bacterium maccullochianum = B.maculicola =B.maculicola* var. *japonicum = Phytomonas maculicola =Pseudomonas maculicola)*; Pseudomonadales: Pseudomonadaceae; pepper spot, leaf spot	(P): *Brassica oleracea* var. *botrytis* subvar. *cymosa* (broccoli), *Brassica oleracea capitata* (kubis, cabbage), *Brassica rapa gongylodes* (kohlrabi), *Brassica rapa* sub sp. *rapa* (turnip, turnip), *Brassica juncea* var. *juncea*, *Brassica nigra*, *Brassica oleracea*	I	bagian tanaman (part of plant)	Europe: Bulgaria, Czech, Slovakia, Denmark, Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Germany, Italy, Netherlands, Norway, Russia, Rusia, Ukraine, UK, Serbia,

		var. *viridis*, *Brassica oleracea* var. *gemmifera*, *Brassica rapa* sub sp. *pekinensis*, *Raphanus sativus*			Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: China, Georgia (Republic), Japan, Korea DPR (North Korea), Korea Republic of (South Korea), Southeast Asia, Turkey Africa: Algeria, Algeria, Mauritius, Mozambique, South Africa, Zimbabwe America: Argentina, Bermuda, Brazil, Karibia, Cuba, El Salvador, North America, Puerto Rico, Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana, USA, Canada

					Oceania: Australia, Palau, Micronesia, Fiji, New Zealand, Papua New Guinea
20.	*Pseudomonas syringae* pv. *morsprunorum* (Wormald) Young et al. (=*Pseudomonas mors-prunorum = Agrobacterium mors-prunorum = Bacterium mors-prunorum = Phytomonas mors-prunorum*; Pseudomonadales; Pseudomonadaceae; bacterial canker of stone fruits; leaf spot of stone fruits; shoot wilt of stone fruits; gummosis; blossom blast	(P) *: Prunus avium* (sweet cherry), *Prunus domestica* (plum), *Prunus salicina* (Japanese plum) (S) : *Prunus cerasus* (sour cherry)	I	Buah (Fruits/pods, inflorescence, daun (leaves) and batang (stems).	Eroupe : Czech Republic, Czech Republic and Slovakia , Denmark, Finland, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia , Frence, Germany,Greece, Ireland, Italy,Netherlands, Norway, Poland, Romania, Sweden, Serbia and Montenegro, Ukraine, UK, Switzerland

					Asia : India, Japan, Libanon Africa : South Africa America : North America (Canada), USA Oceania : Australia
21.	*Pseudomonas syringae* pv. *pisi (=Bacterium pisi = Chlorobacter pisi =Phytomonas pisi =Pseudomonas pisi)*; Pseudomonadales: Pseudomonadaceae; bacterial pea blight	(P): *Pisum sativum* (kapri, sweet pea), *Lathyrus*, *Pisum sativum* var. *arvense* (S): *Vicia benghalensis*, *Lablab purpureus*, *Lathyrus latifolius*, *Lathyrus odoratus*, Vicia spp., *Cynodon dactylon*, *Galium aparine*, *Reseda lutea*, *Digitaria sanguinalis*, *Lepidium campestre.*	I	planlet, kulit kayu (bark), buah (fruit), bunga (flower), daun (leaf), tanaman (plant), batang (stem), benih (seed).	Europe: Bulgaria, Croatia, Czech, Denmark, France, Germany, Greece, Hungary, Italy, Caldarera, Sicily, Lithuania, Moldova, Netherlands, Portugal, Romania, Russia, Southern Rusia, Slovakia, Switzerland, Ukraine, UK (England, Wales), Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia

					Asia: Armenia, Georgia, India, Israel, Japan, Kazakhstan, Kyrgyzstan, Libanon, Nepal, Pakistan, Syria Africa: Kenya, Malawi, Morocco, South Africa, Tanzania, Zimbabwe America: Argentina, Bermuda, Brazil, Canada, Colombia, Costa Rica, Ecuador, Mexico, USA, Uruguay Oceania: Australia, New Caledonia, New Zealand
22.	*Pseudomonas syringae* pv. *theae* (Hori) Young *et al.* ; *(=Bacillus theae =Erwinia theae =Innominatus theae =Pseudomonas theae);* Pseudomonadales : Pseudomonadaceae; shoot blight, bacterial batang (stem) blight, bacterial tea blight, red blight, tea bacterial leaf spot	(P): *Camellia sinensis* (teh, tea)	I	bagian tanaman (part of plant)	Asia: Japan

23.	*Pseudomonas syringae* pv. *syringae* (van Hall) Young *et al*.; *(=Bacillus cerasi =B.gummis =B.matthiolae =B.spongiosus =Bacterium cerasi =B.cerasi* var. *prunicola =B.citrarefaciens =B.citriputeale =B.gummis =B.hibisci =B.holci = B.nectalaphilum =B.prunicola =B.rimaefaciens =B.spongiosum =B.syringae =B.trifoliorum =B.utiformica =B.vignae =B.vignae* var. *leguminophilum =B.viridifaciens =Chlorobacter syringae =Phytomonas cerasi =P.cerasi* var. *prunicola =P.citrarefaciens =P.citriputealis =P.hibisci =P.holci =P.matthiolae =P.nectalaphila =P.prunicola =P.rimaefaciens =P.spongiosa =P.syringae =P.trifoliorum =P.utiformica =P.vignae =P.vignae* var. *leguminophila =P.viridifaciens =Pseudomonas cerasi =Pseudomonas cerasi* f.sp. *pyri =P.cerasi* var. *prunicola*	(P): *Malus domesticum (*apel, apple*), Prunus* spp., *Vigna* spp. (buncis, cowpea), *Syringa vulgaris*, *Sorghum bicolor* (sorgum, sorghum), *Aconitum* spp., *Abelmoschus moschatus* (okra, lady's finger), *Vernicia fordii*, *Allium* spp., *Alnus glutinosa*, *Arbutus spp.*, *Aralia* spp., *Actinidia deliciosa* (kiwi, kiwi fruit), *Atriplex hortensis*, *Beta vulgaris* var *saccharifera* (bit gula, sugar beet), *Betula pendula*, *Brassica rapa* subsp. *pekinensis* (pe-tsai), *Carthamus tinctorius*, *Centaurea maculosa*, *Erysimum cheiri*, *Chrysanthemum indicum*, *Citrus* spp.(jeruk, orange), *Cinnamomum camphora*,	I	Benih (Seed), semua bagian tanaman (all parts of plant), media tanam (planting medium)	Europe: Belarus, Belgium, Bulgaria, Cyprus, Czech, Slovakia, Denmark, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Hungary, Ireland, Italy, Moldova, Netherlands, Poland, Portugal, Romania, Spain, Sweden, Switzerland, Ukraine, UK Asia: Azerbaijan, China, Georgia, India, Iran, Israel, Japan, Kazakhstan, Korea, Kyrgyzstan, Libanon, Sri Lanka, Thailand, Turkey, Uzbekistan, Africa: Algeria, Egypt, Ethiopia, Kenya,

	=P.cerasi var. *pyri* *=P.citrarefaciens =P. citriputealis* *=P.hibisci =P.oryzicola* *=P.prunicola=P.spongiosa* *=P.syringae =P.syringae* f.sp. *prunicola* (Wormald) *=P.trifoliorum =P.utiformica* *=P.vignae =P.vignae* var. *leguminophila =P.viridifaciens* *=P.syringae* pv. *japonica)*; Pseudomonadales: Pseudomonadaceae; bacterial canker or blast (stone and pome fruits), bacterial brown spot (beans), apoplexy of apricots, bacterial black spot, bacterial eye spot, bacterial leaf spot, bacterial sheath rot, blast of *Citrus*, blister spot of apple, peach-tree short-life, pear blossom blight	*Calystegia sepium*, *Cyamopsis tetragonoloba*, *Coffea* spp. (kopi, coffee), *Capsicum annuum* (paprika, bell-pepper), *Cucumis sativus* (mentimun, cucumber), *Cucurbita*, *Cydonia oblonga*, *Cyphomandra betacea*, *Dahlia pinnata*, *Daphne odora*, *Desmodium* spp., *Diospyros kaki* (kesemek, persimmon), *Echinochloa crusgalli*, *Fortunella* spp., *Forsythia intermedia*, *Fragaria vesca*, *Glycine max* (kedelai, soybean), *Hibiscus* spp., *Hordeum vulgare* (barli, barley), *Impatiens balsamina*, *Juglans regia*, *Lactuca* sativa, *Lablab purpureus*, *Ligustrum ovalifolium*, *Lycopersicum esculentum* (tomat, tomato), *Magnolia*			Lesotho, Malawi, Morocco, South Africa, Tanzania, Tunisia, Uganda, Zimbabwe, America: Argentina, Barbados, Brazil, Chile, El Salvador, Guatemala, Honduras, Mexico, Panama, Puerto Rico, USA, Uruguay Oceania: Australia, New Zealand

		spp., *Medicago sativa*, *Mangifera indica* (mangga, mango), *Matthiola incana*, *Musa paradisiaca* (pisang kepok, plantain), *Mucuna deeringiana*, *Nerium oleander*, *Nicotiana tabacum* (tembakau, tobacco), *Oryza sativa* (padi, paddy), *Panicum* spp., *Passiflora quadrangularis* (markisa, passion- fruit, granadilla), *Persea americana* (alpokat, avocado), *Pennisetum* spp., *Philadelphus*, *Vigna angularis*, *Phaseolus* spp., *Pisum sativum* (kapri, sweet pea), *Piper nigrum* (lada, black pepper), *Pinus radiata*, *Populus* spp., *Quercus* spp., *Rhododendron*, *Rosa* spp. (mawar, rose), *Rubus*			

		ursinus, *Salix* spp., *Sorghum bicolor* (sorgum, sorghum), *Sorghum* spp., *Trifolium* spp., *Trigonella foenum-graecum*, *Triticum aestivum* (gandum, wheat), *Vaccinium* sp., *Vicia faba*, *Vicia villosa*, *Vigna cylindrica*, *Vitis vinifera* (anggur, grapevine), *Zea mays* (jagung, corn, maize).			
24.	*Pseudomonas viridiflava* (Burkholder); (= *Bacterium viridiflavum = Chlorobacter viridiflavus = Phytomonas viridiflava);* Pseudomonadales; Pseudomonadaceae; bacterial leaf blight of tomato; Hydrangea bud blight; bacterial leaf necrosis of basil; bacterial rot of lettuce; bacterial rot of Chinese cabbage; bacterial soft rot of tomato; bacterial blossom blight of kiwi	(P): *Actinidia deliciosa* (kiwi, kiwifruit), *Allium cepa* (bawang bombay, onion), *Anethum graveolens* (dill), *Apium graveolens* (seledri, celery), *Apium graveolens* var. *dulce* (celery), *Brassica* spp. , *Capsicum annuum* (bell pepper), *Cucumis melo* (melon, melon), *Cucumis sativus*	I	benih (seed), semua bagian tanaman (all parts of plant), media tanam (planting medium)	Europe: Belgium, Bulgaria, Czech, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Hungary, Italy, Macedonia, Netherlands, Poland, Portugal, Serbia-Montenegro, Slovakia,

		(ketimun, cucumber), *Cucurbita maxima* (giant pumpkin), *Hydrang*ea (hydrangeas), *Lycopersicon esculentum* (tomat, tomato) (S): Actinidia chinensis (Chinese gooseberry), *Allium fistulosum* (Welsh onion), *Brassica oleracea* var. *botrytis* (cauliflower), *Brassica oleracea* var. *capitata* (cabbage), *Brassica oleracea* var. *gemmifera* (Brussels sprouts), *Calendula officinalis* (Pot marigold), *Capsicum frutescens* (chilli), *Carthamus tinctorius* (safflower), *Chrysanthemum indicum* (krisan, chrysanthemum), *Cichorium endivia* (endives), *Citrus aurantium* (sour orange), *Citrus macrophylla*			Spain, Switzerland, UK. Asia: China , Iran, Japan, Jordan, South Korea, Nepal, Turkey. Africa: Egypt, Kenya, Morocco, Tanzania, Uganda. America: USA, Argentina, Brazil, Venezuela. Oceania: Australia, New Zealand.

		(alemow), *Citrus sinensis* (navel orange), *Cyclamen persicum* (cyclamens), *Eschscholzia californica* (california poppy), *Euphorbia pulcherrima* (poinsettia), *Eutrema wasabi* (Wasabi), *Forsythia suspensa* , *Glycine max* (kedelai, soyabean), *Lablab purpureus* (hyacinth bean), *Lotus corniculatus* (bird's-foot trefoil), *Lupinus angustifolius* (lupin), *Medicago sativa* (lucerne), *Nicotiana rustica* (wild tobacco), *Papaver* (poppies), *Papaver nudicaule* (Iceland poppy), *Passiflora edulis* (passionfruit), *Pastinaca sativa* (parsnip), *Petroselinum crispum* (parsley), *Petunia hybrida*			

		, *Phaseolus coccineus* (runner bean), *Phaseolus lunatus* (lima bean), *Phaseolus vulgaris* (common bean), *Pisum sativum (*pea), *Prunus* armeniaca (aprikot, apricot), *Prunus avium* (sweet cherry), *Pseudopanax* , *Pyrus communis* (European pear), *Rosa* (mawar, roses), *Sorghum bicolor* (sorgum, sorghum), *Sorghum sudanense* (Sudan grass), *Tanacetum coccineum* (common pyrethrum), *Trifolium pratense* (purple clover), *Tropaeolum majus* (common nasturtium), *Vaccinium corymbosum* (blueberry), *Vicia faba* (broad bean), *Vigna angularis* (adzuki bean), *Vigna unguiculata*			

		(cowpea), *Viola* (violet), *Vitis vinifera* (anggur, grapevine), *Zea mays* (jagung, maize), *Zinnia elegans* (zinnia)			
25.	*Rathayibacter tritici* (Hutchinson) Zgurskaya *et al*.; *(=Clavibacter tritici =Corynebacterium michiganense* pv. *tritici =C.tritici =Agrobacterium tritici =Bacterium tritici =Phytomonas tritici =P.tritici =Pseudomonas tritici);* Actynomycetales: Microbacteriaceae; spike blight, tundu disease, yellow ear rot, yellow slime disease, yellow spike	(P) : *Triticum* spp.	I	benih/biji (seed/grain), bagian lain dari tanaman (other part of plant), tanah (soil), media tanam (planting medium) Vector : *Anguina tritici*	Europe: Cyprus Asia: Afghanistan, China, India, Iran, Iraq, Pakistan Africa: Egypt:, Ethiopia, Zambia Oceania: Australia
26.	*Rhizobium vitis* (Ophel & Kerr) Young *et al*. ; *(=Agrobacterium biovar 3 =A.tumefaciens biovar 3 = A. vitis)*; Rhizobiales: Rhizobiaceae; crown gall	(P): *Vitis* spp.	I	daun (leaf), planlet, akar (root), batang (stem), benih (seed), tanah	Europe: France, Greece, Hungary, Spain Asia: Afghanistan, China, Japan, Jordan, Korea

				(soil)	America: Brazil, Canada, USA Oceania: Australia
27.	*Rhodococcus fascians* (Zopt.) Tsunukura; *(=Bacterium fascians =Phytomonas fascians =Pseudobacterium fascians =Rhodococcus rubropertinctus =Corynebacterium fascians;* Actinomycetales: Nocardiaceae; witches' broom syndrome, ornamental cauliflower disease, strawberry cauliflower disease, strawberry fasciation, tobacco leafy gall, leafy gall, fasciation	(P): *Asparagus densiflorus*, *Begonia tuberhybrida*, *Erysimum cheiri*, *Chrysanthemum* spp., *Cucumis melo* (melon), *Dahlia pinnata*, *Dianthus caryophyllus*, *Fragaria vesca* (arbei, strawberry), *Freesia* spp., *Gloriosa* spp., *Lilium* spp., *Lathyrus odoratus*, *Pelargonium zonale*, *Triteleia* spp., *Brassica oleracea botrytis* (bunga kol, cauliflower), *Brodiaea*, *Euphorbia*, *Fragaria*, *Hebe*, *Kalanchoe*, *Pisum sativum* (kapri, sweet pea) (S): *Chamaemelum nobile*, *Antirrhinum majus*, *Beta vulgaris* (bit,	I	daun (leaf), planlet, akar (root), batang (stem), benih/biji (seed/grain), tanah (soil) Vector : *Myzus persicae, M. ascalonicus*	Europe: Belgium, Czech, Denmark, Estonia, France, Germany, Hungary, Italy, Latvia, Netherlands, Norway, Russia, Slovakia, Sweden, Ukraine, UK. Asia: India, Iran Africa: Egypt: America: Canada, Colombia, Mexico, USA Oceania: Australia, New Zealand

		beet root), *Beloperone*, *Brassica* spp., *Tunas (bud)dleia davidii*, *Cichorium intybus*, *Cicer arietinum*, *Consolida ambigua*, *Capsicum annuum* (paprika, bell-pepper), *Casuarina equisetifolia*, *Dianthus barbatus*, *Euphorbia pulcherrima*, *Erysimum allionii*, *Forsythia suspensa*, *Fragaria vesca*, *Gladiolus hybrids*, *Glycine max* (kedelai, soybean), *Gypsophila paniculata*, *Hebe*, *Bakungus*, *Impatiens walleriana*, *Kalanchoe blossfeldiana*, *Lycopersicum esculentum* (tomat, tomato), *Mesembryanthemum*, *Muscari botryoides*, *Nicotiana*, *Petunia hybrida*, *Phaseolus* spp.,			

		Physalis spp., *Pisum sativum* (kapri, sweet pea), *Phlox* spp., *azalea*, *Spinacia oleracea*, *Tagetes* spp., *Tropaeolum majus*, *Triteleia laxa*, Tulip, *Viburnum opulus*, *Vicia faba*			
28.	*Spiroplasma kunkelii* (Whitcomb) Chen *et al.*; Entomoplasmatales: spiroplasmataceae; corn stunt disease, corn stunt spiroplasma, maize stunt spiroplasma, Rio Grande corn stunt	(P): *Zea mays* (jagung, corn, maize)	I	benih (seed), bagian lain dari tanaman (other part of plant) Vector: : *Dalbulus maydis*, *D. eliminatus*, *Exitianus exitiosus*, *Graminella nigrifons*, *Stirellus bicolor*	America: Bolivia, Brazil, El Salvador, Jamaica, Mexico, Peru, USA, Venezuela,

29.	*Streptomyces ipomoeae* (Person & Martin) Waksman & Henrici; *(= Actinomyces ipomoeae)*; Actinomycetales: Streptomycetaceae; Streptomycetes soil rot (pox), soil rot, ground rot, sweet potato soft rot, sweet potato soil rot, sweet potato pox	(P): *Ipomoea batatas* (ubi jalar, sweet potato)	I	umbi (tuber/ corm), planlet, akar (root), tanah (soil), media tanam (planting medium)	Asia: Japan, Vietnam America: USA
30.	*Xanthomonas arboricola* pv. *pruni* (Smith) Vauterin, Hoste, Kersters & Swings (=*Xanthomonas pruni = Bacillus pruni = Bacterium cerasi wraggi = Bacterium pruni = Phytomonas cerasi wraggi = Phytomonas pruni = Pseudomonas cerasi wraggi = Pseudomonas pruni = Xanthomonas campestris* pv. *pruni*; Xanthomonadales; Xanthomonadaceae; bacterial canker of stone fruit; bacterial shot-hole of stone fruit; bacterial spot of stone fruit; bacterial leaf spot of stone fruit; black spot of stone fruit	(P) : *Prunus armeniaca* (apricot), *Prunus domestica* (plum), *Prunus dulcis* (almond), *Prunus persica* (peach), *Prunus salicina* (Japanese plum) (S) : *Prunus avium* (sweet cherry), *Prunus cerasus* (sour cherry), *Prunus japonica* (Japanese bush cherry tree), *Prunus mume* (Japanese apricot tree),Prunus (stone fruit), *Prunus laurocerasus* (cherry laurel)	I	Buah (Fruits/pods) , daun (leaves) and batang (stems).	Europe : Bulgaria, France (France [mainland]), Italy , Moldova, Romania, Russia (Russian Far East, Southern Russia), Slovenia, Ukraine Asia : China, Taiwan, India, Iran, Japan, Korea DPR (North Korea), Korea Republic of (South Korea), Lebanon, Pakistan, Saudi Arabia, Tajikistan

					Africa : South Africa , Zimbabwe America : Central America & Caribbean (Bermuda), North America, Canada , Mexico, USA , Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana Oceania : Australia , New Zealand
31.	*Xanthomonas axonopodis* pv. *Allii* Roumagnac et al.(= Xanthomonas campestris pv. allii)*;* Xanthomonadales: Xanthomonadaceae; leaf blight	(P): Allium (onions, garlic, leek, etc.), *Allium cepa* (bawang bombay, onion), *Allium cepa var. aggregatum* (bawang merah, shallot), *Allium fistulosum* (Welsh onion*), Allium porrum* (leek), *Allium sativum* (bawang putih, garlic), *Allium*	I	Semua bagian tanaman (all parts of plant), media tanam (planting medium)	Asia : Japan Africa : Mauritius, Réunion, South Africa America : Central America & Caribbean (Barbados, Cuba, Saint Kitts and Nevis), USA , Brazil, Venezuela

		schoenoprasum (chives)			
32.	*Xanthomonas axonopodis* pv. *dieffenbachiae* (McCulloch & Pirone Vauterin) *et al*. ; *(=Phytomonas dieffenbachiae =Bacterium dieffenbachiae =Xanthomonas dieffenbachiae =X.campestris* pv. *dieffenbachiae =X.campestris* pv. *syngonii);* Xanthomonadales: Xanthomonadaceae; anthurium blight, bacterial blight of aroids	(P): *Anthurium andreanum*, *Philodendron hederaceum, Philodendron hederaceum* var. *oxycardium* (S): *Aglaonema commutatum, Anthurium* spp., *Caladium bicolor* hybrids, *Dieffenbachia maculata*, *Epipremnum pinnatum*, Araceae, *Philodendron selloum, Syngonium podophyllum*, *Xanthosoma caracu, X. sagittifolium*	I	umbi (tuber/corm), rhizom, daun (leaf), batang (stem), media tanam (planting medium)	Europe: Italy, Netherland Asia: China, Philippines Africa: Réunion, South Africa America: Barbados, Bermuda, Brazil, Canada, Costa Rica, Dominica, Guadeloupe, Jamaica, Martinique, Puerto Rico, St. Vincent and the Grenadines, Trinidad and Tobago, USA, Venezuela, Oceania: Australia, France Polynesia
33.	*Xanthomonas axonopodis* pv. *poinsettiicola* (Patel, Bhatt & Kulkarni) Vauterin *et al*. ; *(=Xanthomonas campestris* pv. *poinsettiicola =X.poinsetticola =X.poinsettiicola =X.pulcherrimae*	(P): *Codiaeum variegatum*, *Euphorbia* spp., *Manihot esculenta* (ubi kayu, cassava)	I	tunas (bud), bagian lain dari tanaman (other part of plant)	Europe : Germany, Italy Asia: Cocos Islands, Philippines, India, China America: USA, Venezulea

	=*X.ricini* f.sp. *poinsettiicola* =*X.rinici* f.sp. poinsetticola); Xanthomonadales: Xanthomonadaceae				Oceania: Australia , New Zealand
34.	*Xanthomonas axonopodis* pv. *vasculorum* (Cobb) Vauterin et al. ; *(= Xanthomonas campestris* pv. *vasculorum =Bacillus vasculorum =Bacterium vasculorum =Phytomonas vasculara =P.vasculorum =Pseudomonas vasculorum =Xanthomonas vasculorum)* ; Xanthomonadales: Xanthomonadaceae; sugarcane gumming disease, Gummosis	(P): *Saccharum officinarum* (tebu, sugarcane) (S): *Zea mays* (jagung, corn, maize), *Roystonea regia*, *Dictyosperma album*, *Areca catechu (pinang, betelnut palm)*, bambu, *Cocos nucifera* (kelapa, coconut), *Coix lacryma-jobi*, *Panicum* spp., *Pennisetum purpureum*, *Sorghum* spp.	I	daun (leaf), benih (seed), planlet, batang (stem)	Europe: Portugal Africa: Ghana, Madagascar, Malawi, Mauritius, Mozambique, Réunion, South Africa, Swaziland, Zimbabwe America: Antigua and Barbuda, Argentina, Barbados, Belize, Brazil, Colombia, Cuba, Dominica, Dominican, Guyana France, Guadeloupe, Jamaica, Martinique, Mexico, Panama, Puerto Rico, St. Kitts & Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago Oceania: Australia, Fiji, Papua New Guinea

35.	*Xanthomonas axonopodis* pv. *vitians* (Brown) Vauterin *et al*. ; *(=Bacterium lactuca =B.vitians = Phytomonas lactucae =P.lactucae-scariolae =P.vitians =Pseudomonas lactucae =P.lactucae-scariolae =P.vitians =Xanthomonas campestris* pv. *vitians =X.lactucae =X.lactucae-scariolae =X.vitians)*; Xanthomonadales: Xanthomonadaceae; leafspot, lettuce bacterial spot	(P): *Lactuca sativa* (lettuce), Syngonium , *Syngonium podophyllum* (Arrowhead vine)	I	bagian tanaman (part of plant)	Europe: Germany, Italy, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia Asia: Japan Africa: South Africa, Zimbabwe America: Brazil, France West Indies, USA, Hawaii, Venezuela Oceania: Australia
36.	*Xanthomonas campestris* pv. *armoraciae* (McCulloch) Dye; *(=Bacterium campestre* var. *armoraciae = Phytomonas campestris* var. *armoraciae = Pseudomonas campestris* var. *armoraciae = Xanthomonas*	(P): *Armoracia rusticana* (horseradish), *Brassica oleracea* var. *botrytis* (cauliflower), *Brassica oleracea* var. *gemmifera* (Brussels sprouts), *Brassica oleracea* var.	I	bagian tanaman (part of plant)	Europe : Ukraine Asia: China, India, Japan, Turkey Africa: Zimbabwe America: USA , Brazil Oceania : Austalia

	armoraciae); Xanthomonadales: Xanthomonadaceae; Xanthomonas leaf spot	*italica* (broccoli), Iberis (candytuft)			
37.	*Xanthomonas cassavae* (ex Wiehe & Dows.) Vauterin *et al*.; *(=Xanthomonas campestris* pv. *cassavae =X.ricini* f.sp. *cassavae)*; Xanthomonadales: Xanthomonadaceae; cassava leaf spot, cassava bacterial necrosis	(P): *Manihot esculenta* (ubi kayu, cassava)	I	daun (leaf), batang (stem)	Africa: Burundi, DR Congo, Kenya, Malawi, Rwanda, Tanzania, Uganda America: Colombia
38.	*Xanthomonas hortorum* pv. *pelargonii* (Brown) Vauterin *et al*. ; *(=Bacterium geranii =B.pelargonii =Phytomonas geranii =P.pelargonii =Pseudomonas geranii =P.pelargonii =Xanthomonas campestris* pv. *pelargonii =X.geranii =X.pelargonii);* Xanthomonadales: Xanthomonadaceae; bacterial leaf spot	(P): *Geranium sanguineum* (bloody cranesbill), Pelargonium (pelargoniums), *Pelargonium graveolens* (Rose geranium)	I	tunas (bud), bagian tanaman (part of plant), Vector: : Cicadellidae, Cercopidae	Europe: Austria, Belgium, Denmark, France, Germany, Greece, Hungary, Italy, Netherlands, Portugal, Romania, Russia, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia, Serbia, Slovenia,

					Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Sweden, Switzerland, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: India, Iran, Japan Africa: Egypt, Morocco, South Africa America: Argentina, Brazil, Canada , USA Oceania: Australia
39.	*Xanthomonas vasicola* pv. *holcicola* (Elliot); (= *Xanthomonas holcicola =Bacterium holcicola =Phytomonas holcicola = Pseudomonas holcicola = Xanthomonas campestris pv. holcicola*); Xanthomonadales: Xanthomonadaceae; streaky spot	(P): *Panicum miliaceum* (millet), *Setaria italica* (foxtail millet), *Sorghum bicolor* (sorghum), *Sorghum halepense* (Johnson grass), *Sorghum sudanense* (Sudan grass) (S): *Sorghum almum* (Columbusgrass), *Zea mays* (maize)	I	benih (seed), semua bagian tanaman (all part of plant)	Europe: France, Romania, Russia, Ukraine. Asia: Bangladesh, India, Iran, Israel, Kazakhstan, Pakistan, Philippines, Thailand. Africa: Ivory Coast,

	of sorghum and Sudan grass; melanosis of Panicum millet; bacterial streak of millet				Gambia, Madagascar, Niger, South Africa, Togo. America: Mexico, USA, Argentina, Venezuela. Oceania: Australia, New Zealand.
40.	*Xylella fastidiosa* Wells *et al*.; Xanthomonadales: Xanthomonadaceae; Pierce's disease of grapevines, alfalfa dwarf, almond leaf scorch, citrus variegated chlorosis, dwarf lucerne, leaf scorch, phony disease of peach, plum leaf scald	(P): *Vitis vinifera* (anggur, grapevine), *Prunus* spp., *Acer saccharum*, *Citrus* spp., *Liquidambar styraciflua*, *Medicago sativa*, *Morus alba*, *Platanus occidentalis*, *Pyrus communis (*pir, pear*)*, *Ulmus* (S): *Brachiaria* spp., *Cynodon* spp., *Cyperus* spp., *Digitaria* spp., *Echinochloa frumentacea*, *Fragaria vesca* (arbei, strawberry), *Lolium* spp., *Medicago* spp., *Paspalum* spp., *Rubus* spp.,	I	semua bagian tanaman (all parts of plant) Vector: *Cicadella viridis Carneocephala fulgida*, *Draeculacephala minerva*, *Graphocephala atropunctata*, *(Philaenus*	Asia: China, India America: Argentina, Brazil, Canada, Costa Rica, Mexico, Paraguay, USA, Venezuela

		Sambucus spp., *Salix* spp., *Taraxacum officinale*, *Trifolium* spp., *Vinca minor*, *Coffea* spp. (kopi, coffee)		*spumarius)*	
41.	*Xylophilus ampelinus* (Panag.) Willems *et al*. ; (= *Xanthomonas ampelina);* Pseudomonadales: Pseudomonadaceae; canker of grapevine, bacterial blight of grapevine, black arm	*Vitis vinifera* (anggur, grapevine)	I	tunas (bud), suluran (stolon)	Europe: France, Greece, Italy, Moldova, Portugal, Spain, Switzerland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Africa: South Africa

FITOPLASMA

NO.	NAMA ILMIAH/SINONIM/FAMILI/ NAMA UMUM/ SCIENTIFIC NAME/SYNONIM/TAXON/COMMON NAME	INANG/ HOST	GOL / GROUP	MEDIA PEMBAWA / PATHWAY	DAERAH SEBAR/ GEOGRAPHICAL DISTRIBUTION
1	*Apple chat fruit;* Sin: Apple chat fruit MLO	(P): *Malus domesticum (*apel, apple*)*, *Malus* spp.	I	mata tunas (eye bud), batang (stem), tanaman (plant), akar (root)	Europe: Belgium, Bulgaria, Denmark, Germany, Gibraltar, Hungary, Ireland, Italy, Moldova, Netherlands, Norway, Sweden, Switzerland, UK (England and Wales, Scotland) Africa: South Africa America : USA Ocean : New Zealand

2	*Apple rubbery wood phytoplasma*; Acholeplasmatales, Acholeplasmataceae; apple rubbery wood; quince chlorotic blotch; pear rubbery wood disease	(P) : *Malus domestica* (apel, apple) (S) : *Cydonia oblonga* (quince), *Malus baccata* (siberian crab apple), *Prunus avium* (sweet cherry), *Prunus cerasus* (sour cherry), *Pyrus communis* (European pear)	I	Organ perbanyakan vegetative, bibit (seedling).	Europe : Austria, Czech Republic, Denmark, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Italy (Italy [mainland]), Moldova, Netherlands, Norway, Poland, Romania, Serbia and Montenegro, Sweden, Switzerland, Ukraine, UK Asia :India Africa :South Africa America : Canada , Mexico, USA, Brazil Oceania : New Zealand, Australia
3	*Aster yellows phytoplasma group*; Acholeplasmatales; Acholeplasmataceae; tomato big bud; western aster yellows;	(P) : *Allium cepa* (onion), Alstroemeria (Inca lily), *Anemone coronaria* (Poppy anemone), *Apium*	I	Buah (fruits/pods), titik tumbuh (growing	Europe : Europe (as a whole),Belgium, Czech Republic, France, Germany, Greece, Italy,

	periwinkle little leaf; eastern aster yellows; purple coneflower yellows; multiplier disease	*graveolens* (celery), *Brassica napus var. napus* (rape), *Brassica oleracea var. capitata* (cabbage), *Brassica oleracea var. italica* (broccoli), *Brassica rapa subsp. rapa* (turnip), *Callistephus chinensis* (China aster), *Chrysanthemum coronarium* (garland chrysanthemum), *Chrysanthemum frutescens* (marguerite), *Daucus carota* (carrot), *Fragaria ananassa* (strawberry), *Gladiolus hybrids* (sword lily), *Hydrangea macrophylla* (French hydrangea), *Lactuca sativa* (lettuce), *Paulownia tomentosa* (paulownia), *Primula* sp. (primrose), *Ranunculus asiaticus* (garden		points), inflorescence, daun (leaves), akar (roots), batang (stems) and keseluruhan bagian tanaman (whole plant).	Portugal, Russia, Spain, UK Asia : China (Taiwan), India, Israel, Japan, Lebanon, Malaysia, Thailand Africa : South Africa America : Canada , Mexico,USA , Brazil, Peru Oceania : Australia

		crowfoot), *Spinacia oleracea* (spinach), *Tagetes patula* (French marigold), *Trifolium repens* (white clover), *Zea mays* (maize) (S) : *Catharanthus roseus* (Pink periwinkle), *Celtis australis* (European nettle wood), *Cornus racemosa* (gray dogwood), *Cryptotaenia canadensis* (honewort), *Cucurbita pepo* (ornamental gourd), *Cyclamen persicum* (cyclamens), *Delphinium hybrids* (florist's larkspur), *Echinacea purpurea* (purple coneflower), *Eupatorium capillifolium* (Dog fennel), *Euphorbia pulcherrima* (poinsettia), *Lotus corniculatus* (bird's-foot trefoil), *Lycopersicon esculentum*			

		(tomato), *Morus bombycis* (Japanese mulberry), *Myrtus communis* (myrtle), *Olea europaea* subsp. *europaea* (olive), *Opuntia* sp. (pricklypear), *Petroselinum crispum* (parsley), Populus (poplars), *Populus nigra* (black poplar), *Prunus armeniaca* (apricot), *Prunus persica* var. *nucipersica* (nectarine), *Prunus salicina* (Japanese plum), *Santalum album* (Indian sandalwood), *Solanum melongena* (aubergine), *Solanum tuberosum* (potato), Solidago (Goldenrod), *Spiraea tomentosa* (Hardhack), *Trifolium pratense* (purple clover), Vaccinium (blueberries),			

		Vitis vinifera (grapevine), *Ambrosia artemisiifolia* (common ragweed), *Calendula officinalis* (Pot marigold), *Conyza canadensis* (Canadian fleabane), *Lepidium draba* (hoary cress), Malva (mallow), *Papaver rhoeas* (common poppy), *Portulaca oleracea* (purslane), *Raphanus raphanistrum* (wild radish), *Stellaria media* (common chickweed)			
4	*Phytoplasma; Acholeplasmatales: Acholeplasmataceae; grapevein flavescence doree phytoplasma*	(P): *Vitis vinifera* (anggur, grapevine) (S): *Chrysanthemum* spp., *Xleia faba, Vince rosea*.	I	tunas (bud), suluran (stolon), bagian vegetatif lainnya (other vegetative part) Vector: Scaphoideus titanus	Europe: Croatia, France, Germany, Italy, Slovenia, Spain

5	*Phytoplasma; Acholeplasmatales: Acholeplasmataceae; apple proliferation*	(P): *Malus domesticum* (apel, apple) (S): *Vitis vinifera* (anggur, grapevine), *Catharanthus roseus*, *Corylus avellana*, *Pyrus communis* (pir, pear)	I	tunas (bud), suluran (stolon), bagian vegetatif lainnya (other vegetative part) Vector : *Philaenus spumarius*, *Aphrophora alni*, *Lepyronia coleoptrata*, *Arhianus interstitialis*, *Fiebierella florii*, *Cacopsilla costalis*, *C. Mali*	Europe: Austria, Bulgaria, Croatia, Cyprus, Czech, Denmark, France, Germany, Greece, Hungary, Italy, Moldova, Netherlands, Norway, Poland, Romania, Slovakia, Slovenia, Spain, Switzerland, Ukraine, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia. Asia: Turkey.

6	*Phytoplasma; Acholeplasmatales: Acholeplasmataceae; lethal yellowing, Cape St Paul disease, Cape Three Point disease, keincope, kribi*	(P): *Cocos nucifera* (kelapa, coconut), *Elaeis guineensis* (kelapa sawit, oilpalm), and other Palmae (Arenga engleri, *Borassus flabellifer*, *Caryota mitis*, *Howea forsteriana*, *Hyophorbe verschaffeltii*, *Phoenix canariensis*, *P. dactylifera, P. reclinata, P. sylvestris*, *Chrysalidocarpus cabadae*, *Corypha utan*, *Dictyosperma album*, *Latania spp.*, *Livistona chinensis*, *L. rotundifolia*, *Trachycarpus fortunei*, *Veitchia macandielsii*, *Veitchia merrillii*, *Panandus utilis)*	I	benih (seed), bibit (seedling) Vector: : Myndus crudus, Cicadelloidea & Fulgoroidea	Africa: Benin, Cameroon, Ghana, Kenya, Mozambique, Nigeria, Tanzania, Togo Asia: India America: Belize, Cayman Islands, Cuba, Dominica, Haiti, Honduras, Jamaica, Mexico, USA Oceania: Papua New Guinea
7	*Phytoplasma; Acholeplasmatales: Acholeplasmataceae; sugarcane white leaf phytoplasma (SCWLD) = white leaf disease =India albino*	(P): *Saccharum officinarum* (tebu, sugarcane). (S): *Saccharum*	I	stek (cutting), tunas bud), bagian lain	Asia: Bangladesh, Taiwan, India, Iran, Japan, , Myanmar, Nepal, Pakistan, Sri

		spontaneum, Cynodon dactylon, Brachiaria subquadripara, Dactyloctenium egyptium, Chloris barbata, Sporobolus fertilis.		dari tanaman (other part of plant) Vector: : *Matsumuratettix hiroglyphicus*	Lanka, Thailand Africa: Sudan
8	*Phytoplasma, Acholeplasmatales : Acholeplasmataceae; ramu stunt , sugarcane ramu stunt disease*	(P): *Saccharum officinarum* (tebu, sugarcane)	I	stek (cutting), mata tunas (eye-bud), batang (stem) Vector: : *Eumetopina flavipes*	Oceania: Papua New Guinea:
9	*Phytoplasma; Acholeplasmatales: Acholeplasmataceae; sugarcane grassy shoot and (SCGSD) =grassy shoot disease = sugarcane grassy = stunt phytoplasma = grassy shoot = gassy stunt*	(P): *Saccharum officinarum* (tebu, sugarcane) (S): *Sorghum bicolor* (sorgum, sorghum), *Pennisetum purpureum*,	I	stek (cutting), mata tunas (eye-bud), batang (stem)	Asia: Bangladesh, Taiwan, India, Iran, Japan, , Myanmar, Nepal, Pakistan, Sri Lanka,Thailand Africa: Sudan

	phytoplasma	*Brachiaria mutica*, *Cynodon dactylon*, *Imperata arundinacea*		Vector: Melanaphis sacchari f.sp indosacchari	
10	Strawberry lethal decline phytoplasma (SLD) (Schwartze et al.); Acholeplasmatales: Acholeplasmataceae; northwest disease	(P): *Fragaria* sp.(strawberry), *Fragaria ananassa* (strawberry), *Fragaria chiloensis* (Chilean strawberry), *Fragaria vesca* (wild strawberry)	I	daun (leaf), batang (stem), akar (root), bibit tanaman (seedling)	America : Canada , USA

V. VIRUS / VIRAL

NO.	NAMA ILMIAH/ NAMA UMUM/SINONIM/ SCIENTIFIC NAME/COMMON NAME/SYNONIM	INANG/ HOST	GOL / GROUP	MEDIA PEMBAWA / PATHWAY	DAERAH SEBAR/ GEOGRAPHICAL DISTRIBUTION
1.	African cassava mosaic bigeminivirus (ACMV) Sin: African cassava mosaic virus, Indian cassava mosaic disease, cassava latent virus, cassava mosaic virus	(P): *Manihot esculenta* (ubi kayu, cassava), *Ricinus* spp. (S): *Hewittia sublobata*, *Laportea (=Fluerya) aestuans*, *Manihot glaziovii*, *Jatropha* sp.	I	Tanaman (plant), tunas (bud), suluran (stolon)	Asia: India, Sri Lanka Africa: Angola, Kenya, Nigeria, Seychelles
2.	Agropyron mosaic virus Sin: Agropyron mosaic rymovirus, Agropyron green mosaic virus, Agropyron yellow mosaic virus, Agropyron streak mosaic virus, couch grass streak mosaic virus, wheat virus 2, Marmor agropyri, Agropyron mosaic PV75 severe isolate,	*Elymus repens* (quackgrass), *Triticum aestivum (*wheat), *Triticum turgidum* (durum wheat*)*	I		Europe: Finland America : Canada, USA

	Agropyron mosaic PV101 isolate, Agropyron mosaic mild isolate				
3.	Alfalfa mosaic alfamovirus (AMV); Sin: alfalfa virus 1 & 2, lucerne mosaic virus, Marmor medicaginis, potato calico virus	(P): *Medicago sativa*, *Lycopersicum esculentum* (tomat, tomato), *Nicotiana tabacum* (tembakau, tobacco), *Solanum tuberosum* (kentang, potato), Cucurbitaceae, *Apium graveolens* var. *rapaceum*, *Apium graveolens* (seladeri, celery), *Cicer arietinum*, *Capsicum annuum* (cabai, hot pepper, chili, red pepper), *Glycine max* (kedelai, soybean), *Lactuca sativa*, *Vigna* sp. (kacang panjang, cowpea), *Vigna radiata*, *Trifolium incarnatum*, *Trifolium pratense*, *Trifolium repens*, *Viburnum*	I	Semua bagian tanaman (all parts of plant), benih (seed) Vector: : *Acyrthosiphon pisum*, *Myzus persicae*	Europe: Austria, Belarus, Belgium, Bulgaria, Cyprus, Czech, Slovakia, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Romania, Russia, Slovenia, Spain, Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia

		opulus (S): *Pisum sativum*, *Cajanus cajan* (kacang gude), *Cercis siliquastrum*, *Coriandum sativum* (tumbar, coriander), *Cyphomandra betacea*, *Eutrema wasabi, Euonymus japonicus, Hibiscus cannabinus, Lavandula latifolia, Pelargo nium,Vigna angularis, Solanum melongena, Trifolium subterraneum, Vicia faba, Vinca minor, Vitis vinifera*			Asia: Bangladesh, China, India, Iran, Iraq, Israel, Japan, Jordan, South Korea, Kyrgyzstan, Lebanon, Myanmar, Nepal, Pakistan, Saudi Arabia, Syria, Tajikistan, Turkey, Uzbekistan, Yemen Africa: Algeria, Egypt, Ethiopia, Kenya, Libya, Morocco, South Africa, Sudan, Tanzania, Tunisia, Zambia America: Argentina, Brazil, Panama, Canada, Chile, Colombia, Mexico, Peru, USA, Venezuela Oceania: Australia , New Zealand

4.	Andean potato latent tymovirus (APLV); Sin: Eggplant mosaic tymovirus, Andean potato latent str, Eggplant mosaic virus (Andean potato latent str.), potato (Andean) latent virus, Potato Andean latent tymovirus, Potato Andean latent virus	(P): *Solanum tuberosum* (kentang, potato), *Ullucus tuberosus* (ulluco)	I	umbi (tuber), tanaman (plant)	America: Argentina, Bolivia, Chile, Colombia, Ecuador, Peru
5.	Andean potato mottle comovirus (APMoV); Sin: potato Andean mottle comovirus, potato Andean mottle virus	(P): *Capsicum annuum* (cabai, hot pepper, chili, red pepper), *Solanum tuberosum* (kentang, potato) (S): *Gomphrena globosa*, *Lycopersicum esculentum* (tomat, tomato), *Physalis peruviana*, *Amaranthus hybridus* (bayam, spinach), *Nicotiana tabacum* (tembakau, tobacco)	I	umbi (tuber), tanaman (plant)	America: Bolivia, Brazil, Chile, Colombia, Ecuador, Honduras, Nicaragua, Peru
6.	Anyelir necrotic fleck closterovirus (CNFV) Sin: carnation streak virus, carnation yellow fleck virus	(P): *Dianthus caryophyllus* *(S): Dianthus barbatus*, *D.chinensis*, *Saponaria*	I	Bunga (flower), akar (root), daun (leaf),	Europe: Belgium, Czech, Slovakia, Serbia, Slovenia, Croatia, Bosnia and

		vaccaria, Silene armeria		batang (stem) Vector: *Myzus persicae*, Aphididae	Herzegovina, Montenegro, Macedonia, France, Germany, Italy, Netherlands, Spain, UK, Asia: Israel, Japan America: Colombia, USA, Venezuela Oceania: Australia, New Zealand
7.	Apple chlorotic leaf spot virus (ACLSV) ; Trichovirus Sin: Apple chlorotic leaf spot trichovirus; Bark split virus; Plum bark split virus; Peach green mottle virus; Pear ring pattern mosaic virus; Quince stunt virus; Apple latent virus type 1; Apple latent 1 virus; Plum pseudopox virus; Pear ring mosaic virus	(P): *Cydonia oblonga* (quince), *Malus* (ornamental species apple), *Malus domestica* (apple), *Malus platycarpa , Prunus armeniaca* (apricot), *Prunus avium* (sweet cherry), *Prunus cerasifera* (myrobalan plum), *Prunus cerasus* (sour cherry), *Prunus domestica* (plum), *Prunus persica* (peach), *Prunus salicina* (Japanese plum), *Prunus spinosa*	I	Titik tumbuh (Growing points), daun (leaves), batang (stems) dan seluruh tanaman (whole plant).	Europe : Albania, Austria, Belarus, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Central Russia, Serbia and Montenegro, Slovakia, Slovenia,

		(blackthorn), *Prunus tomentosa* (Nanking cherry tree), *Pyrus communis* (European pear), *Pyrus pyrifolia* (Oriental pear tree) (S): *Amelanchier canadensis* (thicket serviceberry), *Chaenomeles* (flowering quinces), *Crataegus monogyna* (hawthorn), *Crataegus rhipidophylla* (Midland hawthorn), *Mespilus germanica* (medlar), *Sorbus aucuparia* (mountain ash)			Spain, Sweden, Switzerland, Ukraine, UK Asia : China, Taiwan, India, Iran, Israel, Japan, Jordan, Kazakhstan, Korea Republic of (South Korea), Lebanon, Syria, Turkey Africa : South Africa, Tunisia America : Canada, USA, Argentina, Brazil, Uruguay Oceania : Australia, New Zealand
8.	Apple mosaic virus - ilarvirus (APMV); Sin: European plumline pattern virus, Mountain ash variegation virus, Birch line pattern virus, Birch ringspot virus, Dutch plum line pattern virus, Hop A virus, Horse chestnut yellow mosaic	(P): *Betula*, *Corylus avellana*, *Fragaria*, *Humulus lupulus*, *Malus domesticum (*apel, apple*)*, Prunus, *Prunus americana* (aprikot, apricot), *Prunus avium*, *Prunus dulcis* (almon, almond*)*, *Ribes*	I	buah (fruit), bunga (flower), akar (root), batang (stem)	Europe: Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Czech, Slovakia, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Netherlands,

	virus, Rose mosaic virus, Hop virus A, Hop virus C, Mild apple mosaic virus, Severe apple mosaic virus	*rubrum*, *Rubus* spp. (raspberry, blackberry, black raspberry) (S): *Prunus domesticum* (plam, plum), *Prunus persica* (persik, peach)			Norway, Poland, Portugal, Romania, Russia, Spain, Sweden, Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: Azerbaijan, China, India, Japan, Lebanon, Syria, Turkey Africa: Kenya, South Africa, Tunisia, Zimbabwe America: Argentina, Brazil, Canada, Chile, Mexico, USA, Uruguay Oceania: Australia, New Zealand
9.	Apple Stem Grooving capillovirus (ASGV); Sin: apple topworking disease, Citrange stunt virus, *Citrus* tatter leaf virus, crab apple decline,	(P): *Citrus*, *Lilium*, *Malus pumila*, *Malus sylvestris*, *Malus toringo*, *Prunus mume*, *Prunus armeniaca*, *Pyrus communis*, *Pyrus*	I	tanaman (plant)	Europe: Austria, Belgium, Croatia, Czech, Slovakia, Denmark, Georgia, Serbia, Slovenia, Bosnia

	Apple latent virus type 2, brown line virus disease, Cheno-podium dark green epi-nasty virus, Apple dark green epinasty virus, Apple E36 virus, crab batang (stem) grooving virus, Apple brown line virus	*pyrifolia*, (S): *Aronia melanocarpa*, *Cotoneaster bullatus*, *Cydonia oblonga*, *Prunus avium*, *Pyronia veitchii*, *Sorbus aucuparia*, *Malus* sp, *Malus micromalus*			and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Hungary, Italy, Netherlands, Norway, Poland, Portugal, Romania, Russia Asia: China, Taiwan, India, Israel, Japan, North Korea, South Korea, Nepal, Pakistan, Turkey, Vietnam Africa: South Africa, Swaziland America: Brazil, Canada, Antilles Netherlands, USA, Oceania: Australia, New Zealand
10.	Apple stem pitting foveavirus (ASPV); Sin: apple Spy 227 epinasty & decline, pear stony pit, quince sooty ringspot,	(P): *Malus pumila*, *Pyrus communis* (S): *Crataegus monogyna*, *Cydonia oblonga*, *Malus*	I	tanaman (plant)	Europe: Austria, Belgium, Bulgaria, Czech, Slovakia, Denmark, Serbia,

	pear vein yellows, pear red mottle	*sylvestris, Malus toringo, Pyronia veitchii, Sorbus discolor*.			Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Italy, Netherlands, Poland, Portugal, Romania, Spain, Sweden, Switzerland, Ukraine, UK, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia Asia: China, Japan, South Korea Africa: South Africa America: Brazil, Canada, USA

					Oceania: New Zealand
11.	Apple fruit crinkle viroid (AFCVd); Sin: apple green crinkle disease, apple green crinkle	(P) *Malus domesticum (*apel, apple*)*	I	tanaman (plant)	America: USA
12.	Arabis mosaic nepo-virus (ArMV) Sin: ash ring and line pattern virus, hop nettlehead virus, raspberry yellow dwarf virus, rhubarb mosaic virus, forsythia yellow net virus, jasmine yellow blotch virus, Rhabarber-Mosaik-Virus (rhubarb mosaic virus)	(P): *Anagallis arvensis, Apium graveolens* var. *dulce, Armoracia rusticana*, *Asparagus officinalis* (asparagus, asparagus), *Astilbe* sp., *Bellis perennis*, *Beta vulgaris* (bit), *Buxus sempervirens, Capsella bursa-pastoris, Carum segetum, Chamaecyparis lawsoniana, Cucumis sativus, Cucurbita pepo, Cyphomandra betacea, Daphne mezereum*, *Daucus carota*, *Dianthus caryophyllus, Forsythia intermedia*, *Fragaria vesca*, *Fraxinus excelsior*,	I	tanaman (plant), benih (seed) Vector: *Xiphinema diversicaudatum, X. madierense, X. coxi,*	Europe: Austria, Belgium, Bulgaria, Croatia, Czech, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Moldova, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Slovenia, Sweden, Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: Japan, Kazakstan,

		Humulus lupulus, Jasminum officinale, Lactuca sativa, Lamium amplexicaule, Ligustrum vulgare, Melilotus officinalis, Mentha arvensis, Narsisus sp., *Phaseolus coccineus, Plantago lanceolata, Polygonum aviculare, P. persicaria, Prunus avium, P.domestica, P.persica, Ranunculus repens, Rheum rhaponticum, Rheum hybridum, Ribes* sp., *Rosa* spp., *Rubus idaeus, R. procerus, Sambucus nigra, Senecio vulgaris, Solanum nigrum, Stellaria media,Syringa vulgaris, Taraxacum officinale, Trifolium repens, Tulipa* spp., *Urtica dioica, U. urens, Vitis vinifera, Trifolium repens, Vitis vinifera.*			Turkey Africa: South Africa America: Canada, Oceania: Australia, Caroline Islands, New Zealand

		(S): *Alstroemeria, Fragaria, Fraxinus, Hordeum vulgare, Narsisus, Ribes nigrum, Rubus*			
13.	Arracacha virus B (AVB) Sin: Arracacha B 'nepovirus', Arracacha B nepovirus (oca strain) Arracacha virus B (oca strain)	(P): *Arracacia xanthorrhiza, Oxalis tuberosa* (oca), *Solanum tuberosum* (kentang, potato) (S): *Brassica campestris* ssp.*rapa*, *Vigna* spp. (kacang panjang, cowpea), *Capsicum annuum*, *Hyoscyamus niger*	I	umbi (tuber), daun (leaf), suluran (stolon), benih (seed)	America: Bolivia, Peru.
14.	Artichoke Italian latent nepovirus (AILV)	(P): *Cynara scolymus* (S): *Cichorium intybus*, Gladiolus hybrids, *Pelargonium zonale* hybrids, *Vitis vinifera* (anggur, grapevine)	I	Daun (leaf), suluran (stolon), batang (stem) Vector : *Longidorus apulus*	Europe: Bulgaria, Greece, Italy

15.	Asparagus virus 2 Ilarvirus (AV2) Sin:Asparagus virus II, Asparagus 2 ilarvirus, Asparagus virus C, Asparagus latent virus	(P) *Asparagus officinalis* (asparagus, asparagus)	I	pollen, benih (seed), suluran (stolon) Vector: *Longidorus apulus*	Europe: Denmark, Germany, Italy, UK, Japan America: Canada , Mexico, USA
16.	Avocado sun-blotch avsunviroid (ASBVd) Sin: avocado sunblotch virus, sunblotch viroid (avocado)	(P): *Persea americana* (alpokat, avocado) (S): *Cinnamomum camphora*, *Cinnamomum zeylanicum*, *Ocelea bullata*,	I	kulit (bark), buah (fruit), bunga (flower), daun (leaf), suluran (stolon), batang (stem), benih (seed)	Europe: Spain, Israel Africa: South Africa America: Peru, USA, Venezuela, Oceania: Australia
17.	Barley stripe mosaic hordeivirus (BSMV) Sin: barley false stripe virus, barley mosaic virus, oat stripe mosaic virus, barley mild stripe virus, barley yellow stripe (possibly)	(P): *Hordeum vulgare* (barli, barley), *Triticum aestivum* (gandum, wheat) (S): Poaceae, *Secale cereale* (rye) , *Zea mays* (jagung, corn, maize),	I	polen, benih/biji (seed/grain), tanaman (plant)	Europe: Bulgaria, Czech, Denmark, Greece, Hungary, Moldova, Poland, Portugal, Romania, Russia, Slovakia, Switzerland, Ukraine,

		Oryza sativa (padi, paddy), *Sorghum bicolor* (sorgum, sorghum), *Panicum* spp. (millet)			Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Asia: China, Israel, Japan, Jordan, South Korea, Lebanon, Pakistan, Syria, Turkey Africa: Egypt, South Africa, Tunisia America: Argentina, Brazil, Canada, Mexico, Peru, USA Oceonia: Australia, New Zealand
18.	Barley Yellow Dwarf Luteovirus (BYDV) Sin: barley yellow dwarf luteoviruses; maize leaf fleck virus; wheat cereal yellow dwarf virus; cereal yellow dwarf virus; rice giallume virus; Hordeum virus nanescens; red leaf disease of barley	(P): *Avena sativa* (oats), *Hordeum vulgare* (barley), *Lolium multiflorum* (Italian ryegrass), *Lolium perenne* (perennial ryegrass), *Oryza sativa* (rice), *Poaceae* (grasses), *Secale cereale* (rye), *Triticum aestivum*	I	semua bagian tanaman (all part of plant), kecuali benih	Europe: Belgium, Czech, Slovakia, Denmark, Finland, Former, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro,

		(wheat), *Triticum turgidum* (durum wheat), *Zea mays* (maize) (S): *Agrostis stolonifera* (creeping bentgrass), *Arrhenatherum elatius* (false oatgrass), *Bromus* (bromegrasses), *Bromus catharticus* (prairiegrass), *Elymus repens* (quackgrass), *Eragrostis curvula* (weeping lovegrass), *Festuca* (fescues), *Leersia oryzoides* (Rice cutgrass), *Miscanthus sinensis* (Eulalia), *Pennisetum clandestinum* (kikuyu grass), *Phleum pratense* (timothy), *Phragmites* (reed), *Saccharum officinarum* (sugarcane), *Setaria italica* (foxtail millet), *Sorghum bicolor* (sorghum), *Trifolium repens* (white clover), *Zea*			Macedonia, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Russia, Spain, Sweden, Switzerland, Ukraine, UK. Asia: China, India, Iran, Israel, Japan, Jordan, Lebanon, Pakistan, Syria, Thailand, Turkey. Africa: Algeria, Egypt, Ethiopia, Kenya, Libya, Morocco, Mozambique. South Africa: Tanzania, Tunisia, Zimbabwe. North America: Canada, Mexico, USA, Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru,

					Uruguay, French Guiana Oceania: Australia, New Zealand.
19.	Bean golden mosaic begomovirus (BGMV) Sin: bean golden mosaic gemini virus, bean golden mosaic virus (type 1) Brazil, bean golden yellow mosaic virus (type 2) Caribbean, mosaico dorado, bean calico mosaic bigeminivirus (possible strain)	(P): *Vigna* sp. (kacang panjang, cowpea), *Phaseolus* sp., *Phaseolus lathyroides*, *Phaseolus acutifolius*, *Glycine max* (kedelai, soybean) (S): *Cajanus cajan* (kacang gude), *Calopogonium mucunoides*, *Pachyrhizus erosus*, *Vigna angularis*, *Phaseolus coccineus*, *Vigna mungo*, *Nicotiana tabacum* (tembakau, tobacco)	I	tanaman (plant) Vector: : *Bemisia argentifolii*, *B. tabaci*	Africa: Nigeria America: Argentina, Colombia, Costa Rica, Cuba, Dominica, Guatemala, Jamaica, Mexico, Nicaragua, Puerto Rico, USA, Venezuela
20.	Bean pod mottle comovirus (BPMV) Sin: pod mottle virus, desmodium virus	(P): *Glycine max* (kedelai, soybean), Fabaceae lain	I	Benih/biji (seed/grain), tanaman (plant) Vector: : *Cerotoma trifurcate*,	America: Brazil, Canada, Ecuador, Peru, USA

				Epicauta vittata, Diabrotica balteata, D. undecimpunctata, Colaspis flavida, C. lata	
21.	Beet curly top curtovirus (BCTV) Sin: Beet curly top geminivirus, Beet curly top hybrigeminivirus, sugarbeet curly top virus, tomato yellow virus, sugar beet curly-leaf virus, sugarbeet virus 1, tomato yellows virus, western yellow blight virus, potato green dwarf virus	P: *Beta vulgaris* (bit gula, sugar beet), *Capsicum annuum* (cabai, hot pepper, chilies, red pepper), *Vigna* sp. (kacang panjang, cowpea), Cucurbitaceae, *Beta vulgaris* (bit, beetroot), *Cucumis sativus* (mentimun, cucumber), *Lycopersicum esculentum* (tomat, tomato), *Vigna* spp. (buncis, common bean). (S) : *Linum usitatissimum* (flax), *Nicotiana tabacum* (tembakau, tobacco), *Solanum tuberosum* (kentang, potato)	I	Seluruh bagian tanaman kecuali benih Vector: *Neoaliturus tenellus, N. opacipennis*	Europe : Cyprus, Italy Asia: India, Iran, Israel, Japan, South Korea, Turkey Africa: Ivory Coast, Egypt America: Argentina, Bolivia, Canada, Costa Rica, Mexico, USA, Uruguay

22.	Beet leaf curl rhabdovirus (BLCV) Sin: Beta virus 3, RubenkrSusel-Virus, Rübenkräusel sugar beet leaf crinkle virus, sugar beet leaf curl rhabdo virus, sugar beet virus 3, Beet leaf crinkle virus, sugar beet leaf curl virus	(P): *Beta* spp. (S) *Atriplex, Spinacia, Tetragonia tetragonioides*	I	Daun (leaf), root, batang (stem), tanaman (plant) Vector: *Piesma quadratum*	Europe: Germany, Poland, Turkey
23.	Carnation mottle carmo Virus (CarMV) Sin: carnation mottle carmovirus	(P): *Dianthus caryophyllus, D.barbatus, Begonia* spp., *Sapo naria officinalis, Daphne odora, D.superbus, Tetragonia tetragoni oides, Vaccaria hispanica*	I	suluran (stolon), tanaman (plant)	Europe: Czech, Slovakia, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia, Hungary, Italy Asia: China, India Africa: Egypt America: Argentina, Colombia Oceania: Australia

24.	Carnation ringspot virus (CRSV) Sin: carnation ringspot dianthovirus	(P): Dianthus (carnation), *Dianthus barbatus* (sweet williams), *Dianthus caryophyllus* (carnation), *Malus sylvestris* (crab-apple tree), *Prunus avium* (sweet cherry), *Prunus cerasus* (sour cherry), *Prunus domestica* (plum), *Pyrus communis* (European pear), *Prunus salicina* (Japanese plum), *Vitis vinifera* (grapevine)	I	daun (leaf), benih (seed), bibit tanaman (seedling)	Europe: Denmark, Finland, France, Germany, Italy, Lithuania, Netherlands, Poland, Russia, UK America: North America, Canada, Mexico, USA, Brazil, Colombia Oceania: Australia, New Zealand
25.	Cassava mosaic bigeminivirus; Sin: African cassava mosaic disease, cassava African mosaic bigeminivirus, Indian cassava mosaic disease	(P): *Manihot esculenta* (ubi kayu, cassava), jarak (S): *Jatropha* sp.	I	batang (stem), umbi akar (tuber root)	Asia: India, Sri Lanka Africa: Angola, Benin, Burkina Faso, Burundi, Cameroon, Cape Verde, Central Africa, Chad, RD.Congo, Congo, Ivory Coast, Guinea Ekuator, Ethiopia, Gabon, Ghana, Guinea-Bissau, Guinea, Kenya, Lesotho, Liberia, Madagascar, Malawi,

					Mauritania, Mauritius, Mozambique, Nigeria, Rwanda, Sao Tome & Principe, Senegal, Seychelles, Sierra Leone, South Africa, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe
26.	Cassava brown streak carlavirus (CBSaV) Sin: Cassava brown streak potyvirus, Cassava brown streak-associated (?) carlavirus	(P): *Manihot esculenta* (ubi kayu, cassava)	I	tunas (bud), tanaman (plant)	Africa: Angola, Guinea Ekuator, Kenya, Malawi, Mozambique, Tanzania, Zanzibar, Uganda, Zimbabwe
27.	Cherry leaf roll virus – nepovirus (CLRV)	(P): *Betula* (birches), *Betula pendula* (common silver birch), *Cornus* (Flowering dogwood), *Fagus sylvatica* (common beech), *Fraxinus excelsior* (ash), *Juglans* (walnuts), *Juglans regia* (walnut), *Ligustrum* (privet), *Prunus avium* (sweet cherry), *Ptelea trifoliata* (Hoptree), *Rubus*	I	Benih (Seed, polen), daun (Leaves) dan seluruh tanaman (whole plant).	Europe : Albania, Belgium, Bulgaria, Croatia, Czech Republic, Finland, France, Germany, Hungary, Italy, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia and Montenegro, Slovakia, Slovenia, Spain,

		procerus , *Sambucus canadensis* (American elder), *Sambucus racemosa* (red-berried elder), *Syringa vulgaris* (lilac), *Ulmus* (elms), *Ulmus americana* (American elm) (S): *Delphinium hybrids* (florist's larkspur), *Pelargonium* (pelargoniums), *Rubus idaeus* (raspberry) (Wild hosts): *Plantago* (Plantain), *Rumex* (Dock)			Switzerland, UK, Scotland Asia : China, Turkey America : Canada, USA, Chile Oceania : Australia, New Zealand
28.	Cherry rasp leaf nepovirus (CRLV); Sin: Apple flat apple virus, Flat apple virus	(P): *Prunus avium*, *Prunus cerasus*, *Prunus persica*, *Prunus mahaleb*, *Malus domesticum (*apel, apple*)* (S): *Rubus* spp. (raspberry)	I	tanaman (plant)	America: Canada, USA
29.	*Citrus* cachexia viroid Sin: *Citrus* xyloporosis viroid, *Citrus* xyloporosis 'virus'	(P): *Citrus* spp.(jeruk, orange)	I	tanaman (plant), batang (stem)	America: Cuba, USA

30.	*Citrus* impietratura virus Sin: *Citrus* impietratura disease	(P): *Citrus* spp.(jeruk, orange)	I	bagian tanaman (part of-part of plant) except benih (seed)	Europe: Cyprus, Greece, Italy , Spain Asia: India, Israel, Lebanon, Turkey Africa: Algeria, Libya, Morocco, South Africa, Tanzania, Zimbabwe America: Venezuela
31.	*Citrus* leaf rugose ilarvirus (CiLRV) Sin: *Citrus* variegation virus, *Citrus* crinkly leaf ilarvirusm, *Citrus* variegation ilarvirus	(P): *Citrus aurantifolia*, *C. limon*, *C. paradisi* (S): *Vigna* spp. (kacang panjang, cowpea), *Vigna unguiculata* (kacang tunggak)	I	tunas (bud), benih (seed)	Europe: Turkey America: USA Oceania: Australia
32.	Cocoa necrosis nepo virus (CoNV) Sin: Cacao swollen shoot virus - strain S	(P): *Theobroma cacao* (kakao, cocoa)	I	akar (root), batang (stem), daun (leaf), bunga (flower), buah (fruit) Vector: *Planococcoides*	Asia: Sri Lanka Africa: Ghana, Nigeria America: Colombia, Venezuela

				njalensis, Ferrisia virgata, Planococcus citri, Longidorus spp.	
33.	Cocoa swollen shoot badnavirus (CSSV) Sin: Cocoa necrosis nepo virus, Cocoa Red Mottle Virus, Cocoa Vein Clearing Virus, cacao virus I, theobroma virus I	(P): *Theobroma cacao* (kakao, cocoa) (S): *Ceiba pentandra* (kapuk randu, kapok)	I	akar (root), batang (stem), daun (leaf), bunga (flower), buah (fruit) Vector: : *Planococcoides njalensis, P.citri, Phenacoccus hargreavesi, Pseudococcus concavocerrari, Ferrisia virgata,*	Asia: Sri Lanka Africa: Ivory Coast, Ghana, Nigeria, Sierra Leone, Togo, Northwest Africa

				Pseudococcus longisPinus merkusii (tusam, pinetree), Delococcus tafoensis, Paraputo anomalus	
34.	Cocoa yellow mosaic tymovirus (CYMV)	(P): *Theobroma cacao* (kakao, cocoa) (S): *Cola nitida*, *Culcasia scandens*	I	akar (root), batang (stem), daun (leaf), bunga (flower), buah (fruit)	Africa: Sierra Leone
35.	Coconut cadang-cadang cocadviroid (CCCVd) Sin: palm cadang-cadang viroid	(P): *Cocos nucifera* (kelapa, coconut), *Elaeis guineensis* (kelapa sawit , oilpalm), *Arenga pinnata*, *Borassus flabelifer* (lontar, palmyra palm), *Chloris*, *Phoenix dactylifera* (S): *Corypha elata*,	I	benih (seed), buah (fruit), tanaman (plant) Vector: *Brevipalpus phoenicis*	Asia: Philippines Oceania: Solomon Islands Island

		Livistona rotundifolia, Arecaceae, Panandaceae, Zingiberace-ae, Marantaceae (*Maranta* sp.), Commelinaceae			
36.	Coconut Tinangaja viroid (CtiVd)	(P): *Cocos nucifera* (kelapa, coconut)	I	benih (seed), buah (fruit), tanaman (plant)	Oceania: Guam
37.	Coffee ringspot nucleorhabdovirus (CoRSV) Sin: Coffee ringspot habdovirus	(P): *Coffea* spp. (kopi, coffee)	I	benih (seed), tanaman (plant)	Asia: Philippines America: Brazil, Costa Rica
38.	Coffee Blister Spot Virus	(P): *Coffea* spp. (kopi, coffee)	I	benih (seed), buah (fruit), tanaman (plant)	America: Anguilla, Antigua, Aruba, Barbados, Belize, Bolivia, Bonaire, Brazil, Cayman, Colombia, Costa Rica, Cuba, Curacao, Dominica, Ecuador, El Salvador, France Guyana, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras,

					Jamaica, Martinique, Mexico, Nevis, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, St. Kitts, St Lucia, St Marten, St Vincent, Grenadines, Suriname, Tobago, Turks-Caicos Islands, Trinidad, Venezuela, Virgin Islandss
39.	Cotton anthocyanosis virus (CAV) Sin: Cotton anthocyanosis (?) luteovirus; cotton small leaf virus	(P): *Gossypium barbadens* (kapas, Gallini cotton), Gossypium hirsutum (kapas, Bourbon cotton) (S): *Abelmoschus esculentus, Hibiscus cannabinus, Sida rhombifolia, S. micrantha*	I	tunas (bud), tanaman (plant) Vector: *Aphis gossypii;* Aphididae	Asia: India, Pakistan America: Brazil
40.	Cotton leaf crumple begomovirus (CLCrV) Sin: cotton leaf crumple bigeminivirus	(P): *Gossypium barbadens* (kapas, cotton), *Vigna* spp. (buncis, cowpea) (S): *Abutilon, Althaea, Castanospermum australe,*	I	tanaman (plant) Vector: *Bemisia*	America: Mexico, USA, Guatemala

		Glycine max (kedelai, soybean), *Gossypium*, *Hibiscus cannabinus*, *Malva parviflora*, *Phaseolus acutifolius*, *Vigna angularis*		*tabaci*	
41.	Cotton leaf curl bigeminivirus (CLCuV) Sin: cotton leaf curl bigeminivirus, cotton leaf curl geminivirus	(P): *Gossypium barbadens* (kapas, cotton), *Abelmoschus esculentus*, *Hibiscus cannabinus* *(S): Abelmoschus esculentus, Althea rosae, Corchorus fasicularis, Hibiscus cannabius, H. escu lentus, H. sabdarifa, Malvaviscus arboreus, Sida alba*	I	tanaman (plant) Vector: *Bemisia tabaci*	Asia: India, Pakistan, Philippines Africa: Benin, Burkina Faso, Cameroon, Central Africa, Chad, Ivory Coast, Egypt, Ghana, Niger, Nigeria, Sudan, Togo
42.	Cotton leaf mottle bigeminivirus	(P): *Gossypium barbadens* (kapas, cotton)	I	akar (root), batang (stem), daun (leaf), bunga (flower), buah (fruit) Vector:	Africa: Benin, Cameroon, Central Africa, Chad, Ivory Coast, Egypt, Ghana, Mali, Nigeria, Sudan, Tanzania, Togo

				Bemisia tabaci	
43.	Cowpea chlorotic mottle bromovirus (CCMV) Sin: bean yellow stipple virus, virus del moteado Amarillo, marmor flavopunctum	(P): *Vigna* spp. (kacang panjang, cowpea), *Glycine max* (kedelai, soybean) (S): *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Nicotiana tabacum* (tembakau, tobacco), *Beta vulgaris* (bit), *Cajanus cajan* (kacang gude), *Cassia occidentalis*, *C.tora*	I	tanaman (plant) Vector: *Ceratoma ruficornis*, *C.trifurcata*, *Diabrotica balteata*, *D. undecimpunctata*, Coleoptera	Asia: India Africa: Nigeria America: Costa Rica, Cuba, USA
44.	Cucumber green mottle mosaic tobamovirus (CGMMV) Sin: bottlegourd Indian mosaic virus, cucum ber green mottle mosaic watermelon strain (W), cucumber virus 2, cucumber virus 3, cucumber virus 4, cucumis virus 2, tobacco mosaic virus watermelon strain-W	(P): *Cucumis sativus* (mentimun, cucumber), *Citrullus vulgaris* (semangka, watermelon), *Cucumis melo* (melon, melon), *Lagenaria siceraria*, *Momordica charantia* (S): *Prunus Americana* (apricot)	I	benih (seed), akar (root), tanaman (plant), tanah (soil), air (water), pupuk (manure), media tanam (planting medium)	Europe: Austria, Czech, Slovakia, Denmark, Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Germany, Greece, Hungary, Latvia, Netherlands, Romania, Russia, Spain,

				Vector: : *Raphidopalpa fevicollis*, *Cuscuta* spp.	Sweden, Ukraine, UK, Georgia, Asia: Taiwan, India , Iran, Israel, Japan, South Korea, Lebanon, Saudi Arabia America: Brazil
45.	Cymbidium ringspot tombusvirus (CyRSV)	(P): Orchidaceae (*Cymbidium*) (S): *Trifolium repens*, *Vigna ungiculata*	I	tanaman (plant)	Europe: UK
46.	Dendrobium vein necrosis (?) closterovirus (DVNV)	(P): Orchidaceae	I	tanaman (plant), umbi (corm)	Europe: Germany
47.	Grapevine Bulgarian latent nepovirus (GBLV) Sin: Virus CM112	(P): *Vitis vinifera* (anggur, grapevine), *Vitis* spp.	I	batang (stem) tanaman (plant), benih (seed)	Europe: Bulgaria, Hungary, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Portugal
48.	Grapevine chrome mosaic	(P): *Vitis vinifera* (anggur,	I	kulit (bark),	Europe: Austria, Croatia,

	nepovirus (GCMV) Sin: Hungaryn chrome mosaic virus	grapevine) (S): *Apium graveolens*		batang (stem), daun (leaf), tunas (bud), akar (root), benih (seed)	Czech, Slovakia, Hungary
49.	Grapevine stem pitting associated closterovirus Sin: grapevine corky bark closterovirus, grapevine batang (stem) pitting disease, grapevine stem pitting virus, grapevine virus A, Legno Riccio (possibly), Rugose wood (possibly), Grapevine corky bark disease	(P): *Vitis vinifera* (anggur, grapevine)	I	tunas (bud), suluran (stolon), kulit (bark), batang (stem), daun (leaf), tunas (bud), akar (root). Vector: Pseudococcidae	Europe: Albania, Bulgaria, Italy, Portugal Asia: Jordan, Lebanon, Yemen, Central East Africa: South Africa, Tunisia, South Africa America: Brazil, Mexico, USA
50.	Grapevine fan leaf nepovirus (GFLV) Sin: Grapevine veinbanding virus, Grapevine yellow mosaic virus, Grapevine arricciamento virus, Grape vine infectious	(P): *Vitis vinifera* (anggur, grapevine) (S): *Cucumis sativus*, *Vigna* spp. (buncis, cowpea)	I	tunas (bud), suluran (stolon), tanaman (plant), benih (seed)	Europe: Albania, Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech, Slovakia, France, Germany, Greece, Crete,

	degeneration virus, Grapevine roncet virus, Grapevine urticado virus			Vector: *Xiphinema index, X. Italye*	Hungary, Italy, Macedonia, Malta, Moldova, Portugal, Romania, Russia, Slovenia, Spain: Canary Island, Switzerland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Armenia, Asia: China, Iran, Israel, Japan, Jordan, Kazakhstan, Lebanon, Philippines, Syria, Turkey, Africa: Algeria, Egypt, Madagascar, Morocco, Nigeria, South Africa, Tunisia America: Argentina, Bolivia, Brazil, Canada , Chile, Mexico, USA, Venezuela Oceania: Australia, New

					Zealand
51.	Grapevine fleck virus (GFkV) Sin: grapevine marbrure virus, grapevine phloem-limited isometric virus	(P): *Vitis vinifera* (anggur, grapevine)	I	Batang (stem), tanaman (plant)	Europe: Albania, France, Italy, Asia: Jordan, Syria Africa: South Africa America: Brazil, USA
52.	Grapevine leafroll-associated viruses (GLRaV) Sin: grapevine B virus, grapevine leafroll disease, grapevine leaf roll closterovirus, grapevine C virus	(P): *Vitis vinifera* (anggur, grapevine)	I	kulit (bark), akar (root), batang (stem), daun (leaf) Vector: *Pseudococcus longis, Pinus merkusii (tusam, pinetree), P. calceolariae, P. maritimus, P.affinis,P.vi*	Europe: Albania, Austria, Bulgaria, Croatia, Cyprus, Czech, Slovakia, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Hungary, Italy, Malta, Moldova, Portugal, Romania, Spain, Switzerland, Ukraine, Armenia Asia: China, Taiwan,

				burni, Planococcus ficus, P.citri, Heliococcus bohemicus, Phenacoccus , Prunus cerrasus (ceri, cherry)*s, Pulvinaria vitis, Parthenolecanium corni, Neopulvinaria inummerabilis, Pulvinaria vitis,*	Gaza, Israel, Japan, Jordan, South Korea, Lebanon, Turkey, Yemen, Africa: Algeria, Morocco, Tunisia, Brazil, Canada, Chile, Mexico, USA Oceania: Australia, New Zealand
53.	Grapevine vein necrosis virus	(P): *Vitis vinifera* (anggur, grapevine)	I	tanaman (plant), batang (stem)	Europe: Hungary, Turkey

54.	Johsongrass Mosaic Virus Sin: Johnsongrass mosaic potyvirus	(P): *Pennisetum glaucum* (pearl millet), *Saccharum officinarum* (tebu, sugarcane), *Sorghum bicolor* (sorghum), *Sorghum halepense* (Johnson grass), *Urochloa brizantha* (palisadegrass), *Zea mays* (jagung, maize)	I	benih (seed), bagian tanaman (all part of plant)	Europe: Hungary America: Colombia, Venezuela Oceania: Australia
55.	Maize chlorotic dwarf waikavirus (MCDV) Sin: Maize chlorotic dwarf machlovirus, Maize chlorotic dwarf MCDV group, Maize chlorotic dwarf ribotungrovirus, maize chlorotic dwarf waikavirus, corn stunt agent	(P): *Zea mays* (jagung, corn, maize) (S): *Sorghum bicolor* (sorgum, sorghum), *Setaria* spp.	I	tanaman (plant) Vector: : *Amblysellus grex*, *Dalbulus maidis*, *Endria inimica*, *Exitianus exitiosus*, *Graminella nigrifrons*, *Graminella sonora*, *Macrosteles*	America: USA

				severini, Planicephalus flavo costatus,Stirellus bicolor	
56.	Maize chlorotic mottle machlomovirus (MCMV) Sin: maize mottle virus, Peru corn virus	(P): *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, corn, maize), *Sorghum bicolor* (sorgum, sorghum) (S): *Bromus arvensis*, *Panicum vurgatum*, *Setaria glauca*, *Zea diploperennis*	I	biji (grain), tanaman (plant) Vector: *Chaetocnema pulicaria, Diabrotica* spp., *Frankliniella williamsii, Oulema melanopus, Systena frontalis*	America: Argentina, Mexico, Peru, USA
57.	Maize Dwarf Mosaic Potyvirus (MDMV) Sin: sorghum red stripe virus; European maize mosaic virus; Indian maize mosaic virus; maize	(P): *Sorghum halepense* (Johnson grass*), Sorghum bicolor* (sorgum, sorghum), *Zea mays* (jagung, corn, maize), *Zea mays* subsp.	I	bibit (seedling),	Europe : Bulgaria, Croatia, Czech Republic, Czech Republic and Slovakia , Serbia, Slovenia, Croatia,

	stripe mosaic virus; maize dwarf mosaic potyvirus	*mays* (sweetcorn) (S): *Avena sativa* (oats), *Panicum miliaceum* (millet), *Saccharum officinarum* (tebu, sugarcane)			Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Italy, Romania, Russia (Russia (Europe)), Spain, Ukraine, Asia : China (Taiwan), Georgia (Republic), India (Uttar Pradesh), Iran, Iraq, Israel, Kazakhstan, Korea Republic of (South Korea), Pakistan, Philippines, Turkey, Uzbekistan. Africa : Ivory Coast, Egypt, Ethiopia, Kenya, Mauritius, Morocco, Niger, Nigeria, South Africa, Zambia, Zimbabwe. America : Argentina, Canada, Chile,

					Colombia, Haiti, Honduras, Mexico, Peru, USA, Hawaii, Venezuela.
58.	Maize mosaic nucleorhabdovirus (MMV) Sin: Maize stripe Indian virus, sorghum chlorosis virus, *Zea mays* virus	(P): *Zea mays* (jagung, corn, maize), *Sorghum bicolor* (sorgum, sorghum) (S): *Axonopus*, *Hordeum vulgare*, *Rottboellia cochin chinensis*, *Sorghum halepense*, *Zea mexicana*	I	tanaman (plant) Vector: : *Peregrinus maidis*	Asia: India, Yemen Africa: Kenya, Madagascar, Mauritius, Mozambique, Nigeria, Réunion, Tanzania, Zimbabwe America: Brazil, Colombia, Cuba, Guyana France, Guadeloupe, Mexico, Peru, Puerto Rico, Suriname, USA, Venezuela
59.	Maize rayado fino marafivirus (MRFV)	(P): *Zea mays* (jagung, corn, maize)	I	tanaman (plant) Vector: : *Dalbulus maidis*, *D.elimatus*, *Baldulus*	America: Argentina, Brazil , Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, USA, Uruguay, Venezuela

				tripsaci, *Graminella nigrifrons*	
60.	Maize Rough Dwarf fijivirus (MRDV) Sin: cereal tillering disease reovirus, cereal tillering disease virus	(P): *Zea mays* (jagung, corn, maize), *Sorghum bicolor* (sorgum, sorghum), *Hordeum vulgare* (barli, barley), *Lolium perenne* (perennial ryegrass), *Zea mays* subsp. *mays* (jagung manis, sweetcorn) (S): *Triticum aestivum* (gandum, wheat), *Avena sativa* (oat, oats), *Cynodon dactylon* (rumput bermuda, bermuda grass), *Digitaria sanguinalis* (large crabgrass), *Echinochloa crus-galli* (barnyard grass)	I	tanaman (plant) Vector: *Delphacodes propinqua, Dicranotropis hamata, Laodelphax striatellus, Javasella pellucida, Ribauto delphax notabilis, Sogatella vibix*	Europe: Czech, Slovakia, France, Germany, Italy, Norway, Spain, Sweden, Switzerland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: China, Iran, Israel, South Korea America: Argentina
61.	Maize streak mastrevirus (MSV) Sin: Sereal African streak virus, Maize mottle virus, Maize streak monogeminivirus, maize streak virus A, sugarcane streak virus	(P): *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, corn, maize), *Sorghum bicolor* (sorgum, sorghum), Poaceae	I	tanaman (plant) Vector: *Cicadulina*	Asia: India, Yemen, Africa: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central Africa,

		(S): Oat, *Hordeum vulgare* (barli, barley), Secale cereale (rye)		*mbila*, *C.arachidis*, *C. bipunctella*, *C. triangula*, *C. bimaculata*, *C. similis*, *C.latens*, *C.ghaurii*, *C.parazeae*. *Nesoclutha declivata*	RD.Congo, Congo, Ivory Coast, Egypt, Ethiopia, Gabon, Ghana, Guinea, Kenya, Madagascar, Malawi, Mali, Mauritius, Mozambique, Niger, Nigeria, Rwanda, Réunion, Sao Tome & Principe, Senegal, Sierra Leone, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe America: USA
62.	Maize stripe tenuivirus (MSpV) Sin: maize chlorotic stripe virus, sorghum chlorosis virus	(P): *Zea mays* (jagung, corn, maize), *Sorghum bicolor* (sorgum, sorghum) (S): *Avena sativa* (oat, oats) , *Hordeum vulgare* (barli, barley), *Oryza sativa* (padi, paddy), *Triticum aestivum* (gandum, wheat), *Saccharum officinarum* (tebu, sugarcane), Secale cereale (rye)	I	tanaman (plant) Vector: : *Peregrinus maidis*	Asia: China, Taiwan, India, Philippines Africa: Benin, Botswana, Cameroon, RD.Congo, Egypt, Kenya, Madagascar, Mauritius, Mozambique, Nigeria, Réunion, Sao Tome & Principe, South

					Africa, Swaziland, Tanzania, Uganda, Zimbabwe America: Argentina, Brazil, Costa Rica, Guadeloupe, Peru, Puerto Rico, USA, Venezuela Oceania: Australia
63.	Maize White Line Mosaic Virus (MWLMV) Sin: Maize dwarf ringspot virus, Maize white line virus	(P): *Zea mays* (jagung, corn, maize)	I	tanaman (plant)	Europe: France, Italy America: USA
64.	Orchid fleck rhabdovirus (OFV) Sin: dendrobium leaf streak virus, dendrobium virus, probably laelia red leafspot, short orchid rhabdovirus, orchid rhabdovirus, phalae nopsis chlorotic spot virus, phalaenopsis hybrid virus, phalae nopsis virus	(P): Orchidaceae	I	tanaman (plant)	Asia: Japan Europe: Germany America: Brazil, USA Oceania: Australia, New Zealand

65.	Papaya ring spot potyvirus strain W (PRSV) Sin: papaya distortion mosaic virus, papaya leaf distortion virus, papaw distortion ringspot virus, papaw mosaic virus, watermelon mosaic virus 1 (type P), Guadeloupe papaya ringspot, papaya ringspot - type W has been shown to be watermelon mosaic virus 1 potyvirus)	(P): C*arica papaya* (S): Cucurbitaceae	I	tanaman (plant), bibit (seedling), buah (fruit), bunga (flower) Vector: *Myzus persicae, Aphis coreopsidis, A. craccivora, A. fabae,A.gossypii, Toxoptera citricida*	Europe: France, Germany, Italy, Bangladesh Asia: China, India, Japan, Lebanon, Malaysia, Nepal, Philippines, Singapore, Sri Lanka, Syria, Thailand, Yemen Africa: Nigeria America: Bahama, Brazil, Colombia, Costa Rica, Cuba, Dominica, Ecuador, El Salvador, Honduras, Jamaica, Mexico, Puerto Rico, Trinidad and Tobago, USA, Venezuela Oceania: Australia
66.	Papaya mosaic virus (PapMV) Sin: Argentine plantago potexvirus; Papaya mosaic potexvirus; Babaco yellow mosaic virus; Australian	(P): *Carica papaya* (papaya, papaw)	I	daun (leaf), bibit tanaman (seedling), bagian	Africa: Tanzania America: Dominica,Trinidad and Tobago, USA, Brazil,

	alternanthera potexvirus; Olive vein yellow virus; Portulaca virus; Salvia potexvirus; Trichosanthes virus; Ullucus potexvirus; Boussingaultia mosaic virus; Papaya mild mosaic virus; Pawpaw mild mosaic virus; Argentine plantago virus			tanaman (part of plant)	Venezuela Oceania: Guam
67.	Papaya necrosis virus (Papaya droopy necrosis virus (PDNV), papaya apical necrosis virus (PANV))	(P): *Carica papaya* (papaya, papaw)	I	tanaman (plant)	America: USA
68.	Pea enation mosaic enamovirus (PEMV) Sin: pea enation mosaic virus-1, pea enation mosaic virus 'group'	(P): *Vicia faba* (S): *Cicer arietinum, Lathyrus odoratus, Lens culinaris, Medicago arabica, Pisum sativum, Trifolium incarnatum, Vicia sativa*	I	benih (seed), tanaman (plant) Vector: : *Acyrthosiphon pisum, Myzus persicae*	Europe: Austria, Czech, Slovakia, Germany, UK America: USA, Canada Asia: China, Iran
69.	Pea streak carlavirus Sin: Alfalfa latent virus, pea streak carlavirus, pea streak virus,	(P): *Pisum sativum* (kapri, sweet pea),	I	tanaman (plant)	Europe: widespread America: Canada, USA

	Steinklee virus, pea streak virus	(S): Leguminosae, *Medicago sativa, Cicer arietinum*			
70.	Peach latent mosaic viroid (PLMVD) ; Pelamoviroid Sin: Peach latent mosaic virus; Prunus virus 5; Peach yellow mosaic viroid; Peach yellow mosaic; Peach blotch; Peach virus 6; Peach American mosaic disease; Peach American mosaic pathogen; Peach mosaic; Peach calico; Peach latent mosaic pelamoviroid	(P): *Prunus persica* (peach) (S): *Prunus armeniaca* (apricot), *Prunus avium* (sweet cherry), *Prunus domestica* (plum)	I	Buah (fruits), polong (pods), inflorescence, daun (leaves), batang (stems) dan seluruh tanaman (whole plant).	Europe : Austria, Bosnia and Herzegovina, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Greece, Italy, Romania, Montenegro, Spain Asia : China, Japan, Lebanon, Syria Africa : Algeria, Egypt, Morocco, South Africa, Tunisia America : Canada, Mexico, USA, Uruguay Oceania : Australia
71.	Peach rosette mosaic nepovirus (PRMV) Sin: grape decline virus,	(P): *Vitis vinifera* (anggur, grapevine), *Prunus persica* (S): *Vaccinium*	I	benih (seed), batang (stem), daun	Asia: India, Turkey Africa: Egypt

	grapevine degeneration virus, rosette mosaic virus	*corymbosum*, *Rumex crispus*, *Solanum carolinense*, *Taraxacum officinale*		(leaf), buah (fruit), suluran (stolon), tanah (soil), media tanam (planting medium) Vector : *Xiphinema americanum*, *Longidorus diadecturus*	America: Canada , USA
72.	Peanut chlorotic streak caulimovirus (PCSV)	(P): *Arachys hypogaea* (kacang tanah, groundnut, peanut) (S): *Canavalia ensiformis*, *Cyamopsis tetragonoloba*, *Glycine max*, *Vigna* sp. (kacang panjang, cowpea), *Spinacia oleracea*, *Vicia faba* (kacang babi, broad bean), *Vigna radiata*, *Vigna unguiculata*	I	Tanaman (plant)	Asia: India

73.	Peanut clump pecluvirus Sin: peanut clump furovirus, Indian peanut clump virus (IPCV)	(P): *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Saccharum officinarum* (tebu, sugarcane), *Triticum aestivum* (gandum, wheat), *Setaria Italyca* (foxtail millet)	I	Benih/biji (seed/grain), tanaman (plant) Vector: : *Polymyxa graminis*	Asia: India, Pakistan Africa: Burkina Faso, Ivory Coast, Senegal
74.	Peanut green mosaic potyvirus Sin: peanut chlorotic mottle virus (PCMV)	(P): *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Vigna* sp. (kacang panjang, cowpea), *Tetragonia tetragonioides*	I	tanaman (plant) Vector: *Aphis gossypii, Myzus persicae*	Asia: India
75.	Peanut stunt cucumovirus (PSV) Sin: Black locust true mosaic virus, Clover blotch virus, Groundnut stunt virus, Peanut common mosaic virus, Robinia mosaic virus	(P): *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Glycine max* (kedelai, soybean), *Lycopersicum esculentum* (tomat, tomato), *Nicotiana tabacum* (tembakau, tobacco), pea, *Vigna* spp. (buncis, cowpea)	I	benih (seed), tanaman (plant) Vector: *Aphis craccivora, A.*	Europe: France, Hungary, Italy, Poland, Spain, Georgia Asia: China, Japan, Korea Africa: Morocco, Sudan America: USA

				spiraecola, Myzus persicae	
76.	Plum pox virus (PPV) ; Potyvirus Sin: plum pox potyvirus; Prunus virus 7; Annulus pruni; Sharka virus	(P): *Prunus armeniaca* (apricot), *Prunus domestica* (plum), *Prunus dulcis* (almond), *Prunus persica* (peach), *Prunus salicina* (Japanese plum) (S): *Juglans regia* (walnut), *Prunus avium* (sweet cherry), *Prunus besseyi* (bessey cherry), *Prunus cerasifera* (myrobalan plum), *Prunus spinosa* (blackthorn), *Prunus tomentosa* (Nanking cherry tree) (Wild hosts): *Prunus glandulosa* (flowering almond), *Prunus japonica* (Japanese bush cherry tree), *Prunus serotina* (black cherry)	I	Buah (fruits), polong (pods), daun (leaves), batang (stems), akar (root), benih/biji (seeds), dan bibit (seedling).	Europe : Albania, Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, France, Germany, Greece, Hungary, Italy, Lithuania, Luxembourg, Moldova, Netherlands, Norway, Poland, Portugal, , Romania, Russia, Serbia and Montenegro, Slovakia, Slovenia, Spain, Ukraine, UK Asia : India, Iran, Jordan, Kazakhstan, Syria, Turkey Africa : Egypt America : Canada, USA, Argentina, Chile

77.	Potato black ringspot nepovirus (PBRSV); Sin: potato calico strain of tobacco ringspot virus, Andean potato calico strain of tobacco ringspot virus, Andean potato calico strains nepovirus	(P): *Solanum tuberosum* (kentang, potato) (S): *Arracacia xanthorrhiza*, *Oxalis tuberose*	I	umbi (tuber), tanaman (plant)	America: Peru
78.	Potato mop-top pomovirus (PMTV) Sin: Potato mop-top furovirus	(P): *Solanum tuberosum* (kentang, potato)	I	umbi (tuber), tanaman (plant) Vector: *Spongospora subterranea*	Europe: Czech, Slovakia, Denmark, Estonia, Finland, Germany, Ireland, Netherlands, Norway, Sweden, UK Asia: China: Taiwan, Israel, Japan, Pakistan America: Bolivia, Canada , Chile, Peru, USA
79.	Potato spindle tuber pospiviroid (PSTV) Sin: Potato spindle viroid, Spindle tuber viroid,Potato gothic virus, tomato bunchy top viroid	(P): *Solanum tuberosum* (kentang, potato), *Lycopersicum esculentum* (tomat, tomato), *Persea americana* (alpokat,	I	benih (seed), umbi (tuber, polen, tanaman (plant)	Europe: Belarus, Germany, Poland, Russia (Southern Russia), Ukraine Asia: Afghanistan,

		avocado) (S): *Beta vulgaris* var *saccharifera* (bit gula, sugar beet)		Vector: *Macrosiphum euphorbiae, Myzus persicae*	China, India Africa: Egypt, Nigeria, Argentina America: Canada, Chile, Costa Rica, Peru, USA, Venezuela Oceania: Australia, New Zealand
80.	Potato Vein Yellowing crinivirus (PYVV) Sin: Potato vein-yellowing disease, Potato yellow vein disease	(P): *Solanum tuberosum* (kentang, potato)	I	umbi (tuber), tanaman (plant) Vector: *Trialeurodes vaporariorum*	America: Colombia, Ecuador, Peru, Venezuela
81.	Potato T trichovirus (PV-T) Sin: Potato T capillovirus	P: *Solanum tuberosum* (kentang, potato) S: *Oxalis tuberosa* , *Ullucus tuberosus*	I	umbi (tuber), benih (seed), tanaman (plant)	America: Bolivia, Peru, Uruguay
82.	Potato U Nepovirus (PV-U)	(P): *Solanum tuberosum* (kentang, potato), *Nicotiana tabacum* (tembakau,	I	umbi (tuber), benih (seed) Vector:	America: Peru

		tobacco), Beta vulgaris (bit, beetroot), *Cucumis sativus* (mentimun, cucumber), *Lycopersicum esculentum* (tomat, tomato)		*Longidorus* sp.	
83.	Potato yellow dwarf virus (PYDV); Nucleorhabdovirus Sin: Potato yellow dwarf nucleorhabdovirus; yellow dwarf of potato	(P*): Solanum tuberosum* (potato) (S): *Catharanthus roseus* (Pink periwinkle), *Lycopersicon esculentum* (tomato), *Mirabilis jalapa* (marvel of Peru), *Nicotiana alata* (sweet-scented tobacco), *Tagetes erecta* (African marigold), *Zinnia elegans* (zinnia) (Wild hosts): *Anthemis cotula* (dog fennel), *Brassica nigra* (black mustard), *Erysimum cheiranthoides* (Treacle mustard), *Lepidium campestre* (Field cress), *Lepidium virginicum* (n peppercress), *Verbascum thapsus* (Aaron's-rod)	I	Umbi (tubers, bulbs), titik tumbuh (Growing points), daun (leaves), akar (roots), batang (stems), organ vegetatif (vegetative organs) dan seluruh tanaman (whole plant.)	America : Canada, USA

84.	Prunus necrotic ringspot ilarvirus (PNRSV) Sin: rose line pattern virus, European plum line pattern virus, hop B virus, hop C virus, peach ringspot virus, plum line pattern virus, prunus ringspot virus, red currant necrotic ringspot virus, rose chlorotic mottle virus, rose vein banding virus, rose yellow vein mosaic virus, sour cherry necrotic ringspot virus	(P): *Prunus persica*, *Prunus cerasus, Prunus persica*, *Rosa* spp. (mawar, rose), *Prunus domesticum* (plam, plum), *Prunus dulcis* (almon, almond), *Humulus*, *Cucumis sativus* (ketimun, cucumber)	I	benih (seed), polen, batang (stem), tanaman (plant)	America: USA Europe Australia Asia: Asia subtropic
85.	Raspberry ring spot nepovirus (RpRSV) Sin: Raspberry Scottish leaf curl virus, Red currant ringspot virus, Red currant ringspot virus	(P) : *Rubus* spp. (raspberry), *Fragaria vesca* (arbei, strawberry), *Prunus cerrasus* (ceri, cherry), *Vitis vinifera* (anggur, grapevine), *Prunus cerrasus* (ceri, cherry), *Prunus domesticum* (plam, plum), *Prunus americana* (aprikot, apricot), *Prunus persica* (persik, peach), *Fragaria vesca* (arbei, strawberry) *Ligustrum*	I	benih (seed), pollen, tanaman (plant) Vector: *Longidorus elongatus, L. macrosoma*	Europe: Belgium, Bulgaria, Czech, Finland, France, Germany, Greece, Ireland, Latvia, Luxembourg, Netherlands, Norway, Poland, Russia, Spain, Switzerland, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia

		vulgare, *Narsisus pseudonar cissus*, *Ribes*, *Weigela* (S) : *Daphne*, *Forsythia*, *Phlox*, *Cynara scolymus*			Asia: Kazakhstan, Turkey, Siberia
86.	Rice Black Streaked Virus (RBSDV) Sin: Rice black-streaked dwarf fijivirus; Rice black streak virus; Rice streak (dwarf) virus; Black streaked dwarf disease	(P): *Avena sativa* (oat, oats), *Hordeum vulgare* (barley), *Oryza sativa* (padi, *paddy)*, *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, maize) (S): *Beckmannia syzigachne* (american sloughgrass), *Eleusine coracana* (finger millet), *Festuca arundinacea* (reed fescue), *Lolium multiflorum* (Italian ryegrass), *Lolium perenne* (perennial ryegrass), *Panicum miliaceum* (millet), *Phleum pratense* (timothy), *Poa annua* (annual meadowgrass), *Secale cereale* (rye), *Setaria*	I	benih (seed), bagian tanaman (part of plant)	Asia: China, Japan, Korea America: Argentina

		italica (foxtail millet), *Sorghum bicolor* (sorghum), *Triticum* (wheat)			
87.	Rice Dwarf phytoreovirus (RDV) Sin: Rice mosaic virus, Rice stunt, Oryza virus 1	(P): *Oryza sativa* (padi, paddy)	I	Tanaman (plant) Vector: *Nephotettix cincticeps, N. nigropictus, Nephotettix* spp., *Recilia dorsalis*	Asia: China, Japan, Korea, Nepal
88.	Rice hoja blanca tenuivirus (RHBV) Sin: Echinochloa hoja blanca virus	(P): *Oryza sativa* (padi, paddy), *Triticum aestivum* (gandum, wheat), *Avena sativa* (oat, oats) (S): *Hordeum vulgare* (barli, barley),Secale cereale (rye)	I	tanaman (plant) Vector: *Tagosodes orizicolus*	America: Argentina, Belize, Brazil, Colombia, Costa Rica, Cuba, Dominica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Mexico, Panama, Peru, Puerto Rico, Suriname, Trinidad and Tobago, USA, Venezuela

89.	Rice stripe tenuivirus (RSV)	(P): *Oryza sativa* (padi, paddy) (S): *Zea mays* (jagung, corn, maize), *Triticum aestivum* (gandum, wheat), *Avena sativa* (oat, oats), *Hordeum vulgare* (barli, barley), Secale cereale (rye), rumput-rumputan	I	tanaman (plant), biji (kontaminan) Vector: *Laodelphax striatellus, Terthron albovittatum , Unkanodes sapporona, U. albifascia*	Europe: Russia Asia: Siberia, China, Japan, Korea
90.	Rice transitory yellowing nucleo rhabdovirus (RTYV)	(P): *Oryza sativa* (padi, paddy)	I	tanaman (plant) Vector: *Nephotettix cincticeps, N. nigropictus, N. virescens*	Asia: China, Japan, Thailand, Vietnam, Laos
91.	Rice yellow mottle sobemovirus (RYMV)	(P): *Oryza sativa* (padi, paddy)	I	tanaman (plant) Vector:	Africa: Burkina Faso, Cameroon, Chad, Ivory Coast, Gambia, Ghana,

				Sesselia pusilla, *Chaetocnema* spp., *Dactylispa* spp., *Dicladisa viridicyanea*, *Trichispa sericea*, Chrysomelidae lain	Guinea-Bissau,Guinea, Kenya, Liberia, Madagascar, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Tanzania: Zanzibar, Zimbabwe
92.	Rose streak virus (RSV)	(P): *Rosa* spp. (mawar, rose)	I	batang (stem), tanaman (plant)	Africa: South Africa America: USA Oceania: Australia, New Zealand
93.	Satsuma dwarf orange nepovirus (SDV) Sin: *Citrus* mosaic virus, Natsudaidai dwarf virus, Navel orange infectious mottling virus,*Citrus* satsuma dwarf nepovirus, *Citrus* (navel orange) infectious mottling virus	(P): *Citrus* spp.(jeruk, orange)	I	mata tunas (eyebud), benih (seed), tanaman (plant)	Asia: China, Iran, Japan , Korea, Turkey

94.	Squash mosaic comovirus (SqMV) Sin: cucurbit ring mosaic virus, musk melon mosaic como virus, muskmelon necrotic mosaic virus, squash mosaic comovirus, pumpkin mosaic virus, watermelon stunt virus	(P): Cucurbitaceae, *Citrullus vulgaris* (semangka, watermelon), *Cucumis melo* (melon), *Cucumis sativus* (mentimun, cucumber), *Cucurbita maxima* (waluh, labu parang, pumpkin), *C. pepo*	I	benih (seed), tanaman (plant) Vector: *Acalymma trivittata, A. thiemei thiemei, Diabrotica undecimpunctata undecimpunctata, D. bivittula, Epilachna chrysomelina; E. paenulata*	Europe: Greece, Italy, Netherland Asia: Bangladesh, China, India, Iran, Israel, Japan, Jordan, Kazakhstan, Lebanon, Philippines, Yemen, Africa: Egypt, Morocco America: Argentina, Brazil , Canada , Honduras, Jamaica, Mexico, Montserrat, USA, Venezuela Oceania: New Zealand
95.	Strawberry crinkle virus (SCV) Sin: strawberry crinkle rhabdovirus, strawberry latent virus A, strawberry crinkle cytorhabdovirus, strawberry latent virus B,	(P): Fragaria (strawberry), *Fragaria ananassa*	I	bunga (flower), buah (fruit), bibit tanaman (seedling)	Europe: Belgium, Bulgaria, Czech, France, Germany, Italy, Netherlands, Poland, Serbia-Montenegro, Slovakia, UK, Scotland

	strawberry latent A, (mild form), strawberry latent A, strawberry latent B, strawberry lesion A, strawberry lesion B, strawberry vein chlorosis				Asia: China, Israel, Japan, Kazakhstan, Korea Africa: South Africa America: Canada , Mexico, USA, Brazil, Chile Oceania: Australia, Fiji, New Zealand
96.	Strawberry latent C rhabdovirus (SLCV)	(P): *Fragaria vesca* (arbei, strawberry)	I	suluran (stolon) Vector: *Chaetosiphon fragaefolii*	Asia: Japan America: Canada, USA
97.	Strawberry mild yellow edge virus (SMYEV) Sin: Strawberry mild yellow edge disease; Strawberry yellow edge; Strawberry mild yellow edge potexvirus; Strawberry mild yellow edge associated virus; Strawberry xanthosis; strawberry virus 2	(P): Fragaria (strawberry), *Fragaria ananassa* (strawberry), *Fragaria chiloensis* (Chilean strawberry), *Fragaria ovalis*, *Fragaria vesca* (wild strawberry), *Fragaria na* (scarlet strawberry (UK))	I	Bunga (flower), buah (fruit), bibit tanaman (seedling)	Europe: Belgium, Bulgaria, Czech, France, Germany, Hungary, Ireland, Italy, Netherlands, Poland, Serbia-Montenegro, Slovakia, Switzerland, UK Asia: China, Israel,

					Japan Africa: South Africa America: Canada , USA, Brazil, Chile, Paraguay Oceania: Australia, New Zealand
98.	Strawberry latent ring spot nepovirus (SLRSV) Sin: Aesculus line pattern virus, rhubarb virus 5	(P): *Apium graveolens, Asparagus officinalis* (asparagus, asparagus), *Fragaria vesca* (arbei, strawberry), *Lilium, Narsisus, Prunus americana* (aprikot, apricot), *Prunus avium, Prunus domesticum* (plam, plum), *Prunus persica* (persik, peach), Rheum hybridum, *Ribes nigrum, R.rubrum, Rubus fruticosa, Trifolium repens, Vitis vinifera* (anggur, grapevine). (S): Aesculus, *Humulus lupulus, Pastinaca sativa*	I	benih (seed), tanaman (plant) Vector: *Xiphinema diversicaudatum, X. coxi, Paralongidorus maximus*	Europe: Belgium, Czech, Finland, France, Germany, Hungary, Ireland, Italy, Luxembourg, Netherlands, Poland, Portugal, Romania, Spain, Switzerland, UK (England, Wales), Northern Ireland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: Turkey America: USA Oceania: Australia

99.	Strawberry vein banding virus (SVBV) Sin: Strawberry veinbanding caulimovirus; Strawberry virus 5	(P): *Fragaria vesca* (wild strawberry), Fragaria (strawberry), *Fragaria ananassa* (strawberry)	I	daun (leaf), bibit tanaman (seedling)	Europe: Czech, Denmark, Germany, Hungary, Ireland, Italy, Norway, Russia, Serbia, Slovakia, UK Asia: China, Japan America: Canada, USA, Brazil, Chile Oceania: Australia
100	Sugarcane bacilliform badnavirus (SCBV)	(P): *Saccharum officinarum* (tebu, sugarcane)	I	tunas (bud), batang (stem), mata tunas (eye-bud)	America: Cuba, Morocco, USA
101	Sugarcane mild mosaic virus (SCMMV)	(P): *Saccharum officinarum* (tebu, sugarcane)	I	bagian tanaman (part of plant)	Ref: ▪ Ganoo S., Autrey L.J.C., Lockhart B.E.L. , 1998. Distribution of sugarcane mild mosaic virus in sugarcane germplasm in Mauritius. Sugar Cane 2: 22–24.

					▪ Autrey, L. J. C., Ganoo, S., and Saumtally, S. (1994). Occurrence of sugarcane mild mosaic virus in sugarcane germplasm in Mauritius. In : BSES Program and Abstracts, 4th ISSCT Pathology Workshop, Brisbane, Australia, 4th-9th April 1994, p. 24. Brisbane. BSES. (Abstract only) ▪ Lockhart B.E., Autrey L.J.C., 2000. Mild mosaic. *In:* A guide to sugarcane diseases, P. Rott, R. Bailey, J.C. Comstock, B. Croft and S. Saumtally (Eds), p. 245-248. Montpellier, France, CIRAD/ISSCT.

102	Sugarcane yellow leaf luteovirus (ScYLV)	(P); *Saccharum officinarum* (tebu, sugarcane) (S): *S.robustum, S. sinensis, S.spontaneum*	I	batang (stem), suluran (stolon), tanaman (plant) Vector: *Melanaphis sacchari, Rhopalosiphum maidis*	America: USA, Mexico, Cuba, Dominica, Peru, Brazil, Colombia, Argentina, Hawai, Jamaica, Barbados, Guatemala, El Salvador Asia: Iran, India, Thailand Africa: Morocco, Uganda, Senegal, Kenya, Zambia, Malawi, Zimbabwe, South Africa, Reunion, Mauritius Oceania: Australia, Papua New Guinea
103	Tobacco rattle virus (TRV) ; Tobravirus Sin: tobacco rattle tobravirus; aster ringspot virus; potato stem mottle virus; peony mosaic virus; belladonna mosaic virus; peony ringspot virus; paeony mosaic virus; paeony ringspot virus;	(P): *Beta vulgaris* var. *saccharifera* (sugarbeet), *Capsicum annuum* (bell pepper), Freesia , *Gladiolus hybrids* (sword lily), Iris (irises), *Lilium candidum* (madonna lily), *Nicotiana tabacum* (tobacco), *Secale*	I	Titik tumbuh (Growing points), daun (leaves), batang (stems), organ vegetatif	Europe : Austria, Belarus, Belgium, Bulgaria, Czech Republic, Czech Republic and Slovakia , Denmark, Finland, Serbia, Slovenia, Croatia, Bosnia and

	potato corky ringspot virus; ratel virus; Tabakmauche Virus; Tabakstreifen- und Kra; spinach yellow mottle virus; tulip white streak virus; Oregon yellow virus; spinach yellow mottle; fraxinus virus	*cereale* (rye), *Solanum tuberosum* (potato), Tulipa (tulip) (S): *Allium cepa* (onion), *Allium sativum* (garlic), *Alstroemeria* (Inca lily), *Anemone* (windflower), *Brassica* sp. , *Cyclamen* , *Cynara cardunculus* L. var. *scolymus* (globe artichoke), *Fraxinus* (ashes), *Hosta* spp. , *Lactuca sativa* (lettuce), *Lilium longiflorum* (Easter lily), Narcissus (daffodil), Peperomia , *Phaseolus vulgaris* (common bean), Phlox , *Phlox paniculata* (summer perennial phlox) (Wild hosts): Amaranthus (grain amaranth), Artemisia (wormwoods), *Artemisia vulgaris* (mugwort), *Capsella bursa-pastoris* (shepherd's purse), *Galium*		(vegetative organs) dan semua tanaman (whole plant).	Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Macedonia, Moldova, Netherlands, Norway, Poland, Russia, Sweden, Switzerland, UK Asia : Bangladesh, China, India, Israel, Japan, Korea Republic of (South Korea) , Uzbekistan, Africa : Egypt , South Africa, Tunisia America : Cuba, Canada, USA, Bolivia, Brazil Oceania : Australia, New Zealand

		mollugo (Hedge bedstraw), Malva (mallow), Physalis (Groundcherry), Plantago (Plantain), *Portulaca oleracea* (purslane), Rumex (Dock*), Solanum nigrum* (black nightshade), Sonchus (Sowthistle), *Stellaria media* (common chickweed), *Tussilago farfara* (Colt's-foot), *Viola arvensis* (feld pansy)			
104	Tobacco streak ilarvirus (TSV) Sin: Asparagus stunt virus, Asparagus stunt virus, Datura quercina virus, New logan virus, Nicotiana virus 8, Nico-tiana virus vulnerans, strawberry necrotic shock virus, tractus orae, Black raspberry latent ilarvirus, Black raspberry latent virus, Bean red node strain, Black raspberry latent strain	(P): *Vigna* spp. (kacang panjang, cowpea), *Nicotiana tabacum* (tembakau, tobacco), *Lycopersicum esculentum* (tomat, tomato), *Capsicum annuum* (cabai, hot pepper, chilies, red pepper), *Glycine max* (kedelai, soybean), *Fragaria*, *Asparagus officinalis* (asparagus, asparagus), *Cynara scolymus*,	I	buah (fruit), bunga (flower), daun (leaf), tunas (bud), akar (root), batang (stem), benih (seed)	Europe: Denmark, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Netherlands, Norway, Scotland Asia: China, India, Iran, Israel, Japan, Singapore Africa: South Africa America: Argentina,

		Gossypium herbaceum, *Helianthus annuus* (bunga matahari, sunflower), *Lactuca sativa* (letus, lettuce), *Medicago sativa*, *Vigna* sp. (kacang panjang, cowpea), *Vigna angularis*, *Pisum sativum*, *Rubus* sp. (black raspberry), *Solanum tuberosum* (kentang, potato), *Trifolium pratense* (S): *Carica papaya* (pepaya, pawpaw), *Cichorium endivia*, *Cicer arietinum*,*Cucumis sativus* (mentimun, cucumber), *Cyphomandra betacea*, *Dahlia*, *Eustoma grandiflorum*, *Gladiolus* hybrids, *Melilotus alba*, raspberry, *Rubus ursinus*, *Trigonella foenumgraecum*			Brazil , Canada , Mexico, Peru, USA, Venezuela Oceania: Australia, New Zealand
105	Tomato Aspermy cucumovirus (TAV) Sin: *Chrysanthemum* aspermy virus,	(P): *Chrysanthemum* spp. (krisan, chrysant), aster, *Capsicum annuum* (cabai,	I	benih (seed), tanaman (plant)	Europe: Estonia, Belarus, Latvia, Lithuania, Estonia,

	Chrysanthemum mild mottle virus, tomato aspermy cucumovirus, *Chrysanthemum* mosaic virus,cucumis virus 1, lycopersicon virus 7	hot pepper, chilies, red pepper), *Lycopersicum esculentum* (tomat, tomato), *Canna* sp., *Lilium* sp., *Mentha spicata*, *Petunia hybrida*, *Zinnia elegans*		Vector: *Myzus persicae*	Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Poland, Romania Asia: China, India, Japan, America: Canada, USA Oceania: Australia, New Zealand
106	Tomato black ring virus (TBRV) ; Nepovirus Sin: tomato black ring nepovirus; bean ringspot virus; beet ringspot virus; lettuce ringspot virus; potato bouquet virus; potato pseudo-aucuba virus	(P): *Allium cepa* (onion), *Allium porrum* (leek), *Apium graveolens* (celery), *Beta vulgaris* var. *saccharifera* (sugarbeet), *Brassica napus* var. *napobrassica* (swede),	I	Benih (seeds), buah (fruits), polong (pods), daun (leaves), dan seluruh	Europe : Albania, Belarus, Belgium, Bulgaria, Croatia, Czech Republic, Finland, France, Germany, Greece, Hungary, Ireland,

		Brassica rapa subsp. *rapa* (turnip), *Capsicum* (peppers), *Cucumis sativus* (cucumber), *Cynara cardunculus* L. var. *scolymus* (globe artichoke), *Fragaria* (strawberry), *Fragaria ananassa* (strawberry), *Gladiolus hybrids* (sword lily), *Lactuca sativa* (lettuce), *Lycopersicon esculentum* (tomato), *Narcissus* (daffodil), *Phaseolus vulgaris* (common bean), *Prunus persica* (peach), Ribes (currants), Rubus (blackberry, raspberry), *Solanum melongena* (aubergine), *Solanum tuberosum* (potato), *Vitis vinifera* (grapevine) (S): *Forsythia intermedia* (Golden bells), *Syringa vulgaris* (lilac)		tanaman (whole plant.)	Moldova, Netherlands, Norway, Poland, Romania, Russia, Serbia and Montenegro, Sweden, Switzerland, UK, Scotland Asia : India, Japan, Turkey America : Chile

		(Wild hosts): *Capsella bursa-pastoris* (shepherd's purse), Herbaceous hosts , *Lamium* amplexicaule (henbit deadnettle), Sambucus nigra (elder)			
107	Tomato ringspot virus (ToRSV) Sin: Tomato ringspot nepovirus, Prunus stem pitting virus, blackberry (Himalaya) mosaic virus, Nicotiana 13 virus, Tobacco ringspot virus 2, peach stem pitting virus, prune brown line virus, gravelins yellow vein virus, Red currant mosaic vurus, winter peach mosaic virus, apple union necrotic nepovirus	*(*P) : *Fragaria chiloensis* (Chilean strawberry), *Malus domestica* (apple), *Nicotiana tabacum* (tobacco), *Pelargonium (*pelargoniums*), Prunus* (stone fruit), *Prunus armeniaca* (apricot), *Prunus avium* (sweet cherry), *Prunus cerasus* (sour cherry), *Prunus domestica* (plum), *Prunus persica* (peach), *Prunus salicina* (Japanese plum), *Ribes* (currants), *Rubbus* (blackberry, Raspberry), *Rubbus idaeus* (raspberry), *Vitis vinifera* (grapevine),	I	benih (seed), tanaman (plant), bagian tanaman (part of plant).	Europe: Belarus, Belgium, Bulgarium, Croatia, Czech, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Lithuania, Netherlands, Norway, Portugal, Russia, Serbia, Montenegro, Slovakia, Slovenia, Sweden, UK Asia: China, Iran, Japan, Jordan, South Korea, Oman, Pakistan, Turkey Africa : Egypt, Togo, Tunisia America : Puerto Rico, Canada, Mexico, USA,

					Argentina, Chile, Peru, Venezuela Oceania : Australia, New Zealand

VI. GULMA / WEEDS

NO.	NAMA ILMIAH/ORDO/FAMILI/NAMA UMUM/ *SCIENTIFIC NAME/TAXON/ COMMON NAME*	MEDIA PEMBAWA/ *PATHWAY*	GOL / *GROUP*	DAERAH ASAL/ *GEOGRAPHICAL DISTRIBUTION*
1.	*Agropyron repens* (L.) Beauv.; *(Elymus repens = Elytrigia repens =Triticum repens)*; Poaceae; quack grass, couch grass, quackgrass, rope twich	*Triticum aestivum* (gandum, wheat), Poaceae, *Avena sativa* (oat, oats) , *Beta vulgaris* var *saccharifera* (bit gula, sugar beet), *Brassica* spp., *Daucus carota* (wortel, carrot), *Helianthus annuus* (bunga matahari, sunflower), *Hordeum vulgare* (barli, barley), *Linum usitatissimum*, *Medicago sativa*, pastures, *Phaseolus* spp., *Pisum sativum* (kapri, sweet pea), Secale cereale (rye) , *Solanum tuberosum* (kentang, potato), *Trifolium*, *Zea mays* (jagung, corn,	II	Europe: Austria, Belarus, Belgium, Bulgaria, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden: Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Asia: Afghanistan, Armenia, Bangladesh, Georgia, India, Iran, Israel, Japan, Kazakhstan, Mongolia, Pakistan, Turkey Africa: Egypt, Nigeria America: Argentina, Canada,

		maize)		Ecuador, USA Oceania: Australia, New Zealand, Papua New Guinea
2.	*Alopecurus myosuroides* (Hudson); Poaceae; blackgrass, slender foxtail	*Triticum aestivum* (gandum, wheat), *Hordeum vulgare* (barli, barley), *Brassica napus* var. *napus*, Secale cereale (rye)	II	Europe: Albania, Austria, Belgium, Bulgaria, Czech, Slovakia, Denmark, France, Corsica, Germany, Greece, Hungary, Italy, Macedonia, Netherlands, Norway, Portugal, Romania, Russia, Slovenia, Spain, Sweden, Switzerland, UK Asia: Afghanistan, China, India, Iran, Iraq, Israel, Jordania, Lebanon, Pakistan,Turkey Africa: Northern Africa America: Argentina, Bolivia, Canada, Mexico, Peru, USA, Uruguay, Oceania: Australia, New Zealand
3.	*Alectra sessiliflora* (Vahl) Kuntze; Schropulariaceae	Leguminoceae (kacang-kacangan)	II	Africa Asia : India, Myanmar, China, Philippines

4.	*Alectra vogelli* (Benth); Schropulariaceae	Leguminoceae (kacang-kacangan)	II	Europe : Switzerland Africa : South Africa, Central Africa, Mali, Kenya
5.	*Alectra orobanchoides* (Benth); (= *A kirkii* Benth. Kick; tobacco witch weed	Leguminoceae (kacang-kacangan)	II	Africa : Kenya
6.	*Asphodelus fistulosus* (L.); Asphodelaceae; onion weed, asphodelus, wild onion	*Cicer arietinum, Linum usitatissimum, Nicotiana tabacum* (tembakau, tobacco), *Pisum sativum* (kapri, sweet pea), *Solanum tuberosum* (kentang, potato), *Triticum aestivum* (gandum, wheat)	II	Europe: Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Greece, Italy, Portugal, , Spain, Balearic Islands. Asia: Afghanistan, Bangladesh, India, Iran, Iraq, Israel, Malaysia, Nepal, Oman, Pakistan, Saudi Arabia, Turkey, Yemen Africa: Algeria, Egypt, Mauritius, Morocco, Sudan America: Bolivia, Mexico, Peru, USA Oceania: Australia, New Zealand
7.	*Bunchnera hispida* (Bunch.Ham.Ex Don); Orobanchaceae	*Sorghum bicolor* (cantel, sorghum), *Setaria italic* (jewawut, millet)	II	Africa : Africa Southeast and Tropic Asia : India, Madagaskar

8.	*Cirsium arvense* (L.) Scop. *; (= Cirsium incanum = C.lanatum =C.setosum =C.arvensis);* Asteraceae; california thistle, canada thistle, creeping thistle, field thistle	*Triticum aestivum* (gandum, wheat), *Aeschynomene falcata, Avena sativa* (oat, oats), *Bromus, Brassica napus* var. *napus, Carthamus tinctorius, Coronilla varia, Dactylis glomerata, Fagopyron esculentum, Glycine max* (kedelai, soybean), *Gossypium barbadens* (kapas, cotton), *Helianthus annuus* (bunga matahari, sunflower), *Hordeum vulgare* (barli, barley), *Linum usitatissimum, Lotus corniculatus,* Lu*Pinus merkusii* (tusam, pinetree), *Medicago sativa, Onobrychis viciifolia, Panicum miliaceum,* Phleum, *Pisum sativum* (kapri, sweet pea), *Poa, Polyphagous, Secale cerea*le (rye) , *Sorghum bicolor* (sorgum, sorghum), Trifolium, *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, corn, maize)	II	Europe: Belgium, Bulgaria, Czech Republic, Denmark, Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Iceland, Italy, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Ukraine, UK Asia: Afghanistan, Armenia, China, India, Iran, Japan, Korea, Lebanon, Pakistan, Turkey Africa: Angola, South Africa, Sudan, Swaziland, Tunisia, Zimbabwe America: Canada, Chile, Mexico, USA Oceania: Australia, New Zealand.

9.	*Cuscuta monogyna* (Vahl.); Convolvulaceae	Leguminoceae, jeruk, Tamarix, Salix	II	Europe : France, South Europe Asia : Central East, Afghanistan Oceania: Mediteranean
10.	*Cuscuta japonica (*Choisy); Convolvulaceae	Solanum tuberosum (kentang, potato), Terong, Tomat	II	Asia : Japan
11.	*Cuscuta pedicellata (*Ledeb) ;Convolvulaceae	Leguminoceae	II	Asia : Central Asia, Central East Asia Oceania: Eastern Mediteranean
12.	*Cuscuta planiflora (*Ten.); (= *C. Approximate);* Convolvulaceae	Leguminoceae	II	America: North America Asia: Central Asia Oceania: Mediteranean
13.	*Cuscuta epilinum (*Weike); Convolvulaceae	Flax dan Linseed	II	Europe America : Canada, USA Africa : Ethiopia, Egypt, Morocco, South Africa Asia : Cyprus
14.	*Cuscuta epithyum* (L.) Murr. (= *C. Trifoli)*.; Convolvulaceae	Herbaceous, Legume	II	Europe America : North America, Argentina,

				Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana Asia : Japan, West Asia Africa : South Africa Oceania : Australia
15.	*Cuscuta indecora (*Choisy.); Convolvulaceae; Thin-vine dodder	Leguminoceae	II	Europe : Greece America : North dan Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana Africa : Morocco
16.	*Cuscuta gronovii (*Willd.); Convolvulaceae; Swamp dodder	Herbaceous, Kentang, Lada, Celery	II	Europe North America
17.	*Digitaria scalarum* (Schweinf.) Chiov.; *(=Digitaria abyssinica =D.abyssinica* var. *scalarum =D.eichingeri =D.hackelii =D.merkeri =D.mutica =D.scalarum*	*Agave part oflana*, *Ananas comosus* (nenas, pineapple), *Coffea* spp. (kopi, coffee), *Gossypium barbadens* (kapas, cotton), *Saccharum officinarum* (tebu,	II	Africa: Nigeria, South Africa, Kenya, Uganda, Burundi, Rwanda, Tanzania, Madagascar Asia: Saudi Arabia, India, Sri Lanka,.

	=D.somaliensis =D.tangaensis =D.vestita =Panicum abyssinicum =P.hackelii =P.kafuroense =P.muticum =P.scalarum); Poaceae; cough grass	sugarcane), *Zea mays* (jagung, corn, maize)		
18.	*Emex australis (Steinh.)*; Polygonaceae; Spiny Emex	*Glycine max* (kedelai,soybean)	II	America : North America Africa :South Africa Oceania : Australia
19.	*Melampyrum arvense* (L.); Orobanchaceae	Cereal, Gandum, Barley	II	Europe : West Europe Asia : West Asia
20.	*Odontites verna (*Bell) Dum; (= *Bastsia odontites = O. serotinus)* ; Orobanchaceae	Grasses, Lucerne, Gandum	II	Europe : Southeast Europe America : North America Asia : Turkey
21.	*Orobanche ramosa (*L.); (= *O. mutelii, O. nana);* Orobanchaceae ; Broomrapes	Tanaman Solanaceae, Cruciferae dan Legume	II	Europe : Central Europe America : USA, Cuba Africa : North Africa Asia : Central East Oceania : Australia

22.	*Orobanche cernua (*Loefl.); (= *O. Cumana);* Orobanchaceae	Tanaman Compositae, Solanaceae	II	Europe : Southeast Europe, North Europe, Rusia Africa : Tanzania, Uganda Asia : India Oceania : Australia
23.	*Orobanche gracilis* (SM.); Orobanchaceae; Broomrapes	Legume	II	Europe : Sout East Europe Africa : Kenya, Uganda, Burundi, Rwanda, Tanzania
24.	*Orobanche foetida* (Poir.), Orobanchaceae; Broomrapes	Bean	II	Europe : Spain Africa : Morocco, Tunisia
25.	*Parthenium hysterophorus* L.; Asteraceae; Parthenium weeds	Pasture, sun flower (bunga matahari)	II	America: Tropical America, Caribean Island Asia: India, Pakistan Oceania: Eastern Queensland
26.	*Praxelis clematidea* R.M. King & H. Robinson; (=*Eupatorium catarium* Veldk.); Asteraceae	Pasture	II	America: Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana, Guyana Asia: Hongkong Oceania: Australia

27.	*Rhinanthus angustifolius* (C. Gmelin); (= *R. major* = *R. serotinus*); Orobanchaceae	Gandum, Barley	II	Europe Asia: West Asia America: North America
28.	*Rhinanthus minor (*L.); Orobanchaceae	Gandum, Barley	II	Europe America: North America Asia: West Asia
29.	*Ramphicarpa fistulosa* (Hochst)Benth ; (= *R. Longiflora)*; Schropulariaceae	Padi, Jagung, Rumput-rumputan	II	Africa : Africa Tropik, South Africa
30.	*Striga hermonthica* (Benth.); (= *S. senegalensis*); parasitic weed	Jagung, Sorgum, millet, Padi, Tebu	II	Africa : Africa, Angola, Namibia, Madagascar, Sudan, Ethiopia
31.	*Striga aspera* (Willd.), parasitic weed	Jagung, Sorgum, millet,	II	Africa : West Africa, Cameroon, Sudan, Ethiopia, Tanzania
32.	*Striga pasarggei* (Engl.); parasitic weed	Jagung/1	II	Asia : Saudi Arabia Africa : Senegal, Sudan, Tanzania, Nigeria
33.	*Striga forbesii* (Benth); parasitic weed	Jagung	II	Africa : Africa, Madagaskar

34.	*Striga latericea* (Vatke); (= *S. somaliensis*); Orobanchaceae; parasitic weed	Tebu	II	Africa : Ethiopia, Tanzania, Kenya, Somalia
35.	*Striga gesnerioides* (Willd) Vatke; (= *S. Orobanchoides* = *Buchnera gesnerioides*); Orobanchaceae; cowpea striga	Tembakau, Ubi jalar, Cowpea	II	America : Africa : Sudan Asia : Morocco, Sri Langka, India, Saudi Arabia
36.	*Thesium humile* (Vahl.); Santalaceae	Barly, grasses, Tebu	II	Europe : Spain Africa : North Africa
37.	*Thesium resdoides*; Santalaceae	Barly, grasses, Tebu	II	Africa : South Africa
38.	*Thesium australe* (R. Br.); Santalaceae	Barly, grasses, Tebu	II	Oceania : Australia

VII. TUNGAU / MITES

NO.	NAMA ILMIAH/ORDO/FAMILI/NAMA UMUM/ *SCIENTIFIC NAME / TAXON / COMMON NAME*	INANG / *HOSTS*	GOL / *GROUP*	MEDIA PEMBAWA/ *PATHWAYS*	DAERAH SEBAR / *GEOGRAPHICAL DISTRIBUTION*
1.	*Aceria cajani* Channabasavanna; Eriophydae, Arachnida; pigeon pea mite	*Cajanus cajan* (kacang gude, pigeon pea), Cajanus scarabaeoides (kacang gude, peanut grass)	II	bagian tanaman (part of plants)	Asia: India, Myanmar, Thailand, Nephal
2.	*Aceria ficus* (Cotte); *(=Aceria fici =Eriophyes fici =E.ficus)*; Eriophyidae, Arachnida; fig blister mite, fig mite, fig rust mite	*Ficus carica* (buah ara, fig)	II	bagian tanaman (part of plants)	Asia: Japan, India Eropa : All America : North america Africa: all Africa

3.	*Aceria guerrenronis* Keifer; *(=Eriophyes guerreronis)*; Eriophyidae, Arachnida; coconut mite	*Cocos nucifera* (kelapa, coconut) dan *Lytocaryum weddellianum*	II	buah (fruit), bagian tanaman (part of plants)	Asia: India, Sri Lanka, Oman Africa: Benin, Cameroon, Ivory Coast, Gambia, Nigeria, Sao Tome & Principe, Tanzania, Togo, New Guinea America: Anguilla, Bahamas, Brazil, Colombia, Cuba, Dominica, Grenada, Guadeloupe, Jamaica, Martinique, Mexico,Puerto Rico, Saint Lucia, Saint Vincent & the Grenadines, Trinidad and Tobago, USA, Venezuela.Costa Rica
4.	*Aculops lycopersici* Tryon.; *(=Aculops destructor =Aculus destructor =A.lycopersici =Phyllocoptes destructor =P.lycopersici =Vasates destructor =V.lycopersici);* Eriophyidae, Arachnida; tomato russet mite, tomato mite	(P): *Lycopersicum esculentum* (tomat, tomato), *Ipo-moea batatas* (ubi jalar, sweet potato), *Nicotiana tabacum* (tembakau, tobacco), *Solanum*	II	buah (fruit), bagian tanaman (part of plants)	Europe: Bulgaria, Cyprus, Finland, France, Greece, Hungary, Italy, Sisilia, Malta, Moldova, Netherlands, Portugal, , Russia, Spain, Swedia, Ukraina, UK, Channel Islands, England and Wales Asia: Cina, Georgia, Iran, Iraq,

		melongena (terung, eggplant), *Solanum tuberosum* (kentang, potato) (S): *Capsicum annuum* (paprika, bell-pepper), *Browallia americana*, *Convolvulus*, *Datura* spp., *Petunia hybrida*, *Physalis peruviana*, *Solanum* spp., *Convolvulus arvensis*,*Physalis minima*			Israel, Lebanon, Saudi Arabia, Sri Lanka, Syria, Turki, Uzbekistan Africa: Angola, Egypt, Ethiopia, Kenya, Libya, Mauritius, Maroko, Mozambique, Senegal, South Africa, Tunisia, Zambia, Zimbabwe America: Antigua and Barbuda, Argentina, Bermuda, Brazil, Canada, Cuba, Curaçao, Guyana France, Grenada, Guadeloupe, Martinique, Mexico, Montserrat, Trinidad and Tobago, USA, Uruguay, Venezuela Oceania: Australia, Fiji, New Caledonia, New Zealand, Vanuatu
5.	*Aculops pelekassi* Keifer; (=*Aculus pelekas-si*); Eriophyidae, Arachnida; pink citrus rust mite	*Citrus* spp. (jeruk, orange)	II	buah (fruit), bagian tanaman (part of plants)	Asia: South Korea Japan ,Taiwan ,Thailand America : (USA) ,Brazil Europe : Italy, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia

6.	*Aculus schlechtendali* (Nalepa); *(=Aculus malivagrans =Phyllocoptes schlechtendali =Vasates malivagrans =Vasates schlechten-dali);* Eriophyidae, Arachnida; apple rust mite, apple bud mite, apple leaf mite, rusty leaf mite	(P): *Malus domesticum* (apel, apple) (S*): Pyrus communis* (pir, pear), Malus sylvestris (crab-apple tree)	II	buah (fruit), bagian tanaman (part of plants)	Europe: Austria,Belgium, Bulgaria, Denmark, Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Hungary, Italy, Netherlands, Norway, Poland, Portugal, Russia, Swedia, Swiss, Ukraina, UK Asia: China, India, Japan, Lebanon, Pakistan Africa: Egypt, South Africa America: Kanada, USA, Chile Oceania: New Zealand, Australia
7.	*Brevipalpus californicus* Bank.; *(=Brevipal-pus australis =B.browningi =B.confusis =B. woglumi =Hystripalpus californicus =Tenuipal-pus australis =T.californicus =T.vitis)*; Tenui-palpidae, Arachnida: citrus flat mite, red flat mite, scarlet mite of tea, bunch mite	(P*): Camellia sinensis* (teh, tea), *Citrus* spp. (S): *Abelmoschus esculentus* (okra, lady's finger), *Citharexylum quadrangulare*, *Cymbidium*, *Cucurbita*,	II	buah (fruit), bagian tanaman (part of plants)	Europe: Cyprus, France, Greece, Crete,Italy, Portugal, Russia, UE. Asia: Georgia, India, Israel, Japan, Malaysia, Nepal, Philippines, Sri Lanka, Tajikistan, Thailand Africa: Algeria, Angola, Congo, Egypt, Libya, Mozambique, Senegal, South Africa, Zimbabwe America: Brazil, Costa Rica, Guyana France, Guyana,

		Dendrobium, *Ipomoea batatas* (ubi alar, sweet po-tato), *Musa* spp. (pisang, banana), *Vigna sinensis* (buncis, common bean), *Phalaenopsis*, *Psidium guajava* (jambu biji, guava), *Pittosporum*, *Rhododen-dron*, *Robinia*, *Schinus terebinthifolius*, *Sesbania sesban*, *Tetragonia tetragonioides*, *Vitis vinifera* (anggur, grapevine), *Chenopodium ambrosioides*, *Cinnamomum burmanii* (kayu manis, cassiavera), *Lablab purpureus*, *Solanum* spp.			Honduras, Mexico, USA ,Mauritania Oceania: Australia, New Zealand, Papua New Guinea

8.	*Bryobia rubrioculus* Scheuten; *(=Bryobia arborea*, B.redikorzevi); Tetranychidae, Arachnida; brown apple mite, brown mite; brown, bryobia mite, pear bryobia mites	(P): *Malus domesticum* (apel, apple), *Prunus* spp., *Pyrus communis* (pir, pear), Pyrus javonica (Japonica), Ulmus sp. (elm) (S*): Arachis hypogaea* (kacang tanah, groundnut, peanut), *Gossypium barbadens* (kapas, cotton),	II	bagian tanaman (part of plant)	Europe: Austria, Belgium, Bulgaria, Uni Soviet, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Moldova, Netherlands, Poland, Portugal, Romania, Russia, Spain, Swiss, Ukraina, UK Asia: Afghanistan, Azerbaijan, Cina, Georgia, India, Iran, Iraq, Japan, Kazakhstan, Kyrgyzstan, Lebanon, Turkey, Uzbekistan Africa: Mozambique, South Africa, Zimbabwe America: Argentina, Brazil, Canada, Chili, Mexico, USA, Uruguay Oceania: Australia, New Zealand.
9.	*Eotetranychus willamettei* (McGregor); *(=Tetranychus willamettei)*; Tetranychidae, Arachnida; willamette mite	*Vitis vinifera* (anggur, grapevine), *Acer negundo*, *Quercus garryana*, *Quercus lobata, Eriogonum jamesi*, *Amelanchier* sp.,	II	bagian tanaman (part of plants)	America: USA

		Malus domestica (Apel, *Apple*), *Purshia tridentata*, *Pyrus communis* (Pie, *pear*), *Sorbus domestica*, *Ulmus* sp. (Elm)			
10.	*Eutetranychus orientalis* Klein.; *(=Anychus orientalis =A.ricini =Eutetranychus anneckei =E.monodi =E.sudanicus);* Tetranychidae, Arachnida; Citrus brown mite, oriental mite, oriental red mite, oriental spider mite	(P); *Citrus*, *Abelmoschus esculentus* (okra, lady's finger), *Codiaeum variegatum*, *Carica papaya* (pepaya, pawpaw), *Ficus carica* (fig), *Gossypium barbadens* (kapas, cotton), *Morus alba* (murbei, mulberry), *Nephelium lappaceum* (rambutan), *Plumeria*, *Ricinus communis*, *Solanum*	II	bagian tanaman (part of plants)	Europe: Cyprus Asia: Afghanistan, Bangladesh, Cina, India, Iran, Israel, Japan, Yordania, Lebanon, Pakistan, Philippines, Thailand, Turkey, Yemen Africa: Cape Verde, Egypt, Ethiopia, Gambia, Kenya, Libya, Malawi, Mauritania, Mozambique, Nigeria, Senegal, Sudan, Swaziland Oceania: Australia

		melongena (terung, eggplant), *Phaleria macrocarpa* (Mahkota dewa) (S): *Manihot esculenta* (ubi kayu, cassava), *Musa paradisiaca* (pisang kepok, plantain), *Olea europea* sub-sp. *europea* (zaitun, olive), *Prunus amygdalus* (almon, almond), *Psidium guajava* (jambu biji, guava), *Caladium spp*. (Keladi)			
11.	*Mononychellus tanajoa* Bondar: *(=Mononychellus caribbeanae =Mononychus tanajoa =Eotetranychus caribbeanae =E.caribbeanus = Tetranychus tanajoa);* Tetranychidae, Arachnida; cassava mite, cassava green mite	(P): *Lycopersicum esculentum* (tomat, tomato), *Mani hot esculenta* (ubi kayu, cassava) (S): *Vigna sinensis* (buncis, common bean), *Zea mays* (jagung, corn, maize)	II	bagian tanaman (part of plants)	Africa: Benin, Burkina Faso, Burundi, Cameroon, Central Africa, Chad, Congo, Ivory Coast, Equatorial Guinea, Gabon, Ghana, Guinea, Kenya, Liberia, Malawi, Mali, Mozambique, Nigeria, Rwanda, Sierra Leone, Sudan, Tanzania, Togo, Uganda, Zambia,

					Zimbabwe America: Antigua and Barbuda, Argentina, Bolivia, Brazil, Chili, Colombia, Dominica, Ekuador, Falklands, Guyana France, Guyana, Mexico, Paraguay, Peru, Puerto Rico, Suriname, Trinidad and Tobago, USA, Uruguay, Venezuela Oceania: Australia
12.	*Oligonychus peruvianus* Mc Gregor 1917= *Tetranychus peruvianus* Mc Gregor, Pritchard & Baker, 1955); Cassava White spot spider mite	(P) : *Manihot esculenta* (ubi kayu, cassava) (S) : *Ceratonia siliqua*, *Citrus* aurantium, *Coffea Arabica* (kopi, coffee), *Daucus carota* (Daucus carota (wortel, car-rot), *Gossypium*, *Persea americana* (alpokat, avoca-do), *Trifolium repens*, *Vitis*. Oxalis sp.	II	Benih (seeds of), bagian tanaman (parts of plant)	America : Colombia, Costa Rica, Equador, Guatemala, Mexico, Peru, Trinidad andTobago, USA, Venezuela

13.	*Oligonychus yothersi* Avocado red mite	(P): *Coffea* spp. (kopi.coffee), *Mangifera indica* (mangga, mango), *Persia americana* (Alpokat, *Avocado*)	II	Tanaman dan (plants and) bagian tanaman (part of plants of)	America: Costa Rica, Cuba, USA, Chili.
14.	*Panonychus ulmi* (Tetranychidae) (Koch) = *Paratetranychus ulmi* Koch = *Metatetranychus ulmi* Koch=*Tetranychus pilosus* Canestrini et Fanzago = *Tetranychus mytilaspidis* Ewing; European red spider mite	(P): *Malus domesticum* (apel, apple), *Pyrus communis* (pir, pear), *Prunus persika* (persik, peach), *Prunus domesticum* (plum*), Prunus cerasus* (sour ceri). (S) : *Arachis hypogaea* (kacang tanah, groundnut), *Cedrus* (cedars), Citrus , *Citrus deliciosa* (jeruk mediterranean mandarin), *Citrus*	II	Daun (leaf), bagian tanaman (part of plant of)	Europe : Albania; Austria; Belarus; Belgium; Bulgaria; Czech; Denmark; Finland; Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia; France; Germany; Greece; Hungary; Ireland; Italy; Latvia; Lithuania; Moldova; Netherlands; Norway; Poland; Portugal; ; Romania; Russia; Spain; Swedia; Switzerland, Ukraina, UK. Asia : Afghanistan; Armenia; Azerbaijan; Cina; Georgia (Republic); India; Iran; Israel; Japan; Korea Republic of (South Korea), Kyrgyzstan; Lebanon;

		reticulata (jeruk mandarin), Coffea (kopi, coffee), Corylus , Gossypium (kapas, cotton), *Morus alba* (mora), *Prunus avium* (sweet cherry), *Prunus dulcis* (almond), *Vitis vinifera* (anggur, grapevine)			Syria; Turki. Tajikistan dan Uzbekistan. Africa : Algeria; Egypt; Libya; South Africa; Tunisia; America: Argentina; Bermuda; Brazil; Canada; Chile, Costa Rica; USA; Uruguay; Venezuela; Oceania : Australia; New Zealand
15.	*Penthaleus major* (Penthaleidae) = *Tetranychus major* Dugès, 1834; Blue oat mite = Winter Grain Mite	*Avena sativa* (oats), *Hordeum vulgare* (barley), *Triticum aestivum (*gandum, wheat).	II	Biji (grain), daun dan bagian tanaman (leaf and part of plant), tanah (soil).	Europe : France; Germany; Italy; Netherlands; Portugal; Russia; Spain; UK. Asia : Cina; Japan. Africa : SouthAfrica. America: Argentina; Canada, Mexico; USA; Oceania : Australia; New Zealand
16.	*Petrobia latens* (Tetranychidae) Brown wheat mite	*Triticum aestivum* (gandum, wheat), *Hordeum vulgare* (barley), *Allium*	II	Daun (leaf), tanah (soil), bagian tanaman (part of plant)	Europe : Austria; Denmark; France; Germany; Italy; Netherlands; Poland; Spain Asia : Cina; India; Korea Republic

		sativum (bawang putih, garlic),. *Allium cepa* (bawang Bombay, onion), *Cuminum cyminum* (jintan, cumin), *Coriandrum sa-tivum (*ketumbar, corriander), *Oryza sativa* (padi, paddy incl. rice), *Cucumis sativus* (ketimun, cucumber), *Cucumis melo* (melon), *Daucus carota* (wortel, carrot), Sorghum, Gladiol , Iris, Apple, Cotton, Alfalfa, bur Clover			of (South Korea); Africa : Egypt; America: Canada; USA Oceania : Australia,
17.	*Phyllocoptes vitis* = *Calepitrimerus vitis* (Eriophydae) ; Grapevine rust mite	*Vitis vinifera* (anggur, grapevine)	II	Daun (leaf)	Europe: Austria, Czech Republic and Slovakia, France, Germany, Hungary, Italy, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Switzerland Asia: India. Africa: South Africa Oceania: Australia, New Zealand

18.	*Phyllocoptruta oleivora* (Eriophyidae) Citrus rust mite	*Citrus* spp. (jeruk, orange)	II	Daun (leaf), buah (fruit), dan batang (and stem)	Europe : Cyprus; Italy; Malta; Yugoslavia; Asia : Cina; India; Iran; Israel; Japan; Yordania; Lebanon; Malaysia; The Philippines; Syria; Thailand; Vietnam; Africa : Angola, Kongo; Kenya; Madagascar; Malawi; Mauritania; Mauritius; Mozambique; Nigeria; Senegal; South Africa; Tanzania; Uganda; Zambia; America: Argentina; Bermuda; Brazil; Chile; Colombia; Cuba; Equador; Guatemala; Jamaica; Mexico; Peru; Puerto Rico; Trinidad-Tobago; USA; Uruguay; Venezuela; Oceania : Australia ; Cook Islands; Fiji; New Zealand
19.	*Raoiella indica* (Tenuipalpidae) Hirst Coconut mite	*Cocos nucifera* (Kelapa, coconut), *Areca catechu* (pinang, Betelnut palm), *Phonix* spp.,	II	Buah (fruit of), bagian tanaman (part of plant),	Asia : India America : Dominica, Jamaica, Africa : Egypt

		Musa spp. (pisang, banana), *Heliconia* sp. (flower banana), *Zingiber officinale* (jahe, ginger), palmae			
20.	*Retracus elaeis* Oil palm mite	*Elaeis guineensis (k*elapa sawit, oilpalm)	II	Daun (leaf), Benih (seeds)	America: Costa Rica, Columbia
21.	*Rhizoglyphus echinopus* Bulb mite	*Allium spp* (bawang-bawangan), *Panax schinseng* (ginseng)	II	Tanaman, (plant), bagian tanaman (part of plant)	Europe : Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia , Hungary, Spain. Asia : Taiwan, Japan, Korea America: USA Oceania : New Zealand
22.	*Steneotarsonemus laticeps* (Halber) = *Tarsonemus approximatus narcissi* Ewing Bulb scale mite	Narcissus (daffodil) *Hippeastrum* spp. (Amarilis, amaryllis); *Cyrtanthus* spp. (fire lily); *Eucharis* spp.	II	Umbi (Bulb, bagian tanaman (plant part of plant)	Europe : UK (mined data); Netherlands; Poland; Slovakia

		(Amazon lily, eucharist lily); *Sprekelia* spp. (Jacobean lily).			
23.	*Tarsonemus myceliophagus* Mite	Jamur (mushroom)	II	Batang jamur (stem of mushroom)	Europe : UK, New Zealand, Netherlands, Germany. America : USA Oceania : Australia (NSW)
24.	*Tetranychus pasificus* Pasific mite	(P) : *Vitis vinifera* (anggur, grapevine), *Prunus*, *Gossypium hirsutum*, *Gossypium barbadense* (kapas, cotton), *Cucumis melo* (melun, melon), *Phaseolus vulgaris*, *Glycine max* (kedelai, soybean). (S) : *Zea mays* (jagung, corn), *Ficus carica* (fig), *Medicago sativa* (alfalfa, flax), *Citrullus lanatus*	II	Tanaman (plant), bagian tanaman (part of plant)	Asia : Japan (intercepted Orly) America: Canada , Mexico, USA

		(semangka, watermelon), *Helianthus annus* (sun flower*)*, *Salvia* sp., *Morning glory*, *Fragaria* (strawberry), *Rosa* (roses), *Rubus* (blackberry, raspberry), *Vicia (vetch. Begonia , Begonia cucullata var. hookeri (Perpetual begonia), Capsicum annuum (*bell pepper*), Chrysanthemum* (daisy), *Chrysanthemum frutescens (*marguerite*), Consolida ambigua (*rocket larkspur*), Cyclamen persicum (*cyclamens*), Rhododendron simsii (Sim's azalea)*			

25.	*Tetranychus schoenei = Septanychus schoenei* Schoene mite	*Malus domesticum* (apel, apple), *Pyrus communis* (pir, pear), *Prunus domesticum* (plum), *Vitis vinifera* (anggur, grapevine), *Gossypium bar-badens* (kapas, cotton)	II	Tanaman (plant), bagian tanaman (part of plant)	Europe America : USA
26.	*Tyrophagus castellanii (Hirst 1912) = Tyrophagus putrescentiae* (Schrank, 1781); Cheese mite	*Cucumis sativus* (Ketimun, cucumber)	II	Daun (leaf), bahan simpan (stored products), mushrooms, house dusts, pollens, soil, mosses, litter and the nests of different animals. It has also been found in greenhouses, in flower heads of	Europe : Belgium, Czech Republic and Slovakia , Den-mark, Finland, France, Germany , Ireland , Italy , Netherlands , Spain , UK . Asia : China (Taiwan), India (Delhi, Haryana, Uttar Pra-desh), Iraq , Nepal , Philippines , Turkey . Africa : Kenya, Zimbabwe. Western Hemisphere : Guatemala, Panama, North America, Mexico, USA, Brazil.

				Gerbera, Narine and Kalanchoe leaf tissue. (Bahrami *et al*. 2007).	

VIII. OPTK PADA TANAMAN KEHUTANAN/TANAMAN KAYU

NO.	NAMA ILMIAH/ORDO/FAMILI/NAMA UMUM/ *SCIENTIFIC NAME/TAXON/COMMON NAME*	INANG/ *HOST*	GOL / *GROUP*	MEDIA PEMBAWA/ *PATHWAY*	DAERAH SEBAR/ *GEOGRAPHICAL DISTRIBUTION*
	I. SERANGGA / INSECTS				
1	*Ancita crocogaster* (Boisduval); Coleoptera: Cerambycidae; Grey longicorne beetle	*Acacia* spp.	II	batang, kayu	Oceania: Eastern Australia
2	*Ancita marginicollis* (Boisduval); Coleoptera: Cerambycidae; Hitechiked longicorn	*Acacia* spp.	II	batang, kayu	Oceania: Eastern Australia
3	*Apriona germmari (*Mope); Coleoptera: Cerambycidae; Longhorn beetle	*Artocarpus intergra, Morus alba, Salix tetrasperma*	II	batang, kayu	Asia: India, Pakistan

4	*Aerocinus longimanus (*Linnaeus); Coleoptera: Cerambycidae; Herlequin beetle, jak-tree borer	*A.integra, Moraceae, Ficus elastica*	II	batang, kayu	America: Barbados, Honduras, Guyama, Trinidad
5	*Apate terebrans (*Pallas); Coleoptera: Bostricidae	*Albizia lelbeck, A.procera, Anacadium occidentale, Dalbergia sissoo, Azadirachta indica, Cedrela odorata, Khaya senegalensis, Tectona grandis, Melia azedorach, Delonix regia*	II	batang, kayu	America: Brazil Asia: West India Africa: Ghana, Kenya, Nigeria, Natal, Sahara, Tanzania, Uganda
6	*Ancistrotermis latinotus (*Holmgren); Isoptera: Termitidae	*Eucalyptus tereticomis*	II	batang, kayu	Africa: Malawi, Tanzania, Zimbabwe, Congo
7	*Anobium puncatum (*DeGeer); Coleoptera: Anobiidae; Furniture beetle	Furniture	II		Europe Africa Oceania: Australia

8	*Anoplophora glabripennis* (Motschulsky); Coleptera: Cerambycidae; Asian Longhorn beetle	*Eucalyptus diversicolor, Populus* spp., *Aesculus hippocastanum, Acer ngundo*	II	batang, kayu	Europe: France, Germany, Poland, England America: USA Asia: China Oceania: Australia
9	*Arhopalus ferus* (Fabricius); Coleoptera: Cerambycidae; Burnt pine longicorn	Burned or windthrown pine and spruce	II	batang, kayu	Europe : England, Russia Oceania: New Zealand
10	*Agrilus planipennis* (Fairmaire); Emerald Ash Borer	Ash Forest	II	batang, kayu	America : USA
11	*Coptotermes formosanus (*Shiraki); Isoptera: Rhinotermitidae; Formosan subterranean termite	Pinus (pines), Quercus (oaks)	II	batang, kayu	America: USA Africa: South Africa Asia: China
12	*Coptoptermes amami (*Sjoestedt); Isoptera: Rhinotermitidae; Dampu rood termite	*A.cunninghamii, Acrocarpus fraxinifolius*	II	batang, kayu	Africa: Kenya, Tanzania, Uganda, Zanzibar
13	*Coccus elongates (*Signoret); Homoptera : Coccidae ; Scale insect	*Albizia falcataria* (L.), *Albazia* spp., *Acacia catechu,*	II	batang, kayu	Europe: Seychelles, England America: Barbados

		Acecia, *elenoxylon*, *Coffee* spp. *(*Kopi, *coffee*), buah-buahan (Fruits)			Africa: Ghana, Tanzania, Uganda Asia: India
14	*Dendroctenus ponderosae* (Hopkins); *Coleoptera :* Scolytidae; pinus beetle	*Pinus* spp	II	batang, kayu	America : USA, Canada
15	*Hylotrupes bajulus (*Linnaeus); Coleoptera: Cerambycidae; house longhorne beetle/Europen house borer	*Pinus nigra*, *Pinus sylvestris*,	II	batang, kayu	Europe: Uruguay America: USA, Canada, Brazil, Argentina Africa: Egypt Asia: China, Iran, Iraq, Israel, Lebanon, Syria, Turki, Libya Ocenia: Australia, New Zealend
17	*Incisitermes minor* (Hagen); western drywood termite	Dry wood	II	batang, kayu	America : USA, Mexico, canada
18	*Ips typographus (*Linnaeus); Coleoptera: Scolytidae; European spruce bark beetle	Eucalyptus, Oak, pines	II	batang, kayu	Europe: Russia Asia: China, Japan, Korea

19	*Lymantria dispar (*Linnaeus); Lepidoptera: Lymantriidae; gypsy moth	*Quercus alba* (white oak), *Quercus coccinea* (scarlet oak), *Quercus ellipsoidalis (*Northern pin oak*), Quercus garryana* (Garry oak), *Quercus ilex* (holm oak*), Quercus lobata (California white oak), Quercus (*basket oak*), Quercus muehlenbergii (*Chinquapin oak*), Quercus palustris (*pin oak*), Quercus petraea (*durmast oak*), Quercus robur (*common oak*), Quercus rubra (*northern red oak*), Quercus suber (*cork oak*), Quercus velutina (*black oak)	II	batang, kayu	Europe Asia: Afghanistan, Azerbaijan, China, Taiwan, India, Iran, Iraq, Israel, Japan, Kazakhstan, Korea, Kyrgyzstan, Lebanon, Syria, Tajikistan, Turkey, Turkmenistan, Uzbekistan Africa: Algeria, Morocco, Tunisia America: Canada, USA.

20	*Macrotermes natalensis* (Haviland); Isoptera : Termitidae	*Eucalyptus macarthurii, E. smithii, E. camaldulensis, E. grandis, E.viminalis*	II	batang, kayu	Africa : South Afrfica, Nigeria, Uganda, Zimbabwe
21	*Olenecamtus bilobus* (Fabricius); Coleoptera : Cerambycidae ; Longhorn beetle.	*Artocarpus integra, A. hissuta, Mangifera indica, Morusa alba*	II	batang, kayu	Asia : India, Pakistan
22	*Otiorhyncus sulcatus* (Fabricius) ; Coleoptera : Curculionidae ; Black Pine Weevil	Pinus	II	batang, kayu	Europe: Rusia Africa: Egypt America: USA, Columbia, Chili, Canada Asia: Japan Oceania : Australia, New Zealand
23	*Pachydissus sericus* (Newman); Coleoptera : Cerambycidae; A longhorn beetle	*Acacia* spp.	II	batang, kayu	Oceania : Eastern Australia
24	*Piesarthrus marginellus* (Newman); Coleoptera: Cerambycidae; Acacia longhorn beetle	*Acacia* spp.	II	batang, kayu	Oceania : Australia

25	*Pissodes strobi (*Peck) ; Coleoptera: Curculionidae; Sitka Spruce weevil	*Pinus balfourina, P.banksiana, P.densifola, P.flexilis, P.griffithii, P.montocola, P.mugo, P.ponderosa, P.resinosa, P.rigida, P.syvestris, Picea abies, P.glauca, P.mariana, P.pungens, P.rubens, P.stroborus, Pseudotsuga menziesii*	II	batang, kayu	America: East North America, Eastern Canada
26	*Platyomopsis egena (*Pascoe) ; Coleoptera : Cerambycidae	*Acacia* spp.	II	batang, kayu	Oceania : Australia
27	*Platyomopsis nigrovireus (*Donovan); Coleoptera: Cerambycidae; Green striped longhorn beetle	*Acacia* spp.	II	batang, kayu	Oceania: Eastern Australia

28	*Pseudococcus aurilanatus (*Maskell); Hemiptera : Psudococcidae; Golden mealybug, yellow banded mealybug	*A.excelsia, Araucaria* spp.	II	batang, kayu	America: North America Africa: Kenya, Uganda Oceania: Australia, New Zealand
29	*Phorachanta semipunctata (*Fabricius); Coleoptera: Cerambycidae; Eucalyptus longhorned borer	*Eucalyptus diverisicolor, E. globules, E. maidenii*	II	batang, kayu	Europa: France, Italy, Netherlands, Spanyol, Portugal Africa: South Africa America: USA
30	*Stromatium barbatum (*Fabricius); Coleoptera: Cerambycidae; Drywood longicorn beetle	Eucalyptus, Oak, pines	II	batang, kayu	Asia: India, Sri Lanka, Burma, Pakistan, Nepal Africa: Tanzania, Madagascar, Mauritius
31	*Sirex noctilio* (Fabricius)*;* Hymenoptera: Siricidae	*Pinus banksiana* (jack pine), *Pinus canariensis* (Canary pine), *Pinus contorta* (lodgepole pine), *Pinus densiflora* (Japanese umbrella pine), *Pinus echinata*	II	batang, kayu	Europe : Austria, Belgium, Cyprus, Czech Republic and Slovakia , Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Norway, Poland, Portugal, , Romania, Russia, Siberia, Serbia and Montenegro, Serbia,

		(shortleaf pine), *Pinus elliottii* (slash pine), *Pinus halepensis* (Aleppo pine), *Pinus jeffreyi* (Jeffrey pine), *Pinus nigra* (black pine), *Pinus palustris* (longleaf pine), *Pinus patula* (Mexican weeping pine), *Pinus pinaster* (maritime pine), *Pinus pinea* (stone pine), *Pinus ponderosa* (ponderosa pine), *Pinus radiata* (radiata pine), *Pinus taeda* (loblolly pine), *Abies* (firs), *Abies alba* (silver fir), *Larix* (larches), *Picea* (spruces), *Picea abies* (common spruce),			Spain, Canary Islands, UK Asia : Georgia (Republic), Mongolia Africa : South Africa America : Canada, USA, Argentina, Brazil, Chile, Uruguay Oceania : Australia, New Zealand

		Pinus sylvestris (Scots pine), *Pseudotsuga* (douglas-fir)			
32	*Tryphocaria mastersi* (Pascoe) ; Coleoptera : Cerambycidae ; Eucalypt ring barber	*Acacia* spp.	II	batang, kayu	Oceania : Eastern Australia
33	*Xyleborus affinis (*Eichoff); Coleoptera : Scolytidae; ambrosia beetle of oak	*Saccharum officinarum* (tebu, sugarcane), *Macadamia integrifolia* (macadamia nut), *Pinus* (pines)	II	batang, kayu	Europe : Italy America : USA, Mexico, Cuba, Brazil Africa : Jamaica
34	*Xyloborinus saxesenii* (Batzeburg); Coleoptera: Scolytidae; Fruit tree pinhole borer	Eucalyptus	II	bibit tanaman, batang, kayu	Europe Asia : China, India, Armenia, Azerbeijan

	II. NEMATODA / NEMATODES				
35	*Bursaphelenchus xylophilus* Steiner & Buhrer, Nickle; Parasitaphelenchidae, Pine Wilt Nematode	(P): *Pinus* spp. (S): *Picea* spp., *Larix* spp., *Abies* spp., *Cedrus deodara*, *Cedrus atlantica*, *Pseudotsuga menziesii*, *Chamaecyparis nootkatensis.*	II	kulit kayu (bark of wood), umbi (tuber/corm), rhizome, batang (stem), daun (leaf), bunga (flower), benih/biji (seed/grain), (externaly), tanah (soil), kemasan kayu (wood packing material), *Monochamus alternatus* (vector), *M. nitens* (vector)	Europe: Portugal America : USA, Canada, Mexico Asia : China, Hongkong, Japan, Korea, Taiwan Afrika: South Africa
	III. CENDAWAN / FUNGI				
36	*Fomes robiniae* (Murr) Sacc and D. Sacc	*Albizia falcataria (*L.*)*, *Albizia lelbeck*, *Robinia pseudo*	II	bibit tanaman, batang, kayu	Asia : India, Ceylon, Pakistan Africa : Jamaica

	(= F. rimosus); Yellow spongy rot	*acacia, Anogeissus latifolia, Boswellia serrata, Casuarina strieta, Dalberbia sissoo, Eucalyptus* spp, *Querus* sp., *Shrea robusta, Terminalia bellarica, Terminalia tomentosa, Morus alba, Pistacia lentiscus*			Oceania : Australia, Samon
37	*Helicobasidium purpureum* (Pat.); Violet root rot	*Araucaria cuninghamii*	II	bibit tanaman, batang, kayu	Europe : England, Ireland, Scotland America : Canada Africa : Rhodesia, Tanzania, Trinidad, Kenya Oceania : Australia, New Zealand
38	*Nectria ditissima* (Tul) ; Hypocreales: Nectriaceae; Hardwoods perennial canker,	*Albizia lebbeck, Acer pseudoplatanus, Aesculus*	II	bibit tanaman, batang, kayu	Europe : England America : North America Asia : Japan

	nectria cancer	*hippocastanum, Ainus glutinosa, Batula pubescens, Juglans sp, Fraxinus excelsior, Fogus silvatica, Platanus orientalis, Pupulus spp, Quercus robus, Salix alba, S. vitallina, Tillia spp, Ulmus glabra*			Africa : South Africa, Madagascar

IX. KEONG DAN SIPUT/SNAIL AND SLUG

NO.	NAMA ILMIAH / ORDO / FAMILI / NAMA UMUM / *SCIENTIFIC NAME / TAXON / COMMON NAME*	INANG/ *HOSTS*	GOL / *GROUP*	MEDIA PEMBAWA / *PATHWAYS*	DAERAH SEBAR/ *GEOGRAPHICAL DISTRIBUTION*
1.	*Achatina craveni* Smith Achatinidae	*Coffea* spp. (Kopi, coffee), tanaman hias (perdu)	II	Bibit (seedling)	Africa
2.	*Achatina zanzibarica* (Bourg) Achatinidae	*Gossypium barbadens* (kapas, cotton), tanaman hias (perdu)	II	Bibit kapas (seedling of *Gossypium barbadens* (kapas, cotton) and sisal)	Africa
3.	*Ariolimax coltubers ofanus* (Gould) Arionidae	*Musa* spp. (pisang, banana)	II	Bibit (seedlings)	America
4.	*Arion circumscriptus* (Johnston) Arionidae	*Nicotiana tabacum* (tembakau, tobacco), *Daucus carota* (wortel,	II	Benih (seed) dan umbi (tuber)	Europe America

		carrot), *Fragaria vesca* (arbei, strawberry), *Solanum tuberosum* (kentang, potato), tanaman jagung (plant of corn), *Apium graveolens* (seledri, celery), barley, rape, poppy, rye			
5.	*Arion intermedius* (Normand) Arionidae	*Daucus carota* (wortel, carrot), *Solanum tuberosum* (kentang, potato), *Apium graveolens* (seledri, celery), tulip	II	Benih (seed) dan umbi (tuber), benih (seed),	Europe

6.	*Arion rufus* L Arionidae	*Nicotiana tabacum* (tembakau, tobacco), *Solanum tuberosum* (kentang, potato), gandum (wheat), medicinal herbs, poppy, rape, barley, rye	II	Benih (seed)	Europe
7.	*Arion subfuscus* (Drap) Arionidae	*Solanum tuberosum* (kentang, potato) *Daucus carota* (wortel, carrot), *Apium graveolens* (seledri, celery)	II	Benih (seed) dan umbi (tuber)	Europe
8.	*Bradybaena fructicum* (Muller) Bradybaenidae	*Vitis vinifera* (anggur, grapevine), polong-polongan	II	Benih (seed),	Africa, Asia, Europe,

		(legumes), tanaman hias (anggrek, tanaman berdaun/puring), *Apium graveolens* (seledri, celery)			
9.	*Ceciloides acicula* (Muller) Ferussaciidae	*Asparagus offinalis* (asparagus), *Apium graveolens* (seledri, celery)	II	Benih (seed)	Europe
10.	*Deroceras agreste* (L) Milacidae	*Fragaria vesca* (arbei, strawberry), sayuran (vegetables), *Solanum tuberosum* (kentang, potato), *Daucus carota* (wortel, carrot), Brassicaceae, *Trifolium* sp, *Cynara scolymus*	II	Benih (seed) dan umbi (tuber), akar sayuran (root of veges), tanaman (plant)	America, Europe, Australia

		(Artichoke)			
11.	*Discus rotundatus* (Muller) Endodontidae/Discidae	Orchidaceae	II	Orchidaceae	Europe
12.	*Drymaeus dormani* (Binney) Bulimulidae	*Citrus* spp. (jeruk, orange)	II	Bibit (seedling)	America
13.	*Geomalacus maculosus* Allman Arionidae	*Beta vulgaris* var. *saccharifera* (Bit gula, sugar beet)	II	Bibit (seedling of) sugar beet)	Europe
14.	*Helix aspersa* Muller Helicidae	(P) : *Actinidia chinensis* (kiwi, Chinese gooseberry), *Beta vulgaris* (bit, beetroot), *Brassica* sp, *Citrus*, *Capsicum*, *Fragaria ananassa*, *Lactuca sativa* (sla, lettuce), *Lycopersicum esculentum* (tomat, tomato), *Persea*	II	Bibit (seedlings)	Europe : Belgium, Croatia,Cyprus,France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Russia, Spain , Sweden, Switzerland, UK. Asia : Israel, Lebanon, Philippines, Syria, Turki. Africa : Algeria, Egypt, Gambia, Lesotho, Lybia, Mauritius, Morocco, Reunion, Saint Helena, Seychelles, South Africa, Tunisia. America : Argentina, Brazil, Canada, Chili, Ecuador, French

		americana (alpukat, avocado), *Phaseolus vulgaris, Pyrus communis (pir, pear), Ribes nigrum, Zea mays* (jagung, corn, maize), *Allium cepa* (bawang bombai, onion), *Brassica oleraceae* var. *capitata* (kubis, cabbage), Polyphagous (S) : Poaceae, *Coriandrum sativum* (ketumbar, coriander) *Humulus lupulus* (hop), *Laburnum anagyroides*,*Nasturtium officinale*			Guiana, Haiti, Mexico, Peru, USA (Hawaii), Uruguay. Oceania : Australia, New Zealand.

		(selada air, watercress), *Rosmarinus officinalis* (rosemary), Rosa, *Thymus vulgaris* (thyme), *Helianthus annuus* (bunga matahari, sunflower), *Trifolium alexandrium, Vitis vinifera* (anggur,grapevine), strawberry, *Citrus* spp. (jeruk, orange), wheat (gandum)			
15.	*Helix pomatia* L Helicidae	*Nicotiana tabacum* (tembakau), *Vitis vinifera* (anggur, grapevine), , tobacco), *Triticum aestivum* (gandum, wheat), dan sayuran	II	Bibit (seedlings)	Europe : Denmark, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia, Germany, Italy, Sweden, Switzerland America : Canada

16.	*Helix rufescens* (Pennant) Helicidae	*Fragaria vesca* (arbei,strawberry)	II	Bibit (seedling)	America
17.	*Lanistes ovum* (Trosch) Ampulariidae	*Oryza sativa* (padi, paddy)	II	Tanaman (plant) *Oryza sativa* (padi, paddy)	Africa
18.	*Lehmania valentiana* (Ferussac) Limacidae	Orchidaceae (anggrek), *Solanum tuberosum* (kentang, potato), veges (sayuran)	II	Benih (seed), umbi (tuber) dan akar sayuran (root of veges)	America
19.	*Limax maximus* L Limacidae	*Solanum tuberosum* (kentang, potato); *Apium graveolens* (seledri, celery), *Cucumis sativus* (ketimun, cucumber), *Lycopersicum esculentum* (tomat, tomato), *Daucus carota* (wortel, carrot), *Brassica*	II	Benih (seed) dan umbi (tuber)	America : USA Europe : Italy, Norway

		oleracea var. *capitata (*kubis, cabbage), *Cucurbita moschata* (labu, pumpkin), tanaman hias (anggrek, anthurium, tanaman berdaun lainnya), jamur (mushroom)			
20.	*Limax cinereoniger* (Wolf) Limacidae	*Solanum tuberosum* (kentang, potato*),* *Apium graveolens* (seledri, celery), *Daucus carota* (wortel, carrot), tanaman hias (anggrek, anthurium, tanaman berdaun lainnya)	II	Benih (seed) dan umbi (tuber)	Europe

21.	*Marisa cornuarietis* L Ampulariidae	*Oryza sativa* (padi, paddy).	II	Tanaman (plant).	Africa, America
22.	*Milax budapestensis* (Hazay) Milacidae	*Solanum tuberosum* (kentang, potato), *Daucus carota* (wortel, carrot), sayuran, akar sayuran (root of veges), *Triticum aestivum* (gandum, wheat), rape, poppy, rye, barley, *Apium graveolens* (seledri, celery), *Helianthus annuus (*bunga matahari, sunflower)	II	Benih (seed) dan umbi (tuber)	Europe
23.	*Milax gagates* (Draparnaud) Milacidae	*Solanum tuberosum* (kentang, potato), *Daucus carota* (wortel, carrot),	II	Benih (seed) dan umbi (tuber)	Africa, America, Europe, Australia

		Brassica oleracea var. *capitata (*kubis, cabbage),*Fragaria vesca* (arbei, strawberry), *Cynara scolimus* (Artichoke)			
24.	*Milax sowerbyi* (Ferussae) Milacidae	*Solanum tuberosum* (kentang, potato), *Apium graveolens* (seladeri, celery), *Daucus carota* (wortel, carrot)	II	Benih (seed) dan umbi (tuber)	Europe
25.	*Otala lactea* (Muller) Arionidae	Brassicaceae, *Citrus*, *Lactuca sativa* (selada, lettuce); garlic (bawang putih)	II	Benih (seed),umbi (tuber)	Europe : Netherlands, Spain Africa : North Africa America: Bermuda; Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana; USA

26.	*Oxychilus cellarius* (Muller) Zonitidae	Orchidaceae (Anggrek), legumes,*Cucumis sativus* (ketimun, cucumber), *Cucurbita moschata (*labu, pumpkin), *Citrullus lanatus* (semangka, watemelon), *Cucumis melo* (melon, melon)	II	Tanaman (plant)	Europe
27.	*Oxychilus draparnaudi* (Beck) Zonitidae	Orchidaceae (Anggrek), legumes,*Cucumis sativus* (ketimun, cucumber), *Cucurbita moschata (*labu, pumpkin)	II	Tanaman (plant)	Europe
28.	*Pila globosa* (Swainson) Ampulariidae	*Malus domesticum* (apel, apple), *Oryza sativa* (padi, paddy), tanaman air	II	Bibit (seedlings) dan sisa tanaman (plant debris)	Asia, Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana

29.	*Theba pisana* (Muller) Arionidae	*Citrus* spp. (jeruk, orange), *Brassica oleracea capitata* (kubis, cabbage), *Lycopersicum esculentum* (tomat, tomato), legumes (kacang-kacangan), *Medicago sativa*	II	Benih (seed),	Asia, Africa, America, Europe, Australia
30.	*Vaginula hedleyi* (Simroth) Veronicellidae	*Nicotiana tabacum* (tembakau, tobacco), *Ipomoea batatas* (ubi jalar, sweet potato), coffee (kopi), lucerne	II	Benih (seed)	America

B. JENIS-JENIS ORGANISME PENGGANGGU TUMBUHAN KARANTINA (KATEGORI A2)

I. SERANGGA / INSECTS

NO.	NAMA ILMIAH/NAMA UMUM *SCIENTIFIC NAME/COMMON NAME*	INANG/ *HOST*	GOL/ *GROUP*	MEDIA PEMBAWA/ *PATHWAY*	DAERAH SEBAR/ *GEOGRAPHICAL DISTRIBUTION*
1.	*Altha alastor* (Tams).; Lepidoptera: Limacadidae; ulat siput/slug caterpillar, The moth of Borneo	(P): *Cocos nucifera* (kelapa, coconut) dan Palmae lainnya, Bombax (Bombacaceae)	II	batang (stem), daun (leaf), bunga (flower), buah (fruit)	Indonesia : Sulawesi (Utara)
2.	*Amblypelta theobroma* (Brown); Hemiptera: Coreidae; coconut bug	(P): *Cocos nucifera* (kelapa, coconut), *Theobroma cacao* (kakao, cocoa)	II	batang (stem), daun (leaf), buah (fruit)	Indonesia : Papua Oceania : Papua New Guinea
3.	*Atherigona soccata* (Rond).; *(=Atherigona indica =A.indica* ssp. *infuscata =A.varia* var. *soccata)*; Diptera: Muscidae; Sorghum shoot	(P): *Sorghum bicolor* (sorgum, sorghum) (S): *Pennisetum glaucum (*bajra, pearl millet), *Triticum aestivum* (gandum, wheat), *Zea mays* (jagung, corn,	II	batang (stem)	Indonesia : Maluku Europe : Italy. Asia : Bangladesh, China, India, Iraq, Israel, Myanmar,

Keterangan : P : Primary Host / Inang Utama
S : Secondary Host / Inang Pilihan

	(stem) fly, great fly, millet stem fly, millet stem maggot	maize), *Brachiaria brizantha*, *Cymbopogon citratus* (serai wangi, lemongrass), *Eleusine coracana* (jaba, finger's millet), *Oryza sativa* (padi, paddy), *Eleusine indica* (rumput belulang, goose grass)			Nepal, Pakistan, Philippines, Saudi Arabia, Sri Lanka, Thailand, Turkey, Vietnam. Africa : Burkina Faso, Congo Democratic Republic, Egypt, Ghana, Kenya, Madagascar, Malawi, Mauritius, Morocco, Nigeria, Réunion, South Africa, Sudan, Tanzania, Uganda, Zimbabwe.
4.	*Bactrocera bryoniae* (Tryon); *(=Chaetodacus bryoniae)*; Diptera: Tephritida; fruit fly	(P): *Mangifera indica* (mangga, mango), *Passiflora quadrangularis* (markisa, granadilla, passion-fruit), *Bryonopsis affinis*, *Musa* spp. (pisang, banana), *Capsicum frutescens* (cabai rawit, chilies)	II	buah (fruit), media tanam (planting medium), tanah (soil)	Indonesia : Kalimantan, Papua, Maluku Utara. Oceania : Australia, French Polynesia, New Caledonia.

5.	*Bactrocera musae* (Tryon).; *(=Chaetodacus musae =C.tryoni* var. *musae =Dacus musae =Strumeta musae)*; Diptera: Tephritidae; banana fruit fly	(P): *Musa* spp. (pisang, banana) , *Carica papaya* (pepaya, pawpaw), *Psidium guajava* (jambu biji (seed), guava)	II	buah (fruit), media tanam (planting medium), tanah (soil)	Indonesia : Kalimantan, Sulawesi, Maluku, Papua. Asia : Philippines. Oceania : Australia , Papua New Guinea, Bismarck , Solomon Islands.
6.	*Bactrocera occipitalis* (Bezzi); (*=Dacus occipitalis = Dacus dorsalis* var. *occipitalis =Chaetodacus occipitalis* Bezzi = *Chaetodacus ferrugineus* var. o*ccipitalis* Bezzi =*Strumeta pedestris* var. *occipitalis*); Diptera: Tephritidae; Fruit fly	(P) : *Averrhoa carambola* (belimbing, carambola, star fruit), *Citrus reticulata* (jeruk mandarin, mandarin,tangerine, mandarin orange), *Mangifera indica* (mangga, mango), *Achras (=Manilkara) zapota* (sawo, sapodilla), *Psidium guajava* (jambu biji, guava), *Spondias purpurea* (plum, red mombin)	II	Buah (fruit)	Indonesia : Kalimantan, Jawa Barat (Bogor), Sumatera (Tanjung Balai Karimun) Asia : Brunei Darussalam, Malaysia, Philippines.
7.	*Bemisia argentifolii* (Gennadius); *(=B.tabaci-biotype)*; Hemiptera: Aleyrodidae; silverleaf	(P): *Gossypium hirsutum* (kapas, cotton), *Lycopersicum esculentum* (tomat, tomato), Fabaceae,	II	batang (stem), daun (leaf), buah (fruit),	Indonesia : Jawa (Barat) Europe : Austria,

	white fly, sweet potato white fly B-biotype	Brassicaceae, *Carica papaya* (pepaya, pawpaw), *Capsicum annuum* (cabai, hot pepper, chilies), *Euphorbia pulcherrima, Lactuca sativa* (salada, lettuce), *Nicotiana tabacum* (tembakau, tobacco), *Solanum melongena* (terung, eggplant) (S): Brassicaceae, Fagaceae, Geraniaceae, Lauraceae, Myrtaceae, Oleaceae, Passifloraceae, Rosaceae, Rubiaceae, Solanaceae, *Acer*, *Amaranthus*, *Mentha*, Bombacaceae.		bunga (flower)	Cyprus, France, Italy, Netherlands, Norway, Poland, Portugal, Spain, Canary Islands, UK Asia : China, Taiwan, Iran, Israel, Japan, Jordan, Korea Republic of (South Korea), Turkey, Yemen. Africa :Egypt, Mauritius, South Africa, Tunisia. America : Antigua and Barbuda, Belize, Brazil, Canada, Colombia, Costa Rica, Cuba, Dominican Republic, Grenada, Guadeloupe, Guatemala,Honduras, Jamaica, Martinique, Mexico, Nicaragua, Panama, Puerto Rico, Saint Kitts and Nevis, Trinidad and Tobago,

					USA, Hawaii, Venezuela. Oceania : American Samoa, Australia, Cook Islands, Fiji, French Polynesia, Guam, Marshall Islands, New Caledonia, New Zealand, Niue, Northern Mariana Islands.
8.	*Chaetanaphothrips orchidii* (Moulton); *(=Anaphothrips orchidii =Euthrips orchidii =Physothrips orchidii =Taeniothrips orchidii)*; Thysanoptera: Thripidae; anthurium thrips, orchid thrips	(P): *Anthurium andreanum*, *Alternanthera*, *Bougainvillea*, *Chrysanthemum*, *Musa* spp. (pisang, banana) , *Petroselinum crispum*, *Zea mays* (jagung, corn, maize) (S): *Acer palmatum*, *Adiantum, Amaranthus*, *Begonia*, *Citrus x paradisi* (jeruk bali, pommelo), *Citrus* spp. (jeruk, orange), *Coix lacryma-jobi* (jail, Job's tears), *Cryptotaenia*	II	batang (stem), daun (leaf), bunga (flower), tanah (soil)	Indonesia : Jawa Asia : China, Taiwan, India, Japan, Malaysia, Nepal, Sri Lanka. Africa : Mauritius, Sao Tome and Principe. America : Brazil, Costa Rica, Dominica, Dominican Republic, Ecuador, Grenada, Guadeloupe, Honduras, Jamaica, Mexico, Puerto Rico, Saint

		canadensis, *Euphorbia*, *Epiphyllum*, *Ipomoea batatas* (ubi jalar, sweet potato), *Iresine*, *Litchi sinensis* (leci, lychee), *Lycopersicon*, *Passiflora*, *Paspalum conjugatum*, *Pisonia*, Orchid, ornamental plants			Lucia, Suriname, Trinidad and Tobago, USA, Hawaii. Oceania : Australia , Tonga.
9.	*Contarinia sorghicola* (Coquillet) ; *(=Contarinia sorghicola =C.saltata =C.andropogonis =C.palposa =Diplosis sorghicola =Allocontarinia sorghicola)*; Diptera: Cecidomyiidae; ganjur (sorgum)/Sorghum midge	(P): *Sorghum bicolor* (sorgum, sorghum) (S): rerumputan *(Triodia flava, Setaria qlauce, Andropogon gayanus)*	II	biji (seed), bunga (flower)	Indonesia : Jawa (Barat). Europe : France, Italy, Russia. Asia : India, Iran, Japan, Myanmar, Pakistan, Philippines, Sri Lanka, Thailand, Yemen Africa : Benin, Burkina Faso, Burund, Cameroon, Central African Republic, Chad, DR Congo, Ethiopia, Gambia, Ghana, Kenya, Malawi, Mali, Mauritius, Niger, Nigeria, Rwanda,

					Senegal, Sierra Leone, Somalia, South Africa, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe America : Antigua and Barbuda, Argentina, Barbados, Brazil, Colombia, Cuba, Curaçao, Dominica, El Salvador, Grenada, Guadeloupe, Guatemala, Honduras, Jamaica, Martinique, Mexico, Montserrat, Netherlands Antilles, Nicaragua, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines,Trinidad and Tobago, USA, Hawaii, Uruguay, Venezuela Oceania : Australia, Fiji, New Caledonia, Papua New Guinea.

10.	*Chrysomphalus aonidum* (L); *(=Aonidiella ficorum =Aspidiotus (Chrysomphalus) aonidum =A.(Chrysomphalus) ficus =A.aonidum =A.ficorum =Aspidiotus ficus =Coccus aonidum)*; Hemiptera: Diaspididae; red scale, Sircular black scale	(P): *Citrus* spp. (jeruk, orange) (S): Lauraceae, Palmaceae, *Asparagus officinalis* (asparaga, asparagus), *Cocos nucifera* (kelapa, coconut), *Carica papaya* (pepaya, pawpaw), *Cinnamomum verum*, *Dracaena*, *Gossypium hirsutum* (kapas, cotton), *Malus sylvestris* (apel, apple), *Mangifera indica* (mangga, mango), *Musa* spp. (pisang, banana) , *Phoenix dactylifera* (kurma, date-palm), *Pinus merkusii* (pinus, pinetree)	II	batang (stem), daun (leaf), buah (fruit)	Indonesia : Jawa, Sulawesi, Sumatera. Europe: Belgium,Croatia, Cyprus, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Italy, Malta, Netherlands, Portugal , Romania, Spain . Asia : Bhutan, China, India, Israel, Japan, Jordan, Korea DPR (North Korea), Korea Republic of (South Korea), Lebanon, Malaysia, Myanmar, Pakistan, Philippines, Saudi Arabia, Singapore, Sri Lanka, Syria, Thailand,

					Turkey, Vietnam, Yemen. Africa : Algeria, British Indian Ocean Territory, Burundi, Comoros, Egypt, Ethiopia, Guinea, Kenya, Madagascar, Malawi, Mauritius, Morocco, Mozambique, Nigeria, Réunion, Senegal, Seychelles, South Africa, Sudan, Tanzania , Tunisia, Uganda, Zambia, Zimbabwe. America: Argentina, Barbados, Bermuda, Brazil, Cayman Islands, Chile, Colombia, Cuba, Dominica, Domini-can Republic, El Salvador, French Guiana, Guadeloupe, Guatemala,

					Guyana,Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Panama, Paraguay, Puerto Rico, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, USA, Hawaii, Uruguay, Venezuela Oceania : American Samoa, Australia, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Kiribati, New Caledonia, Niue, Papua New Guinea, Samoa, Solomon Islands, Tuvalu.
11.	*Chrysomphalus dictyospermi* (Morgan); *(=Aspidiotus (Chrysom phalus) dictyospermi*	(P): *Citrus* spp. (jeruk, orange), *Areca catechu* (pinang, betelnut-pam), *Olea europaea* subsp. *europaea*	II	batang (stem), daun (leaf), buah (fruit)	Indonesia : Jawa, Papua, Sumatera US Minor Outlying Islands : Johnston

	=A.agrumicula =A.arecae =A.dictyospermi =A.dictyospermi v. *arecae =A.dictyospermi* v. *jamaicensis =A.jamaicensis (=Amangiferae =Chrysomphalus arecae =C.castigatus =C.dictyospermatis =C.jamaicensis =C.mangiferae =C.minor)*; Hemiptera: Diaspididae; dictyospermum scale	(zaitun, olive) , *Cocos nucifera* (kelapa, coconut), Palmaceae lainnya, Solanaceae, *Mangifera indica* (mangga, mango), *Musa x paradisiaca* (pisang kepok, plantain), *Persea americana* (alpukat, avocado), *Plumeria*, *Rosa*, *Solanum melongena* (terung, eggplant), *Syzygium malaccense* (jambu bol, malay-apple), *Taxus baccata*, *Zingiber officinale* (jahe, ginger)			Island. Europe : Bulgaria, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Greece , Italy, Malta, Portugal, Russia, Spain, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia. Asia : Azerbaijan,

					Cambodia, China, Taiwan, Georgia (Republic), India, Iraq, Israel, Japan, Laos, Lebanon, Malaysia, Myanmar, Philippines, Sri Lanka, Syria, Thailand, Turkey, Turkmenistan, Vietnam. Africa : Algeria, Angola, Benin, Cameroon, Cape Verde, DR Congo,Ivory Coast, Egypt, Ethiopia, Guinea, Kenya, Libya, Madagascar, Mali, Mauritius, Morocco, Niger, Nigeria, Réunion, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Tanzania , Togo, Tunisia, Uganda,

					Zambia, Zimbabwe. America: Argentina, Bahamas, Barbados, Bermuda, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Grenada, Guadeloupe, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Saint Lucia, Suriname, Trinidad and Tobago, USA, Hawaii, South Carolina, Uruguay, Venezuela. Oceania : American Samoa, Australia, Federated states of Micronesia, Fiji, French Polynesia, Kiribati, Marshall Islands, New Caledonia, Niue,

					Norfolk Island, Northern Mariana Islands, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu.
12.	*Darna catenatus* (Snellen); Lepidoptera: Limacodidae.	(P): *Elaeis guineensis* (Kelapa sawit, oil palm), *Metroxylon sagu* (palem sagu, sago palm)	II	Daun (leaf)	Indonesia : Sulawesi, Papua Barat
13.	*Darna bradleyi* (Holloway); *(=Ploneta bradleyi)*; Lepidoptera: Limacodidae; ulat api / fire worm	(P): *Elaeis guineensis* (kelapa sawit, oilpalm)	II	batang (stem), daun (leaf)	Indonesia : Sumatera
14.	*Dihammus rusticator* (F.); *(=Dihammus fistulator =Monochamus fistulator = Acalolepta fistulator = A.rusticator)*; Coleoptera: Cerambycidae; penggerek batang / stem borer	(P): *Coffea* spp. (kopi, coffee), *Jatropha* sp, (jarak iri, Barbados nut tree), *Manihot esculenta* (ubi kayu, cassava), *Ricinus communis* (jarak kepyar, castor oil bean), *Theobroma cacao* (kakao, cocoa), *Solanum melongena* (terung, eggplant)	II	batang (stem), daun (leaf), akar (root)	Indonesia : Sumatera (Jambi, Lampung).

15.	*Dorysthenes buqueti* (Guerin-Meneville); *(=Lophosternus buqueti);* Coleoptera: Cerambycidae; longhorn beetle	(P): *Saccharum officinarum* (tebu, sugarcane), *Bambusa, Spondias pinnata* (kedondong, otaheitte apple), *Leucaena glauca* (lamtoro gung, horse tamarind) (S): *Manihot esculenta* (ubi kayu, cassava)	II	batang (stem), daun (leaf)	Indonesia : Jawa Asia : India, Laos, Malaysia, Myanmar, Thailand.
16.	*Dysmicoccus brevipes* ; Hemiptera: Pseudococcidae.	(P): *Ananas comusus* (Nenas, pineapple) *Anacardium occidentale* (kacang mete, cashew nut), Annona muricata (soursop), *Annona squamosa* (markisa, sugar apple), *Apium graveolens* (selederi, celery), *Arachis hypogaea* (kacang tanah, groundnut), *Brassica rapa subsp. chinensis* (Chinese cabbage), *Canna indica* (Queensland arrowroot), Capsicum (peppers), *Casuarina equisetifolia* (casuarina),	II	buah (fruit), batang (stem), daun (leaf), tanaman (plant)	Indonesia : Jawa (Barat), Sumatera (Lampung). Europe: Italy, Portugal, Spain Asia: Bangladesh, Brunei Darussalam, Cambodia, China, Taiwan, India, Japan, Malaysia, Pakistan, Philippines, Singapore, Sri Lanka, Vietnam Africa: Angola, Benin,Burkina Faso, Burundi, Cameroon,Chad,

		Citrus , *Cocos nucifera* (kelapa, coconut), *Coffea arabica* (kopi, arabica coffee), *Colocasia esculenta* (talas, taro), *Cucumis sativus* (ketimun, cucumber), Cucurbita (labu, pumpkin), *Daucus carota* (wortel, carrot), *Elaeis guineensis* (kelapa sawit, oil palm), Ficus , Gossypium (kapas, cotton), Hibiscus (rosemallows), *Ipomoea batatas* (ubi jalar, sweet potato), *Malus domestica* (apel, apple), *Mangifera indica* (mangga, mango), *Manihot esculenta* (ubi kayu, cassava), *Medicago sativa* (lucerne), Musa (pisang, banana), *Persea americana* (alpukat, avocado), *Phoenix dactylifera* (kurma, date-palm), *Piper betle* (betel pepper), Poaceae (grasses), *Psidium guajava* (jambu biji,			Congo, Egypt, Ghana,Guinea,Kenya, Madagascar, Malawi, Mali,Mauritius, Mozambique, Niger, Nigeria,Rwanda, Senegal, Seychelles, Sierra Leone, Somalia,South Africa, Sudan, Tanzania, Togo, Uganda, Zambia America: Central America & Caribbean, Bahamas, Barbados, Belize,Bermuda, Costa Rica, Cuba, Dominica, Dominican Republic, El Salvador, Grenada, Guatemala, Haiti, Honduras, Jamaica, Nicaragua, Panama, Puerto Rico, North America, Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican

		guava), *Saccharum officinarum* (tebu, sugarcane), *Solanum tuberosum* (kentang, potato), *Sorghum halepense* (Johnson grass), *Theobroma cacao* (coklat, cocoa), *Trifolium pratense* (purple clover), *Trifolium repens* (white clover), Zea mays (jagung, maize), *Zingiber officinale* (jahe, ginger)			Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana Oceania: American Samoa, Australia, Palau, Cook Islands, Federated states of Micronesia
17.	*Hexamitodera semivelutina* (Heller).; Coleoptera: Cerambycidae; penggerek batang (cengkeh) / stem borer	(P): *Syzygium aromaticum* (cengkeh, clove) (S): *Syzygium* spp., *Eugenia* spp., *Psidium guajava* (jambu biji, guava) dan Myrtaceae lainnya	II	batang (stem)	Indonesia : Jawa, Sulawesi (Utara), Maluku, Sumatera (Barat). Asia : Brunei Darussalam.
18.	*Icerya purchasi* (Maskell).; *(=Pericerya purchasi);* Hemiptera: Margarodidae; cottony cushion scale	(P): *Acacia*, *Acalypha*, *Citrus* , Cytisus, *Glycine soja* (kedelai, soybean), *Indigofera*, *Mangifera indica* (mangga, mango), *Morus alba* (murbei, mulberry),	II	batang (stem), daun (leaf)	Indonesia : Jawa, Sulawesi, Sumatera, Papua. US Minor Outlying Islands: (Johnston Island, Midway Islands,

		Psophocarpus tetragonolobus (kecipir, winged bean), *Psidium guajava* (jambu biji, guava), *Pittosporum, Rosa, Ulex europaeus* (S): *Baccharis*, *Buxus sempervirens*, *Caesalpinia*, *Cajanus cajan* (kacang gude, pigeon pea), *Cassia*, *Casuarina, Crotalaria, Desmodium, Euphorbia, Fragaria*, *Fuchsia, Juncus*, *Laurus nobilis*, *Maranta bicolor*, *Macadamia integrifolia*, *Medicago sativa*, *Mimosa*, *Malpighia punicifolia, Morus nigra* (murbei, mulberry*), Nandina domestica*, *Pelargonium, Plumbago*, *Punica granatum* (delima, pomegranate), *Ricinus communis* (jarak kepyar, castor oil bean), *Schinus*, *Spartium junceum, Virgilia capensis*			Wake Island). Europe : Albania,Cyprus, France, Greece, Italy, Malta, Portugal, Romania, Russia, Spain, Switzerland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia. Asia : Bangladesh, China, Taiwan, Christmas Island (Indian Ocean), Cocos Islands, Georgia (Republic), India, Iran, Iraq, Israel, Japan, Jordan, Korea DPR (North Korea), Korea (Republic of), Lebanon, Malaysia , Maldives, Pakistan, Saudi Arabia, Singapore, Sri Lanka,

					Syria, Thailand, Turkey, Vietnam, Yemen. Africa : Algeria, Angola, Cape Verde, DR Congo, Congo, Egypt, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Morocco, Mozambique, Saint Helena, Sao Tome and Principe, Senegal, Seychelles, Somalia, South Africa, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe. America : Antigua and Barbuda, Argentina, Bahamas, Barbados, Bermuda, Bolivia, Brazil, Cayman Islands, Chile, Colombia, Cuba, Curaçao, Dominican Republic, Ecuador, El

					Salvador, Guadeloupe, Guatemala, Guyana, Haiti, Jamaica, Martinique, Mexico, Montserrat, Paraguay, Peru, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Trinidad and Tobago, USA, Uruguay, Venezuela. Oceania : Australia, Palau, Federated States of Micronesia (Caroline Islands), Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, New Caledonia, New Zealand, Norfolk Island, Northern Mariana Islands, Papua New Guinea, Solomon Islands, Tonga.

19.	*Laodelphax striatella* (Fall.); *(=Laodelphax striatellus =Calligypona marginata =C.striatella =Delphacodes striatella =Delphax notula =D.striata =D.striatella =Liburnia akashiensis =L.devastans =L.gifuensis =L.haupti =L.maikoensis =L.marginata =L.minonensis =L.nipponica =L.striatella)*; Hemiptera: Delphacidae; small brown plant hopper	(P): *Zea mays* (jagung, corn, maize), *Avena sativa* (oat, oats) , *Oryza sativa* (padi, paddy), *Saccharum officinarum* (tebu, sugarcane), serealia lainnya (other cerealia)	II	batang (stem), daun (leaf)	Indonesia : Sumatera Africa : Algeria, Morocco, Tunisia Asia: Armenia, China, Georgia, India, Iran, Israel, Japan, Korea, The Philippines, Tajikistan, Thailand, Turkmenistan Europe : Austria, Belgium, Bulgaria, Czech, Slovakia, Denmark:, Finland, France, Germany, Hungary, Ireland, Italy, Sardinia, Moldova, The Netherlands, Poland, Portugal, Romania, Russia, Spain, Swedia, Switzerlands, Ukraina, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Oceania

20.	*Liriomyza trifolii* (Burgess); *(=Agromyza phaseolunata =Liriomyza alliovora =L.phaseolunata =Oscinis trifolii);* Diptera: Agromyzidae; penggorok daun (leaf), serpentine leaf miner, American serpentine leafminer, chrysanthemum leaf miner	(P): *Abelmoschus esculentus* (okra, lady's finger), *Ageratum*, *Allium* spp, *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Aster*, *Beta vulgaris* var. *saccharifera* (bit gula, sugar beet), *Bidens*, *Brassica rapa* subsp. *chinensis* (pak-choi, Chinese cabbage), *Chrysanthemum* spp, *Capsicum annuum* (cabai, hot pepper, chilies), *Callistephus*, *Cucumis melo* (melon, melon), *Cucumis sativus* (mentimun, cucumber), *Cucurbita pepo* (labu kuning, zucchini), *Dahlia*, *Dendranthema*, *Dianthus*, *Gaillardia*, *Gerbera*, *Glycine max* (kedelai, soybean) , *Gossypium hirsutum* (kapas, cotton), *Gypsophila*, *Helianthus*, *Nasturtium officinale* (selada air,	II	batang (stem), daun (leaf)	Indonesia : Jawa (Barat, Timur), Sumatera Europe : Austria, Belgium, Croatia, Cyprus, Czech Republic, France, Greece, Italy, Malta, Netherlands, Norway, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia. Asia : China, India, Israel, Japan, Jordan, Korea Republic of (South Korea), Lebanon, Oman, Philippines, Thailand, Turkey, Yemen. Africa: Benin, Ivory

		watercress), *Lathyrus (Vetchling*), *Lycopersicum esculentum* (tomat, tomato), *Medicago sativa*, *Phaseolus* spp, *Pisum sativum, Salvia*, *Senecio*, *Solanum melongena* (terung, eggplant), *Solanum tuberosum* (kentang, potato), *Spinacia oleracea*, *Tagetes, Tropaeolum, Trifolium, Trifolium repens*, Vicia, *Vigna unguiculata*, *Zinnia* (S): *Allium cepa* (bawang bombai, onion), *Allium schoenoprasum* (chives), *Apium graveolens* var. *dulce* (bleached celery), *Bellis, Cassia*, *Centaurea, Chenopodium, Citrullus lanatus* (semangka, watermelon), *Daucus carota* (wortel, carrot), *Erigeron, Gazania*, *Gladiolus hybrids, Glycine max* (kedelai, soybean), *Hordeum*, *Linaria*,			Coast, Egypt, Ethiopia, Guinea, Kenya, Madagascar, Mauritius, Mayotte, Nigeria, Réunion, Senegal, South Africa, Sudan, Tanzania, Tunisia, Zambia, Zimbabwe. America : Argentina, Bahamas, Barbados, Bermuda, Brazil, British Virgin Islandss, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, French Guiana, Guadeloupe, Guatemala, Guyana, Martinique, Mexico, Netherlands Antilles, Peru, Puerto Rico, Trinidad and Tobago, USA , Hawaii, Venezuela.

		Medicago, Macrotyloma, Primula, Xanthium			Oceania : American Samoa, Australia, Federated states of Micronesia, Guam, Northern Mariana Islands, Samoa, Tonga.
21.	*Liriomyza chinensis* (Kato); Diptera: Agromyzidae; pengorok daun/onion leaf miner	(P) *Allium cepa* (bawang bombai, onion)	II	batang (stem), daun (leaf)	Indonesia : Jawa (Barat dan Tengah), Sulawesi (Tengah). Asia : Japan, Malaysia, China, Singapore. Europe : France, Germany
22.	*Paracoccus marginatus* (Williams and Granara de Willink); Hemiptera : Pseudococcidae; Papaya Mealybug	(P): *Carica papaya* (pepaya), *Jatropa* sp. (Jarak), ornamental plants (Puring), tropical fruits.	II	daun (leaf), buah (fruit), bagian tanaman (part of plant)	Indonesia : seluruh wilayah Indonesia kecuali Papua. America : Amerika Tengah, Mexico, Costa Rica, Guatemala, Belize Micronesia : Guam, Palau

23.	*Paraeucosmetus pallicornis* (Dallas); Hemiptera: Lygaedae.	(P): *Oryza sativa* (padi, rice)	II	buah/bulir	Indonesia: Sulawesi Asia: Malaysia, Philippines
24.	*Pectinophora gossypiella* (Saund).; *(=Depressaria gossypiella =Ephestia gossypiella =Gelechia gossypiella =Gelechiella gossypiella =Platyedra gossypiella)*; Lepidoptera: Gelechiidae; pink bollworm, pink cotton bollworm	(P): *Gossypium hirsutum* (kapas, cotton), *Abelmoschus moschatus* (okra, lady's finger), *Abutilon* spp, *Hibiscus* spp, *Medicago sativa*	II	buah (fruit), benih (seed), tanah (soil)	Indonesia : Jawa (Tengah, Timur), Nusa Tenggara Barat, Nusa Tenggara Timur, Sulawesi (Selatan, Tenggara). Europe: Albania, Bulgaria, Cyprus, Greece, Italy , Macedonia, Malta, Romania, Russia, Spain, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia. Asia : Afghanistan, Bangladesh, Cambodia, People Republic of China, Taiwan, India, Iran, Iraq, Israel, Japan,

					Jordan, Korea DPR (North Korea), Korea Republic of (South Korea), Laos, Malaysia, Myanmar, Pakistan, Philippines, Saudi Arabia, Sri Lanka, Syria, Thailand, Turkey, Uzbekistan, Vietnam, Yemen. Africa : Algeria, Angola, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, DR Congo, Ivory Coast, Egypt, Ethiopia, Libya, Madagascar, Malawi, Mali, Mauritius, Morocco, Mozambique, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, Somalia, Sudan, Tanzania, Togo, Tunisia, Uganda,

					Zimbabwe. America : Antigua and Barbuda, Argentina, Bahamas, Barbados, Bolivia, Brazil, Colombia, Cuba, Dominica, Dominican Republic, Grenada, Guadeloupe, Guyana, Haiti, Jamaica, Martinique, Mexico, Montserrat, Paraguay, Peru, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago, USA, Hawaii, Uruguay, Venezuela. Oceania : Australia, Fiji, French Polynesia, New Caledonia, Northern Mariana Islands, Pacific Islands (US), Papua New

					Guinea, Samoa, Vanuatu.
25.	*Phragmataecia castaneae* (Hubner); Lepidoptera: Cossidae; giant stem borer	(P): *Saccharum officinarum* (tebu, sugarcane), *Saccharum spontaneum* (glagah, wild sugarcane)	II	batang (stem), daun (leaf)	Indonesia : Sumatera (Utara, Barat). Asia : China, Malaysia.
26.	*Phragmataecia gummata* (Swinhoe).; *(=Phragmataecia parvipunctus)*; Lepidoptera: Cossidae; giant stem borer	(P): *Saccharum officinarum* (tebu, sugarcane), *Saccharum spontaneum* (glagah, wild sugarcane)	II	batang (stem), daun (leaf)	Indonesia : Sumatera (Utara, Barat, Lampung). Asia : Malaysia
27.	*Planococcus deceptor* (Betn).; *(=Dactylopius coffeae =Dactylopius crotonis =Planococcus crotonis = P.lilacinus =P.tayabanus =Pseudococcus coffeae =P.crotonis =P.deceptor =P.lilacinus* Cork *=P.tayabanus =Tylococcus mauritiensis)*; Hemiptera: Pseudo coccidae; cacao	(P): *Coffea* spp. (kopi, *coffee*), *Annona muricata* (sirsak, soursop), *Bauhinia*, *Ceiba pentandra* (kapok randu, kapok), *Citrus* spp. (jeruk, orange), *Psidium guajava* (jambu biji, guava), *Theobroma cacao* (kakao, cocoa) (S): *Annona squamosa* (srikaya, sweetsop), *Bambusa*, *Cocos nucifera*	II	batang (stem), daun (leaf), akar (root), buah segar, tanaman	Indonesia : Jawa (Timur), Kalimantan (Barat). Asia : Bangladesh, Brunei Darussalam, Cambodia, China, Taiwan, Cocos Islands, India, Laos, Malaysia, Maldives, Myanmar, Philippines, Sri Lanka,

	mealybug, coffee mealybug	(kelapa, coconut), *Dioscorea* sp. (gembili, yam), *Mangifera indica* (mangga, mango), *Punica granatum*, *Tamarindus indica* (asam jawa, tamarind)			Thailand, Vietnam, Yemen. Africa : Comoros, Kenya, Madagascar, Mauritius, Seychelles. America : Dominican Republic, El Salvador, Guyana, Haiti. Oceania : Federated States of Micronesia, Guam, Northern Mariana Islands, Papua New Guinea.
28.	*Postelectrotermes militaris* (Desneux; *(=Calotermes militaris = Neotermes militaris =Termes militaris);* Isoptera: Kalotermidae; dry wood termite	(P): *Camellia sinensis* (teh, tea) (S): *Grevillea robusta,Acacia decurrens*, *Casuarina equisetifolia*, *Stenocarpus salignus*, Cedrus, *Erythrina subumbrans*, *Eucalyptus* spp., *Tephrosia vogelii*, *Cinnamomum camphora* (kamfer, camphor), *Cryptomeria japonica*, *Eucalyptus robusta*	II	batang (stem), akar (root)	Indonesia : Jawa. Asia : Sri Lanka.

29.	*Rhabdoscelus obscurus* (Bolsd.); *(=Rhabdocnemis fausti =R.interruptocostatus =R.maculata =R.nudicollis =R.obscura =R.promissus =R.maculatus =Sphenophorus beccarii =S.insularis =S.interruptecostatus =S.nudicollis =S.promissus =S.sulcipes =S.tincturatus =S.obscurus =Rhabdoscelis obscura)*; Coleoptera: Dryophthoridae; beetle borer, cane weevil borer, New Guinea cane weevil borer, sugarcane weevil borer, New Guinea sugarcane weevil, Hawaiian sugarcane borer, cane weevil borer, New Guinea sugarcane weevil	(P): *Saccharum officinarum* (tebu, sugarcane) (S): *Areca catechu* (pinang, betelnut), *Cocos nucifera* (kelapa, coconut), *Carica papaya* (pepaya, pawpaw), *Metroxylon sagu* (sagu, sago palm), *Musa* spp. (pisang, banana) , *Musa x paradisiaca* (pisang kepok, plantain), *Zea mays* (jagung, corn, maize)	II	batang (stem)	Indonesia : Maluku,Papua, Sulawesi, Nusa Tenggara Barat. Asia : China, Taiwan, Christmas Island (Indian Ocean), Japan, Malaysia America : USA (Hawaii). Oceania : American Samoa, Australia , Palau, Cook Islands, Federated States of Micronesia (Caroline Islands), Fiji, French Polynesia, Guam, Marshall Islands, Nauru, New Caledonia, Niue, Northern Mariana Islands, Papua New Guinea, Samoa, Solomon Islands, Tonga, Vanuatu.

30.	*Sesamia grisescens* (Warren).; Lepidoptera: Noctuidae; sesamia borer, pink sugarcane borer	(P): *Saccharum officinarum* (tebu, sugarcane), *Oryza sativa* (padi, paddy), *Zea mays* (jagung, corn, maize)	II	batang (stem)	Indonesia : Papua dan Maluku. Oceania : Papua New Guinea.
31.	*Sexava coriacea* (Linn.); Orthoptera: Tettigoniidae; belalang sexava, sexava grasshopper	(P): *Cocos nucifera* (kelapa, coconut) (S): Orchidaceae (anggrek, orchids), *Asplenium nidus* (kadaka, bird's nest fern), *Salacca edulis* (salak, snake-skin palm), *Metroxylon sagu* (sagu, sago palm), *Arenga pinnata* (aren, sugar palm), *Areca catechu* (pinang, betelnut palm), *Musa* spp. (pisang, banana) , *Pandanus* spp. (pandan), *Zingiber officinale* (jahe, ginger)	II	buah (fruit), tanaman (live plant), daun (leaf), rimpang (rhizome), sabut , tanah (soil).	Indonesia : Sulawesi, Kep. Sangihe, Talaud, Kep. Banggai, Maluku, Papua.
32.	*Sexava karnyi* (Lfs).; Orthoptera: Tettigoniidae; belalang sexava, sexava grasshopper	(P): *Cocos nucifera* (kelapa, coconut) (S): Orchidaceae (anggrek, orchids), *Asplenium nidus* (kadaka, bird's nest fern), *Salacca edulis* (salak, snake-	II	Tanaman (live plant), buah (fruit), daun (leaf), rimpang (rhizome), sabut, tanah (soil).	Indonesia : Sulawesi (Tengah : Kepulauan Togean & Una-una)

		skin palm), *Metroxylon sagu* (sagu, sago palm), *Arenga pinnata* (aren, sugar palm), *Areca catechu* (pinang, betelnut palm), *Musa* spp. (pisang, banana) , *Pandanus* spp. (pandan), *Zingiber officinale* (jahe, ginger)			
33.	*Sexava nubila* (Stal.); Orthoptera: Tettigoniidae; belalang sexava, sexava grass hopper, coconut treehopper	(P): *Cocos nucifera* (kelapa, coconut) (S): Orchidaceae (anggrek, orchids), *Asplenium nidus* (kadaka, bird's nest fern), *Salacca edulis* (salak, snake-skin palm), *Metroxylon sagu* (sagu, sago palm), *Arenga pinnata* (aren, sugar palm), *Areca catechu* (pinang, betelnut palm), *Musa* spp. (pisang, banana) , *Pandanus* spp. (pandan), *Zingiber officinale* (jahe, ginger)	II	tanaman (live plant), buah (fruit), daun (leaf), rimpang (rhizome), sabut, tanah (soil)	Indonesia : Sulawesi (Utara : Kepulauan Sangihe dan Talaud), Maluku, Papua, Ternate, Halmahera Barat, Halmahera Selatan, Distrik Sota. Oceania : Papua New Guinea.
34.	*Thosea monolancha (Meyrick)* (= *Thosea moluccana*); Lepidoptera: Limacodidae	(P): *Cocos nucifera* (kelapa, coconut), *Elaeis guineensis* (kelapa sawit, oil palm)	II	bagian tanaman (part of plant)	Indonesia : Sulawesi, Papua Asia: Philippines Oceania: Papua New Guinea

II. NEMATODA / NEMATODES

NO.	NAMA ILMIAH / NAMA UMUM *SCIENTIFIC NAME / COMMON NAME*	INANG/ *HOST*	GOL / *GROUP*	MEDIA PEMBAWA/ *PATHWAY*	DAERAH SEBAR/ *GEOGRAPHICAL DISTRIBUTION*
1.	*Aphelenchoides besseyi* (Christie); Aphelenchida: Aphelenchoididae; pucuk putih padi / rice leaf nematode	*Oryza sativa* (padi, paddy)	II	benih (seed), jerami (straw), tanah (soil)	Indonesia: Sumatera, Jawa, Kalimantan (Selatan). Europe : Bulgaria,Hungary, Italy, Russia, Slovakia, Ukraine. Asia : Afghanistan, Azerbaijan, Bangladesh, Cambodia, China, Georgia (Republic), India , Iran, Japan, Korea DPR (North Korea), Korea Republic of (South Korea), Kyrgyzstan, Laos, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Tajikistan,

					Thailand, Turkey, Uzbekistan, Vietnam. Africa : Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Comoros, DR Congo, Ivory Coast, Egypt, Gabon, Gambia, Ghana, Guinea, Kenya, Madagascar, Malawi, Mali, Nigeria, Senegal, Sierra Leone, South Africa, Tanzania, Togo, Uganda, Zambia, Zimbabwe. America : Argentina, Brazil, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Guadeloupe, Mexico, Panama, Trinidad and Tobago, USA, Hawaii Oceania : Australia, Cook Islands, Fiji, Papua New Guinea.

2.	*Ditylenchus angustus* (Bul)l. ; Anguinidae; rice stem nematode	*Oryza sativa* (padi, paddy)	II	benih (seed), jerami (straw), tanah (soil)	Indonesia: Jawa, Kalimantan (Selatan). Asia : Bangladesh, India, Malaysia, Myanmar, Pakistan, Philippines, Thailand, Vietnam. Africa : Egypt.
3.	*Globodera pallida* (Stone) Mulvey & Stone; *(=Heterodera pallida)*; Heteroderidae; white cyst nematode, pale potato cyst nematode, potato cyst nematode, potato root eelworm	(P): *Solanum tuberosum* (kentang, potato), *Lycopersicum esculentum* (tomat, tomato), *Solanum melongena* (terung, eggplant) (S): *Datura stramonium* (kecubung, jimsonweed), *Lycopersicon pimpinellifolium*, *Oxalis tuberosa* , *Solanum gilo*,	II	akar (root), umbi (tuber), tanah (soil)	Indonesia : Jawa (Tengah/Dieng) Europe: Austria, Belgium, Netherlands, Bulgaria, Czech Republic, Croatia, Cyprus, Estonia, Finland, France, Faroe Islands, Greece, Hungary, Ireland, Italy, Iceland, Germany, Latvia, Lithuania, Luxembourg, Malta, Moldova, Norway, Poland, Portugal, Rumania, Russia, Slovakia, Spain, Sweden, Switzerland, UK, Ukranie Asia: India, Pakistan,

		Solanum indicum, *Solanum mauritianum*, *Solanum marginatum*, *Solanum nigrum*, *Solanum quitoense*, *Solanum aviculare*, *Solanum sarrachoides*.			Turkey Africa: Algeria, Tunisia, America: Argentina, Bolivia, Canada, Chile, Columbia, Falkland Islands, Ecuador, Panama, Peru, Venezuela Oceania: New Zealand.
4.	*Globodera rostochiensis* (Wollenweber) Mulvey & Stone; Heteroderidae; nematoda sista (kentang) / golden cyst nematode	*Solanum tuberosum* (kentang, potato), *Lycopersicum esculentum* (tomat, tomato), *Solanum melongena* (terung, eggplant)	II	benih dan umbi (seeds and tuber), akar tanaman (root of), akar tanaman (root of) dan tanah (soil)	Indonesia : Jawa. Europe : Albania, Austria, Belarus, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Faroe Islands, Finland,France,Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway,

					Poland, Portugal, Romania, Russia, Slovakia, Slovenia,Spain, Sweden, Switzerland, Ukraine, UK, Scotland Asia : Armenia, India, Japan, Lebanon, Oman, Pakistan, Philippines, Sri Lanka, Tajikistan, Turkey. Africa : Algeria, Egypt, Libya, Sierra Leone, South Africa, Tunisia. America : Bolivia, Canada, Chile, Colombia, Ecuador, Mexico, Panama, Peru, USA, Venezuela. Oceania : Australia, New Zealand, Norfolk Island.
5.	*Hemicriconemoides mangiferae* Siddiqi; Criconematidae; sheath nematode	*Citrus* spp. (jeruk, orange), *Nephelium litchii* (leci, lychee),	II	akar (root), tanah (soil).	Indonesia : Jawa. Asia : China, India, Iran, Israel, Korea Republic of (South Korea),Pakistan,

		Mangifera indica (mangga, mango), *Musa* spp. (pisang, banana), *Zea mays* (jagung, corn/maize), rumput-rumputan (Poaceae)			Philippines, Thailand, Vietnam. Africa : Ghana, Nigeria, South Africa, Sudan. America : Brazil, Dominica, Ecuador, Grenada, Mexico, Peru, Saint Lucia, Trinidad and Tobago, USA, Venezuela. Oceania : Fiji, New Caledonia, Papua New Guinea.
6.	*Heterodera glycines* (Ichinohe); Heteroderidae; soybean cyst nematode	*Glycine max* (kedelai, soybean)	II	akar (root), tanah (soil)	Indonesia : Jawa, Sumatera (Lampung). Europe : Italy, Russia Asia : China,, Japan, Korea DPR (North Korea), Korea Republic of (South Korea), Mongolia. Africa : Egypt. America : Argentina, Brazil, Canada, Ecuador, Puerto Rico, USA.

7.	*Macroposthonia onoensis*; Criconematidae; ring nematode	*Syzygium aromaticum* (cengkeh, clove)	II	akar (root) , tanah (soil)	Indonesia : Jawa, Sumatera (Selatan, Lampung). Asia : India. America : Trinidad, Tobago.
8.	*Meloidogyne graminicola* (Sledge & Golden) Whitehead; Meloidogynidae; rice root knot nematode	serealia, *Oryza sativa* (padi, paddy)	II	akar tanaman (root) , tanah (soil)	Indonesia: DI Yogyakarta, Jawa (Tengah). Asia : Bangladesh, India, Laos, Malaysia, Myanmar, Pakistan, Philippines, Singapore, Thailand, Vietnam Africa : South Africa America : Brazil , Colombia, USA
9.	*Meloidogyne hapla* (Chitwood); Meloidogynidae; northern root knot nematode	(P) : *Actinidia chinensis* (Chinese gooseberry), *Arachis hypogaea* (kacang tanah, groundnut), *Beta*	II	Akar (root) umbi (tuber), tanah (soil)	Indonesia : Jawa Europe : Belarus, Belgium, Bulgaria, Estonia, Finland, Serbia, Slovenia, Croatia, Bosnia

		vulgaris var. *saccharifera* (sugarbeet), *Cichorium intybus* (chicory), *Daucus carota* (wortel, carrot), *Fragaria ananassa* (strawberry), *Glycine max* (kedelai, soyabean), *Lycopersicon esculentum* (tomat, tomato), *Medicago sativa* (lucerne), *Pelargonium* (Pelargoniums), *Rosa* (Mawar, roses), *Solanum tuberosum* (kentang, potato), *Tanacetum cinerariifolium* (Phyretrum),			and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Macedonia, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia : Armenia, China, Taiwan, India, Iran, Israel, Japan, Kazakhstan, Korea Republic of (South Korea), Kyrgyzstan, Malaysia, Mongolia, Pakistan, Philippines, Sri Lanka, Tajikistan, Thailand, Turkey, Turkmenistan, Uzbekistan Africa : Algeria, Ivory

		Trifolium (clover) (S) : *Allium cepa* (bawang, onion), *Anemone* (windflower), *Beta*, *Brassica napus* var. *napus* (rape), *Brassica oleraceae* var. *capitata* (cabbage), *Cajanus cajan* (pigeon pea), *Camellia sinensis* (the, tea), *Capsicum anuum* (bell peper), *Chenopodium quinona* (quinona), *Chrysanthemum* spp. (daisy), *Coffea* (kopi, coffee), *Cucumis* (melon, melons, cucumbers,			Coast, Egypt, Kenya, Libya, Malawi, Morocco, Nigeria, South Africa, Tanzania, Uganda, Zimbabwe America : Argentina, Brazil, Canada, Chile, Colombia, Costa Rica, Ecuador, Mexico, Panama, Paraguay, Peru, USA, Venezuela Oceania : Australia, New Zealand, Norfolk Island, Papua New Guinea

		gerkins), *Cyclamen*, *Dianthus caryophillus* (Carnation), *Fabaceae* (leguminous plants), *Lactuca sativa* (lettuce), *Linum usitatissimum* (flax), *Mentha* (mints), *Nicotiana tabacum* (tembakau, tobacco), *Olea europeae* subsp. *Europeae* (zaitun, olive), *Phaseolus* (kacang, beans), *Raphanus sativus* (radish), *Rubus* (blackberry, raspberry), *Sinapsis alba* (white mustard),			

		Solanum (nightsade), *Vicia* (vetch), *Vitis vinifera* (grapevine)			
10.	*Pratylenchus brachyurus* (Godfrey) Filipjev & Schuurmans Stekhoven; *(=Pratylenchus pratensis)*; Pratylenchidae; smooth headed nematode, root lesion nematode	*Arachis hypogea* (kacang tanah, groundnut, peanut), *Ananas comosus* (nenas, pineapple), *Zea mays* (jagung, corn, maize), *Glycine max* (kedelai, soybean), *Solanum tuberosum* (kentang, potato), *Camellia sinensis* (teh, tea), *Vigna cylindrica* (kacang panjang, long bean), *Citrus* spp. (jeruk, orange), *Coffea* spp. (kopi,	II	akar (root) dan tanah (soil)	Indonesia : Sumatera (Aceh dan Sumatera Barat), Jawa. Europe : Bulgaria, Russia. Asia : Georgia, India, Israel, Japan, Malaysia, Oman, Pakistan, Philippines, Singapore, Sri Lanka, Turkey, Vietnam. Africa : Cameroon, Ivory Coast, Egypt, Guinea, Kenya, Madagascar, Malawi, Nigeria, South Africa, Togo, Uganda, Zimbabwe . America : Belize, Bolivia, Brazil, Canada , Costa Rica, Cuba, French

		coffee), *Gossypium hirsutum* (kapas, cotton), *Hevea brasiliensis* (karet, rubber tree), *Dacryodes edulis* (kenari, African pear), *Nicotiana tabacum* (tembakau, tobacco), *Oryza sativa* (padi, paddy) , *Persea Americana* (alpokat, avocado), *Prunus persica* (persik, peach), *Saccharum officinarum* (tebu, sugarcane), *Theobroma cacao* (kakao, cocoa).			Guiana, Guatemala, Guyana, Mexico, Peru, Puerto Rico, USA, Hawaii, Venezuela Oceania : Australia, Fiji, Tonga.

11.	*Pratylenchus penetrans* (Cobb.) Filipjev; Pratylenchidae; Cobb's root lession nematode	*Solanum tuberosum* (kentang, potato), pakis	II	umbi (bulb), tanah (soil)	Indonesia :Sumatera, Jawa, Bali. Europe : Albania, Belgium, Bulgaria, Cyprus, Czech Republic and Slovakia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia. Asia : Azerbaijan, China, India, Japan, Korea Republic of (South Korea), Kyrgyzstan, Pakistan, Philippines, Saudi Arabia, Singapore, Turkey, Vietnam. Africa : Algeria, Egypt,

					Kenya, Libya, Morocco, Nigeria, South Africa, Zimbabwe. America : Argentina, Brazil, Canada, Costa Rica, Mexico, Trinidad and Tobago, USA, Venezuela. Oceania : Australia, New Zealand.

III. CENDAWAN / FUNGAL

No.	NAMA ILMIAH/SINONIM/KLAS/ NAMA UMUM/ *SCIENTIFIC NAME/SYNONIM/CLASS/COMMON NAME*	INANG/ *HOST*	GOL / *GROUP*	MEDIA PEMBAWA/ *PATHWAY*	DAERAH SEBAR/ *GEOGRAPHICAL DISTRIBUTION*
1.	*Alternaria cucumerina* (Ell. & Ev.) Elliott.; *(=Macrosporium cucumerinum =Alternaria brassicae* var. *nigrescens)*; Anamorphic fungi; cucumber blight, brown spot of cucumber, alternaria leaf blight	(P): Cucuraceae, *Citrullus vulgaris* (semangka, watermelon), *Cucumis melo* (melon, melon)	I	tanaman (plant), bagian tanaman (part of plant)	Indonesia : Jawa (Bogor) Asia: India America: Argentina, USA
2.	*Balansia oryzae-sativae* (Hashioka); *(=Balansia oryzae =Ephelis pallida =Ephelis oryzae)*; Ascomycetes; black choke, black ring, false ergot, incense rod, sterility disease, udbatta, udbatta disease	(P): *Oryza sativa* (padi, paddy)	I	biji (grain), tanaman (plant), bagian tanaman (part of plant)	Indonesia: Jawa (Sukabumi, Bogor, Tegal) Asia: China, India ,Japan Africa: Sierra Leone America: USA Oceania: New Caledonia , Vanuatu

3.	*Botrytis allii* (Munn).; Busuk leher batang (Neck rot fungus)	(P) : *Allium ascalonicum* (bawang merah, shallot)	I	benih (seed) dan umbi (bulb)	Indonesia : Sumatera (Barat dan Lampung). Europe : Austria, Belgium, Bulgaria, Cyprus, Czech Republic and Slovakia , Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Italy, Netherlands, Norway, Poland, UK. Asia : Afghanistan, Bangladesh, China, Taiwan, Georgia (Republic), India, Iran, Iraq, Israel, Japan, Jordan, Korea Republic of (South Korea), Nepal, Pakistan, Saudi Arabia, Turkey, Vietnam.

					Africa : Egypt, Kenya, South Africa, Tanzania, Zambia. America : Brazil, Canada, Chile, Colombia, Costa Rica, Guatemala, Jamaica, Panama, USA, Venezuela. Oceania : Australia, New Zealand.
4.	*Ceratocystis fimbriata*; Penyakit layu,atau kanker, atau busuk, hawar (Ceratocystis wilt, cancer, or rot, blight)	*Theobroma cacao* (kakao, cocoa), *Coffea* spp. (kopi, coffee), *Crotalaria*, *Hevea*, *Camellia sinensis* (teh, tea), *Ipomoea*, *Eucalyptus* spp. (Eucalyptus), *Myristica fragrans* (pala)	I	biji (grain) dan benih (seed), tanaman dan bagian tanaman	Indonesia : Jawa,Kalimantan,Sumatera (Aceh, Riau). Europe : France, Italy, Poland, Portugal, Switzerland, UK. Asia : Brunei Darussalam, Cambodia, China, Taiwan, India, Japan, Korea DPR (North Korea), Korea Republic of (South Korea), Malaysia, Myanmar, Philippines, Thailand, Vietnam. Africa : DR Congo, Ivory Coast, Ghana, Seychelles,

					South Africa, Uganda. America : Brazil, Canada, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Jamaica, Mexico, Nicaragua, Panama, Peru, Puerto Rico, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, USA, Hawaii, Venezuela. Oceania : American Samoa, Australia, Fiji, New Zealand, Papua New Guinea, Samoa, Solomon Islands.
5.	*Chalara paradoxa* (De Seynes) Sacc; *(=Ceratocystis paradoxa = Ceratostomella paradoxa =Endoconidium fragrans =Hughesiella euricoi =Ophiostoma paradoxa =Sporoschisma paradoxum =Stilbochalara dimorpha*	(P): *Musa* spp. (pisang, banana)	I	akar (root), batang (stem)	Indonesia : Sumatera (Lampung), Jawa (Barat). Europe : France, Italy, Portugal , Spain . Asia : Bangladesh, Brunei Darussalam, China , Cocos Islands, India, Iran, Iraq,

	=Thielaviopsis ethacetica); Ascomycetes; black rot , base rot, bitten leaf of coconut, black end of banana, black rot of sugarcane, black scorch of date palm, bleeding stem of coconut, crown decay of date palm, crown rot of banana, dry basal rot of coconut, finger tip rot of banana, head rot of date palm, heart rot of date palm, leaf rot of coconut, pineapple disease, pod rot of cocoa, root rot of coconut, sett rot of sugarcane, stalk rot of banana, stalk rot of pineapple, water blister of pineapple, soft rot, dry basal rot of oil palm, bulb rot, fruit rot, post-harvest rot				Japan, Kuwait, Malaysia, Myanmar, Pakistan, Philippines, Saudi Arabia, Sri Lanka, Thailand, Vietnam. Africa : Algeria, Angola, British Indian Ocean Territory, Burkina Faso, Cameroon, DR Congo, Ivory Coast, Egypt, Ethiopia, Ghana, Guinea, Kenya, Libya, Madagascar, Malawi, Mauritania, Mauritius, Morocco, Mozambique, Nigeria, Réunion, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, South Africa, Swaziland, Tanzania, Togo, Tunisia, Uganda, Zimbabwe. America : Antigua and Barbuda, Argentina, Barbados, Belize, Brazil, Cayman Islands, Colombia, Costa Rica, Cuba, Curaçao, Dominica, Dominican

					Republic, Ecuador, El Salvador, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Pierre and Miquelon, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, USA, Hawaii, Uruguay, Venezuela. Oceania : Australia , Fiji, French Polynesia, New Caledonia, Pacific Islands, Papua New Guinea, Solomon Islands, Vanuatu.
6.	*Diaporthe phaseolorum* (Cooke & Ellis) Sacc var *caulivora* Athow & Caldwell; *(=Phomopsis phaseoli = Phoma subcirnata*); Ascomycetes; lima bean pod blight, leaf spot of Lima bean,	(P): *Phaseolus* spp., *Capsicum annuum* (cabai, hot pepper, chilies, red pepper), *Glycine max* (kedelai,	I	benih (seed), bagian tanaman (part of plant), media tanam (planting medium)	Indonesia : Jawa (Bogor) Europe: Hungary,Italy, Romania Asia: India Africa: South Africa

	bean pod blight, bean batang (stem) blight, bean batang (stem) canker	soybean), *Helianthus annuus* (bunga matahari, sunflower), *Vicia faba*			America: Argentina, USA Oceania: Australia
7.	*Diaporthe vexans* Gratz; *(=Phyllosticta hortorum = Phomopsis vexans)*; Ascomycetes; Phomopsis; blight of eggplant, Phomopsis rot of eggplant, brown spot of eggplant, fruit rot of eggplant, tipover of eggplant	(P): *Solanum melongena* (terung, eggplant, aubergine)	I	benih (seed), tanaman (plant), bagian tanaman (part of plant), media tanam (planting medium)	Indonesia : Jawa (Bogor, Kuningan) Asia: China, India, Malaysia, Philippines, Saudi Arabia America: Mauritius, Barbados, Bermuda, Brazil, Canada, Guyana, Jamaica, Puerto Rico, USA Oceania: New Caledonia
8.	*Fusarium moniliforme* f.sp. *asparagi* (Cohen); Layu, busuk akar (Wilt, root rot)	*Asparagus officinalis* (asparaga, asparagus)	I	benih (seed)	Indonesia : Jawa (Barat dan Timur : Malang).
9.	*Fusarium oxysporum* f.sp. *passiflorae* (W.L. Gordon); Layu Fusarium (Fusarium wilt)	*Passiflora quadrangularis* (markisa, granadilla, passion-fruit)	I	benih (seed)	Indonesia : Sumatera (Utara). Asia : China (Fujian).

					Africa : South Africa. America : Brazil, USA (Hawaii). Oceania : Australia .
10.	*Helminthosporium solani* Durieu & Mont; *(=Cladosporium abietinum =Spondylocladium atrovirens)*; Anamorphic fungi; silver scurf	(P): *Solanum tuberosum* (kentang, potato)	I	umbi (tuber), bagian tanaman (part of plant)	Indonesia: Jawa Europe: Austria,Belarus, Bulgaria, Czech, Slovakia, Denmark, France, Germany, Greece, Hungary,Ireland, Italy, The Netherlands, Norway, Poland, Romania, Rusia, Swedia,Switzerlands, UK Asia: China,Taiwan, India ,Iran, Israel, Japan, Myanmar, Singapore, Turkey Africa: Morocco, South Africa America: Argentina, Bolivia, Brazil,Canada, Chile, Colombia, Cuba, Mexico, Peru, USA, Venezuela Oceania: Australia, New Caledonia, New Zealand, Papua New Guinea.

11.	*Peronosclerospora sorghi* (Weston & Uppal) C.G Shaw.; *(=Protomyces graminicola = Sclerospora graminicola =S.sorghi =S.sorghi-vulgaris)*; Oomycetes; sorghum downy mildew, mildew of maize and sorghum	(P): *Sorghum bicolor* (sorgum, sorghum), *Sorghum* spp., *Zea mays* (jagung, corn, maize) (S): *Andropogon sorghi*, *Panicum trypheron*, *Pennisetum glaucum*, *Sorghum halepense*, *Zea mexicana*	I	bagian tanaman (part of plant)	Indonesia : Jawa (Barat) Asia: Bangladesh, China,Taiwan, India,Iran, Israel, Japan, Nepal, Pakistan, Philippines, Thailand, Yemen Africa: Benin, Botswana, Burkina Faso, Burundi, Egypt, Ethiopia, Ghana, Kenya, Malawi, Mauritius, Mozambique, Nigeria, Rwanda, Somalia, South Africa,Sudan, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe America: Argentina, Bolivia, Brazil, Colombia, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Puerto Rico, USA, Uruguay, Venezuela Oceania: Australia

12.	*Peronospora manshurica* (Naum) Syd.; Downy mildew (embun bulu)	*Glycine max* (kedelai, soybean)	I	benih (seed) dan biji (grain)	Indonesia : Jawa Timur, Jawa Barat (Bogor). Europe : Bulgaria, Czech Republic, Czech Republic and Slovakia , Denmark, France, Germany, Hungary, Italy, Latvia, Moldova, Poland, Romania, Russia, Slovakia, Sweden, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia. Asia : China, Taiwan, India, Iran, Israel, Japan, Kazakhstan, Korea DPR (North Korea), Korea Republic of (South Korea), Malaysia, Philippines, Thailand, Turkey, Vietnam. Africa : Ethiopia, South Africa, Zimbabwe. America : Argentina, Bermuda, Bolivia, Brazil,

					Canada, Colombia, Cuba, Mexico, Puerto Rico, USA. Oceania : Australia , New Zealand.
13.	*Phakopsora vitis* (Thum) Syd.; *(Physopella ampelopsidis)*; Karat (Rust)	*Vitis vinifera* (anggur, grapevine)	I	benih (seed) dan buah (fruit)	Indonesia : Jawa (Timur), Bali. Asia : China, Japan , Korea Republic of (South Korea), Nepal.
14.	*Phoma lingam* (Tode ex Fr.) Demazieres; Pangkal batang hitam (Black leg)	*Brassica oleracea* var. *capitata* (kubis, cabbage)	I	benih (seed)	Indonesia : Jawa (Timur). Europe : Austria, Bulgaria, Czech Republic and Slovakia, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Malta, Netherlands, Norway, Poland, Romania, Russia, Spain, Sweden, Switzerland, Ukraine, UK, Scotland. Asia : Armenia, China, Taiwan, Georgia (Republic),

					India, Iran, Israel, Japan, Kazakhstan, Korea DPR (North Korea), Korea Republic of (South Korea), Kyrgyzstan, Malaysia, Pakistan, Philippines, Thailand, Turkey. Africa : Egypt, Ethiopia, Kenya, Mozambique, Nigeria, South Africa, Zambia, Zimbabwe. America : Argentina, Brazil, Canada, Costa Rica, El Salvador, Mexico, Panama, Puerto Rico, USA, Hawaii. Oceania : Australia , New Caledonia, New Zealand, Papua New Guinea.
15.	*Phytophthora capsici* (Leonian), Busuk polong (Phytophthora pod rot)	*Piper nigrum* (lada, pepper)	I	bibit (seedling), buah (fruit)	Indonesia : Sumatera (Bangka, Belitung, Lampung), Kalimantan (Barat), Sulawesi. Europe : Bulgaria, France, Greece, Italy, Russia, Spain,

					Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia. Asia : China, India, Iran, Iraq, Israel, Japan, Korea DPR (North Korea), Korea Republic of (South Korea), Lebanon, Malaysia, Pakistan, Philippines, Saudi Arabia, Turkey. Africa : Morocco, Nigeria, South Africa. America : Argentina, Bolivia, Brazil, Canada, Chile, Costa Rica, Dominican Republic, El Salvador, Guatemala, Mexico, Panama, Peru, Puerto Rico, Trinidad and Tobago, USA, Hawaii, Venezuela. Oceania : Palau, Federated states of Micronesia (Caroline Islands).

16.	*Phytophthora citrophthora* (R.H Sm & E. Sm); (=*Pythiacystis citrophthora*); Oomycetes; brown rot of *Citrus* fruit, foot rot of *Citrus*, cocoa black pod	(P): *Citrus* spp., *Theobroma cacao* (kakao, cocoa) (S): *Actinidia deliciosa* (kiwi), *Mandevilla* spp., *Tabernae coronaria*, *Euonymus* spp., *Rhododendron* spp., *Hevea brasiliensis* (karet, rubber tree), *Fagus* spp., *Ribes sanguineum*, *Juglans* spp., *Sandoricum koetjape* (kecapi, kecaphi) *Ficus elastica*, *Cocos nucifera* (kelapa, coconut), *Sesamum*	I	buah (fruit), benih (seed), bagian tanaman (part of plant), media tanam (planting medium)	Indonesia : Sulawesi (Tengah), NTT (Soe) Europe: Bulgaria, Cyprus, France, Greece, Italy, Portugal, Rusia, Spain, Switzerland, UK Asia: Bangladesh, China, Taiwan, Georgia, India, Iran, Iraq, Israel, Japan, Jordan, South Korea, Lebanon, Malaysia, Pakistan, Philippines, Thailand, Turkey, Vietnam, Yemen Africa: Algeria, Angola, DR Congo, Ivory Coast, Egypt, Ethiopia, Kenya, Mauritius, Morocco, Mozambique, Senegal, South Africa, Tunisia, Zambia, Zimbabwe America: Argentina, Barbados, Brazil, Chile, Costa Rica, Cuba, Dominica, Ecuador, El Salvador,

		indicum (wijen, sesame), *Piper nigrum* (lada, pepper), *Pistacia vera*, *Fragaria* spp., *Prunus domestica*, *Rubus idaeus*, *Coptis japonica*, *Murraya* sp., *Poncirus trifoliate*, *Capsicum annuum* (cabai, hot pepper, chilies, red pepper), *Taxus* spp., *Sequoiadendron giganteum.*			Guyana France, Guadeloupe, Guatemala, Guyana, Haiti, Jamaica, Martinique, Mexico, Panama, Peru, Puerto Rico, Suriname, Trinidad and Tobago, USA, Uruguay, Venezuela Oceania: Cook Islands, Fiji, New Caledonia, New Zealand
17.	*Phytophthora fragariae* (Hickman), Red core, red stele disease	*Fragaria vesca* (Arbei, strawberry)	I	benih (seed)	Indonesia : Jawa (Barat). Europe : Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Czech Republic, Denmark, France, Germany,

					Hungary, Ireland, Italy, Lithuania, Luxembourg, Netherlands, Norway, Russia, Slovakia, Slovenia, Sweden, Switzerland, Ukraine, UK, Scotland. Asia : China, Taiwan, Japan, Lebanon, Syria. Africa : Egypt. America : Canada, Ecuador, Mexico, USA . Oceania : Australia, New Zealand.
18.	*Phytophthora sojae* Kaufm & Gerd.; *(=Phytophthora megasperma* f.sp. *glycinea =P.sojae* f.sp. *glycines =P.megasperma* var. *sojae)*; Oomycetes; Phytophthora root and batang (stem) rot, root and batang (stem) rot of soybean, root and stem rot of soyabean	(P): *Glycine max* (kedelai, soybean) (S): *Lupinus* sp.	I	benih (seed), bagian tanaman (part of plant)	Indonesia : Jawa (Barat, Tengah) Europe: France, Italy, Rusia, Ukraine Asia: China, Iran, Japan, South Korea, Pakistan America: Argentina, Brazil, Canada, Chile, USA Oceania: Australia

19.	*Pseudoperonospora cubensis* (Berk. & M.A. Curtis) Rostovtzev; Embun bulu (Downy mildew)	*Cucumis sativus* (mentimun, cucumber),*Cucumis melo* (melun, melon),*Citrullus lanatus* (semangka, watermelon) dan cucurbitaceae lainnya	I	benih (*true seed*), seedling	Indonesia : Sumatera, Jawa, Bali. Europe : Austria, Bulgaria, Croatia, Czech Republic and Slovakia , Denmark, Finland, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia, Serbia, Slovenia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Netherlands, Poland, Romania, Russia, Slovenia, Sweden, Switzerland, Ukraine, UK. Asia : Armenia, Azerbaijan, Bangladesh, Brunei Darussalam, Cambodia, China, Taiwan, Georgia (Republic), India, Iran, Iraq,

					Israel, Japan, Jordan, Kazakhstan, Korea Republic of (South Korea), Laos, Lebanon, Malaysia, Mongolia, Myanmar, Nepal, Oman, Pakistan, Philippines, Saudi Arabia, Sri Lanka, Thailand, Turkey, Uzbekistan, Yemen. Africa : Algeria, DR Congo, Ivory Coast, Egypt, Ethiopia, Gabon, Ghana, Guinea, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Niger, Nigeria, Senegal, Sierra Leone, South Africa, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe. America : Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bermuda, Bolivia, Brazil, Canada, Colombia, Cuba, Dominica, Dominican Republic, El Salvador,

					French Guiana, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Nicaragua, Panama, Peru, Puerto Rico, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, USA, Hawaii, Venezuela. Oceania : American Samoa, Australia, Fiji, French Polynesia, Guam, New Zealand, Papua New Guinea, Samoa, Solomon Islands, Tonga.
20.	*Pythium myriotylum* (Drechs).; Oomycetes; brown rot of groundnut, cocoyam root rot, groundnut pod breakdown, kernel rot of groundnut, pod rot of groundnut, tannia leaf burning disease, wilt of groundnut	(P): Araceae, *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Colocasia* spp., Colocasia	I	bagian tanaman (part of plant), tanah (soil)	Indonesia: Sumatera Europe: The Netherlands, Belgium Asia: China ,Taiwan, India , Israel, Japan, North Korea, South Korea, Malaysia, Sri Lanka

		esculenta (talas, taro), *Xanthosoma* spp. (S): *Amaranthus hybridus* (bayam, spinach), *Ananas comosus* (nenas, pineapple), *Artemisia vulgaris*, *Brassica oleracea capitata* (kubis, cabbage), *Carthamus tinctorius*, *Carica papaya* (pepaya, pawpaw), *Citrullus vulgaris* (semangka, watermelon), *Cucumis sativus* (mentimun, cucumber), *Curcuma domestica* (kunyit, tumeric),			Africa: Cameroon, Libya, Madagascar, Malawi, Nigeria, Sierra Leone, South Africa, Swaziland, Zambia America: Brazil, Dominica, Grenada, Guadeloupe, Martinique, Mexico, Saint Lucia, Saint Vincent & the Grenadines, Trinidad and Tobago, USA Oceania: Australia, New Zealand, Papua New Guinea, Samoa, Kepulauan Solomon, Vanuatu

		Coronilla varia, *Elaeis guineensis* (kelapa sawit, oilpalm) *Eucalyptus*, *Fragaria vesca* (arbei, strawberry), *Glycine max* (kedelai, soybean), *Gossypium barbadens* (kapas, cotton), *Medicago sativa*, *Nicotiana tabacum* (tembakau, tobacco), *Oryza sativa* (padi, paddy), *Paulownia*, *Phaseolus* spp., *Vigna* spp. (buncis, cowpea), *Pisum sativum* (kapri, sweet pea), *Raphanus sativus*			

		(lobak, radish), *Saccharum officinarum* (tebu, sugarcane), Secale cereale (rye), *Solanum melongena* (terung, eggplant aubergine), *Sorghum bicolor* (sorgum, sorghum), *Spinacia oleracea*, V*igna* spp., *Zea mays* (jagung, corn, maize), *Zingiber officinale* (jahe, ginger), *Zantedeschia elliottiana*, *Robinia pseudoacacia*			

21.	*Pythium ultimum* (Trow); Oomycetes; black-leg of seedlings; damping-off of seedlings; fruit rot; root rot; stem rot of seedlings; tree decline; watery wound rot of potato; leek of potato	(P): *Alstroemeria* (Inca lily), *Beta vulgaris* (bit, beetroot), *Beta vulgaris* var. *saccharifera* (bit, sugarbeet), *Brassica oleracea* var. *capitata* (cabbage), *Capsicum* (peppers), *Carthamus tinctorius* (safflower), *Cicer arietinum* (chickpea), *Cucumis sativus* (ketimun, cucumber), *Daucus carota* (wortel, carrot), *Fagus sylvatica* (common beech), *Ficus carica*	I	bagian tanaman (part of plant), benih, seedling	Indonesia : Jawa (Barat) Europe: France, Germany, Italy, Russia, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Asia: China, India, Iran, Iraq, Japan, Jordan, South Korea Africa: Egypt. America: Canada, Mexico, USA, Peru. Oceania: Australia.

		(ara), *Fragaria* (stroberi, strawberry), *Glycine max* (kedelai, soyabean), *Gossypium* (kapas, cotton), *Helianthus annuus* (sunflower), *Impatiens* (balsam), *Lactuca sativa* (lettuce), *Lilium longiflorum* (Easter lily), *Linum usitatissimum* (flax), *Lycopersicon esculentum* (tomat, tomato), *Malus domestica* (apel, apple), *Medicago sativa*			

		(lucerne), *Oryza sativa* (padi, paddy, rice), *Phaseolus* (beans), *Phaseolus vulgaris* (common bean), *Pisum sativum* (pea), *Raphanus sativus* (radish), *Solanum melongena* (terung, aubergine), *Solanum tuberosum* (kentang, potato), *Sorghum bicolor* (sorgum, sorghum), *Spinacia oleracea* (bayam, spinach), *Triticum aestivum*			

		(gandum, wheat), *Zea mays* (jagung, maize), *Zingiber officinale* (jahe, ginger), *Zinnia*			
22.	*Sclerotinia sclerotiorum* (Lib.) de Bary; *(=Sclerotinia libertiana = Whetzelinia sclerotiorum = Sclerotium varium = Peziza sclerotiorum);* clerotiniaceae; cottony soft rot, white rot, Sclerotinia wilt, Sclerotinia head rot, Sclerotinia blossom blight, Sclerotinia drop Sclerotinia soft rot, Sclerotinia stalk rot, Sclerotinia stem rot, collar rot, Sclerotinia pod rot, Sclerotinia canker, Sclerotinia twig blight, watery pod rot, white mould, sclerotinia disease	*Abelmoschus esculentus* (okra), *Actinidia chinensis* (Chinese gooseberry), *Actinidia deliciosa* (kiwifruit), *Alcea rosea* (Hollyhock), *Allium cepa* (onion), *Allium sativum* (garlic), *Anethum graveolens* (dill), *Angelica archangelica* (Angelica), *Antirrhinum majus* (snapdragon),	I	Buah (Fruits/pods), inflorescence, daun (leaves), akar (roots), benih (seeds), batang (stems), tanaman (whole plant)	Indonesia : Jawa (Barat, Tengah) Europe: Albania, Austria, Belarus, Belgium, Bulgaria, Cyprus, Czech, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russian, Slovakia, Spain, Sweden, Switzerland, Ukraine, UK, Serbia, Slovenia, Bosnia and Herzegovina, Montenegro, Macedonia, Asia: Azerbaijan, China, India, Iran, Israel, Japan,

		Apium graveolens (celery), *Apium graveolens* var. *rapaceum* (celeriac), *Arachis hypogaea* (groundnut), *Arctium lappa* (burdock), *Asparagus officinalis* (asparagus), *Astragalus sinicus* (chinese clover), *Begonia tuberhybrida* , *Bellis perennis* (common daisy), *Beta vulgaris* var. *saccharifera* (sugarbeet), *Brassica* , *Brassica napus* var. *napus* (rape), *Brassica oleracea* var. *botrytis* (cauliflower),			Jordan, South Korea, Lebanon, Nepal, Pakistan, Singapore, Syria, Tajikistan, Thailand, Turkey, Uzbekistan Africa: Algeria, DR Congo, Egypt, Ethiopia, Kenya, Libya, Malawi, Mauritius, Morocco, Nigeria, St. Helena, South Africa, Tanzania, Zimbabwe America: Costa Rica, El Salvador, Guatemala, Nicaragua, Panama, Canada, Mexico, USA, Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Peru, Uruguay, Venezuela Oceania: Australia , Fiji, New Zealand, Samoa

		Brassica oleracea var. *capitata* (cabbage), *Brassica oleracea* var. *gemmifera* (Brussels sprouts), *Brassica oleracea* var. *gongylodes* (kohlrabi), *Brassica oleracea* var. *italica* (broccoli), *Brassica oleracea* var. *viridis* (collards), *Brassica rapa* subsp. *chinensis* (Chinese cabbage), *Brassica rapa* subsp. *rapa* (turnip), Brassicaceae (cruciferous crops), Camellia , Campanula			

		(campanulas), *Cannabis sativa* (hemp), *Capsicum annuum* (bell pepper), *Capsicum frutescens* (chilli), *Carthamus tinctorius* (safflower), *Carum carvi* (caraway), Chrysanthemum (daisy), *Cicer arietinum* (chickpea), Cichorium (chicory), *Citrullus lanatus* (watermelon), Citrus, *Citrus aurantiifolia* (lime), *Citrus aurantium* (sour orange), *Citrus maxima* (pummelo), *Citrus medica*			

		(citron), *Citrus reticulata* (mandarin), *Citrus sinensis* (navel orange), *Citrus x paradisi* (grapefruit), *Corchorus olitorius* (jute), *Coriandrum sativum* (coriander), *Cucumis melo* (melon), *Cucumis sativus* (cucumber), *Cucurbita maxima* (giant pumpkin), *Cynara cardunculus* L. var. *scolymus* (globe artichoke), *Daucus carota* (carrot), *Euphorbia pulcherrima* (poinsettia), *Foeniculum*			

		vulgare (fennel), *Fragaria ananassa* (strawberry), *Glycine max* (soyabean), Gossypium (cotton), *Helianthus annuus* (sunflower), *Helianthus tuberosus* (Jerusalem artichoke), *Hibiscus cannabinus* (kenaf), Humulus (hop), Ipomoea batatas (sweet potato), Iris (irises), *Lactuca sativa* (lettuce), *Lens culinaris* ssp. *culinaris* (lentil), Lilium (lily), Lupinus (lupins), *Lycopersicon esculentum*			

		(tomato), *Malus domestica* (apple), *Medicago sativa* (lucerne), Melilotus (melilots), *Mentha piperita* (Peppermint), Morus (mulberrytree), Musa (banana), *Nicotiana tabacum* (tobacco), *Ocimum basilicum* (basil), *Panax ginseng* (Asiatic ginseng), *Papaver somniferum* (Opium poppy), *Pastinaca sativa* (parsnip), *Persea americana* (avocado), Petunia , Phaseolus (beans),			

		Phaseolus coccineus (runner bean), *Phaseolus lunatus* (lima bean), *Phaseolus radiata* , *Phaseolus vulgaris* (common bean), Phlox , *Pisum sativum* (pea), Prunus (stone fruit), *Rheum hybridum* (rhubarb), *Ricinus communis* (castor bean), Rosa (roses), *Rosmarinus officinalis* (rosemary), *Rubus idaeus* (raspberry), *Saccharum officinarum* (sugarcane), *Sesamum indicum*			

		(sesame), *Solanum melongena* (aubergine), *Solanum tuberosum* (potato), *Spinacia oleracea* (spinach), Trifolium (clovers), Tulipa (tulip), *Vicia faba* (broad bean), *Vigna angularis* (adzuki bean), *Vigna mungo* (black gram), *Vigna radiata* (mung bean), Viola (violet), Zinnia			
23.	*Spongospora subterranea* f.sp. *subterranea* (Wallr.) Lagerh.; Slimy rot, powdery scab	*Solanum tuberosum* (kentang, potato), *Lycopersicum*	II	benih (seed) , umbi (tuber), benih (seeds) dan buah (fruit)	Indonesia : Jawa (Barat : Cipanas, Pengalengan , Dataran Tinggi Jawa Barat). Europe : Austria, Belgium, Bulgaria, Cyprus, Czech

		esculentum (tomat, tomato)			Republic and Slovakia, Denmark, Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Ireland, Italy, Malta, Netherlands, Norway, Poland, Portugal, Romania, Russia, Sweden, Switzerland, UK. Asia : China, Taiwan, India, Israel, Japan, Kazakhstan, Kyrgyzstan, Lebanon, Nepal, Pakistan, Philippines, Sri Lanka, Turkey. Africa : Algeria, Burundi, Egypt, Kenya, Madagascar, Mauritius, Morocco, Mozambique, Rwanda, South Africa, Tanzania, Tunisia, Zimbabwe. America : Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Ecuador, Falkland Islands,

					Mexico, Panama, Peru, USA, Hawaii, Uruguay, Venezuela. Oceania : Australia, New Zealand.
24.	*Stagonospora sacchari* (T.T. Lo & K.C. Ling); Gosong daun tebu (Sugarcane scorch)	*Saccharum officinarum* (tebu, sugarcane)	I	Stek (cutting), batang (stem) dan bagian tanaman (part of plant)	Indonesia : Sumatera (Selatan, Lampung), Jawa (Timur). Asia : China, Taiwan, India, Japan, Philippines, Thailand, Vietnam. Africa : South Africa. America : Argentina, Panama, Venezuela, Oceania, Papua New Guinea.
25.	*Synchitrium pogostemonis*	Nilam	I	Semua bagian tanaman (All part of plant)	Indonesia : Jawa, Sumatera
26.	*Uncinula necator* (Schwennerts) Burril; Embun tepung (Powdery mildew)	*Vitis vinifera* (anggur, grapevine)	I	benih (seed), sisa benih dan sisa tanaman (plant debris)	Indonesia : Jawa (Timur). Europe : Austria, Belgium, Bulgaria, Croatia, Czech Republic, Serbia, Slovenia, Bosnia and Herzegovina,

					Montenegro, Macedonia, France, Germany, Greece, Hungary, Italy, Luxembourg, Moldova, Poland, Portugal, Romania, Russia, Spain, Switzerland, Ukraine, UK. Asia : Afghanistan, Azerbaijan, China, Taiwan, Georgia, India, Iran, Israel, Japan, Kazakhstan, Korea Republic of (South Korea), Kyrgyzstan, Pakistan, Turkey, Turkmenistan, Uzbekistan. Africa : Egypt, Ethiopia, Malawi, South Africa, Sudan, Tanzania. America : Argentina, Brazil, Canada, Chile, Dominican Republic, Mexico, Peru, USA, Hawaii, Venezuela. Oceania : Australia, New Zealand, Papua New Guinea.

27.	*Ustilago scitaminea* Syd. (Sydow); Sugarcane pecut api (Sugarcane smut)	*Saccharum officinarum* (tebu, sugarcane)	II	Tanaman dan bagian tanaman (plant and part of plant)	Indonesia : Jawa (Tengah, Timur). Europe : Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia, Portugal. Asia : Afghanistan, Bangladesh, Cambodia, China, Taiwan, India, Iran, Japan, Kazakhstan, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Turkmenistan, Vietnam. Africa : Burkina Faso, Cameroon, Chad, DR Congo, Ivory Coast, Egypt, Ethiopia, Ghana, Kenya, Madagascar, Malawi, Mali, Mauritius, Morocco, Mozambique, Niger, Nigeria, Réunion, Senegal, Somalia, South

					Africa, Sudan, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe. America : Argentina, Barbados, Belize, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, El Salvador, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Nicaragua, Panama, Paraguay, Puerto Rico, Saint Kitts and Nevis, Suriname, Trinidad and Tobago, USA, Hawaii, Uruguay, Venezuela. Oceania : Australia, Fiji.

IV. BAKTERI / BACTERIAL

NO.	NAMA ILMIAH/ORDO/FAMILI/NAMA UMUM/ *SCIENTIFIC NAME/TAXON/COMMON NAME*	INANG/ *HOST*	GOL / *GROUP*	MEDIA PEMBAWA/ *PATHWAY*	DAERAH SEBAR/ *GEOGRAPHICAL DISTRIBUTION*
1.	*Burkholderia glumae* (Kurita & Tabei)Urakami et al., (= *Pseudomonas glumae*);Burkholderiales: Burkholderiaceae; bacterial grain rot; grain rot; bacterial seedling rot; rice grain rot; rice seedling rot; rice seedling blight; sheath rot; grain sterility of rice; grain discoloration of rice	(P): *Oryza sativa* (padi, rice)	I	seed, semua bagian tanaman (all parts of plant), media tanam (planting medium)	Indonesia : Jawa, Sulawesi Tenggara (Kab. Kolaka, Kab. Konawe) Asia: China,Taiwan, Japan, Korea, Philippines, Sri Lanka, Vietnam America: Colombia
2.	*Clavibacter michiganensis* subsp. *michiganensis* (Smith) Davis *et al*.; *(=Aplanobacter michiganensis =Bacterium michiganense*	(P): *Capsicum frutescens* (cabai rawit, hot pepper, chilies), *Capsicum annuum* (paprika,	I	semua bagian tanaman (all parts of plants), media tanam (planting	Indonesia: Sumatera (Barat), Jawa (Pandeglang) Europe: Austria, Belarus, Belgium, Bulgaria, Cyprus, Czech, Belarus, Latvia,

	=Corynebacterium michiganense pv. michiganense =C.michiganense subsp. *michiganense =C.michiganense =Erwinia michiganensis (=michiganense) =Mycobacterium michiganense =Phytomonas michiganensis =Pseudomonas michiganense =P. michiganensis);* Actynomycetales : Microbacteriaceae; bacterial cancer, birds eye spot	bell-pepper, red pepper), *Lycopersicum esculentum* (tomat, tomato), *Solanum melongena* (terung, eggplant , aubergine) (S):*Solanum mammosum, S.dauglas, S. nigrum, S. trifolium*		medium), benih/biji (seed/grain)	Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia , France, Germany, Greece, Hungary, Italy, The Netherlands, Poland, Romania, Russia, Slovenia, Spain, Switzerlands, Ukraina, UK, Serbia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia. Asia: Armenia, Azerbaijan, China, India, Iran, Israel, Japan, Libanon, Turkey. Africa: Egypt, Kenya, Madagascar, Morocco, South Africa.

					America: Belize, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Equador, Grenada, Guadeloupe, Mexico, Panama, Peru, USA, Uruguay. Oceania: Australia, New Zealand, Tonga.
3.	*Erwinia chrysanthemi* (Bulkholder, Mc. Fadden & Dimock); *(=Erwinia carotovora* f.sp. *parthenii =E.carotovora* f.sp. *zeae =E.carotovora* var. *chrysanthemi =E.dieffenbachiae =E.maydis =E.paradisiaca =Pectobacterium carotovorum* f. sp. *chrysanthemi =P.carotovorum* var. *chrysanthemi =P.carotovorum* var. *graminarum =P.chrysanthemi =P.chrysanthemi* pv. *zeae =P.parthenii-dianthicola*);	(P): *Chrysanthemum* spp., Araceae, *Aglaonema, Aloe vera, Allium spp*. (bawang-bawangan), *Begonia*, *Brachiaria*, *Brassica oleraceae* var. *botrytis* (kol bunga, cauliflower), *Dieffenbachia, Dianthus*, *Dracaena marginata*, *Elettaria cardamomum*, *Pelargonium zonale* hybrids,	I	bahan tanaman (planting material) dan tanah (soil)	Indonesia : Sumatera (Lampung), Jawa (Barat /Bogor). Europe : Austria, Belarus, Belgium, Denmark, Finland, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Germany, Greece, Hungary, Italy, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Switzerland,

	Enterobacteriales: Enterobacteriaceae; busuk kaki	*Philodendron* (S): *Aglaonema commutatum*, *Ananas comosus* (nenas, pineapple), *Apium graveolens* (seladeri, celery), *Brachiaria mutica*, *Brassica oleracea* var. *capitata* (kubis, cabbage), *Capsicum annuum* (paprika, bell-pepper), *Dieffenbachia maculata*, *Dianthus* spp., *Lycopersicum esculentum* (tomat, tomato), *Panicum maximum*, *Pennisetum purpureum*, *Philodendron* spp., *Aechmea fasciata*, Anemone, *Celosia argentea*, *Cichorium endivia* (andewi, endevi), *Cichorium*			Ukraine, UK, Scotland Asia : Bangladesh, China, Taiwan, India, Iran, Israel, Japan, Korea DPR (North Korea), Korea Republic of (South Korea), Malaysia , Nepal, Philippines, Saudi Arabia, Sri Lanka, Syria. Africa : Algeria, Comoros, DR Congo, Cote d'Ivoire, Egypt, Kenya, Mauritius, Morocco, Réunion, Senegal, South Africa, Sudan, Zimbabwe. America : Aruba, Bolivia, Brazil, Canada , Colombia, Costa Rica, Cuba, Ecuador, French Guiana, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Panama, Peru, Puerto Rico, Saint Lucia, USA, Venezuela. Oceania : Australia, Cook

		intybus, *Canna*, *Consolida ambigua*, *Cucumis melo* (melun, melon), *Colocasia esculenta* (taleus, taro), *Cynara scolimus* (artichoke), *Cyclamen*, *Dahlia pinnata*, *Daucus carota* (wortel, carrot), *Euphorbia pulcherrima*, *Helianthus annuus* (bunga matahari, sunflower), *Hyacinthus*, *Imperata cylindrica* (alang-alang, bedding grass), *Ipomoea batatas* (ubi rambat, sweet potato), *Kalanchoe blossfeldiana*, *Lactuca sativa* (selada, lettuce) *Medicago sativa*, *Musa x paradisiaca* (pisang kepok, plantain), *Musa*			Islands, New Zealand, Papua New Guinea, Solomon Islands.

		textilis, Nicotiana tabacum (tembakau, tobacco), *Oryza sativa* (padi, paddy), *Paspalum, Phalaenopsis*, *Parthenium argentatum, Pyrus communis, Raphanus sativus* (lobak, radish), *Saccharum officinarum* (tebu, sugarcane), *Sedum spectabile*, *Saintpaulia ionantha*, *Solanum melongena* (terung, eggplant) *Solanum tuberosum* (kentang, potato), *Sorghum bicolor* (sorgum, sorghum), *Syngonium podophyllum, Tulip* spp., *Xanthosoma caracu, Zea mays* (jagung, corn, maize)			

4.	*Leifsonia xyli* subsp. *xyli* (Davis et al.) Evtushenko et al.); *(=Clavibacter xyli = Clavibacter xyli* subsp. *xyli);* Actynomycetales : Microbacteriaceae; ratoon stunting of sugarcane, sugarcane ratoon stunting disease	(P): *Saccharum officinarum* (tebu, sugarcane) (S): *Zea mays* (jagung, corn, maize), *Sorghum bicolor* (sorgum, sorghum), *Brachiaria* spp., *Chloris gayana*, *Cynodon dactylon*, *Echinochloa colonum*, *Imperata xylindrical*, *Panicum maximum*, *Pennisetum purpureum* dan *Rhynchelytrum repens*.	I	stek, batang (stem stoke), mata tunas (buds), bunga (flower), akar (root)	Indonesia : Jawa Europe : Spain. Asia : Bangladesh, China, Taiwan, India, Japan, Malaysia , Myanmar, Pakistan, Philippines, Sri Lanka, Thailand. Africa : Burkina Faso, Cameroon, Comoros, DR Congo, Ivory Coast, Djibouti, Egypt, Ethiopia, Kenya, Madagascar, Malawi, Mali, Mauritius, Mozambique, Nigeria, Réunion, Seychelles, Somalia, South Africa, Sudan, Swaziland, Tanzania, Uganda, Zimbabwe. America : Antigua and Barbuda, Argentina, Barbados, Belize, Bolivia, Brazil Colombia, Cuba, Dominican Republic, El

					Salvador, French Guiana, Guadeloupe, Guyana, Jamaica, Mexico, Nicaragua, Panama, Peru, Puerto Rico, Saint Kitts and Nevis, Trinidad and Tobago, USA, Hawaii, Uruguay, Venezuela. Oceania : Australia , Fiji.
5.	*Liberibacter asiaticus* (*=Liberobacter asiaticum*; *=Candidatus liberobacter africanum =C.liberobacter asiaticum)*; Proteobacteria, Alpha subdivision; *Citrus* huanglongbing (greening) disease, African greening, Asian greening, *Citrus* greening bacterium, greening bacterium, huanglongbing bacterium	(P): *Citrus* spp. (jeruk, orange) (S): *Murraya*, *Toddalia*, *Calodendrum capense*	I	kulit batang (bark), buah (fruit), media tanam (planting medium), tanah (soil), dengan tanaman hidup (with live plant), bunga (flower), daun (leaf), akar (root), anakan (plantlet), batang (stem), biji sejati (true	Indonesia : Papua, Jawa, Kalimantan, (Pontianak), Bali (Tabanan, Buleleng), Nusa Tenggara Timur (Kupang), Sulawesi (Mamuju), Sumatra (Palembang, Jambi, dan Bangka). Asia : Bangladesh, Cambodia, China, Taiwan, India, Japan, Laos, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Saudi Arabia, South East Asia, Sri Lanka, Syria, Thailand,

				seed) Vector : *Diaphorina citri*, *Trioza erytreae*	Vietnam, Yemen. Africa : Mauritius, Réunion. Oceania : Papua New Guinea.
6.	*Pseudomonas cichorii* (Swingle) Stapp.; Pseudomonadales : Pseudomonadaceae; hawar bakteri	*Chrysanthemum* spp., *Glycine max* (kedelai, soybean), *Apium graveolens* (seladeri, celery), *Dahlia*, *Lactuca sativa* (selada, lettuce), *Nicotiana tabacum* (tembakau, tobacco)	I	benih (seed)	Indonesia : Jawa (Barat). Europe : France, Germany, Greece, Italy, Macedonia, Portugal, Russia, Spain, Ukraine, UK. Asia : China, Taiwan, India, Iran, Japan, Korea Republic of (South Korea). Africa : Burundi, South Africa, Tanzania. America : Argentina, Barbados, Brazil , Canada, Chile, Cuba, USA, Hawaii. Oceania : Australia, New Zealand.

7.	*Pseudomonas syringae* pv. *lachrymans*; *(=Bacillus lachrymans =Bacterium burgeri =Bacterium lachrymans =Chlorobacter lachrymans =Phytomonas lachrymans =Pseudomonas lachrymans =P.lachrymans* f. *cucumis =P.burgeri)*; Pseudomonadales: Pseudomonadaceae; angular leaf spot of cucumber, bacterial leaf spot	(P): *Cucumis sativus* (mentimun, cucumber), *Benincasa hispida*, *Citrullus lunatus*, *Cucumis auguria*, *Cucumis melo*, *Cucurbita moschata*, *Luffa acutangula*, *Sechium edule.*	I	kulit (bark), buah (fruit), daun (leaf), benih (seed), planlet, batang (stem)	Indonesia : Jawa (Barat, Tengah) Europe: Austria, Belarus, Bulgaria, Czech, Denmark, France, Germany, Greece, Hungary, Italy, Moldova, Netherlands, Poland, Romania, Russia, Slovakia, Switzerland, Ukraine, UK, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia Asia: China, India, Iran, Israel, Japan, Jordan, Kazakhstan, Korea, Laos, Philippines, Singapore, Tajikistan, Thailand, Turkey, Uzbekistan Africa: Algeria, Egypt, Gabon, Kenya, South Africa, Zimbabwe America: Argentina, Brazil, Canada, Colombia, Guadeloupe, Martinique,

					Mexico, Nicaragua, Puerto Rico, USA, Venezuela Oceania: Australia, New Zealand
8.	*Pseudomonas syringae* pv. *mori* (Boyer & Lambert) Young et al.; Pseudomonadales : Pseudomonadaceae; hawar daun	*Morus alba* (murbei, mulberry)	I	bahan tanaman (part of plant)	Indonesia : Jawa Europe : Bulgaria, Czech Republic and Slovakia, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia , Germany, Hungary, Italy, Romania, UK Asia : China, India, Iran, Japan, Korea DPR (North Korea), Korea Republic of (South Korea), Pakistan, Turkey. Africa : South Africa, Tanzania, Uganda, Zimbabwe.

					America : Brazil, Canada, Caribbean, USA. Oceania : Australia , New Zealand.
9.	*Pseudomonas syzygii* (Roberts et al).; Pseudomonadales : Pseudomonadaceae; bakteri pembuluh kayu *Syzygium aromaticum* (cengkeh, clove) (BPKC)	*Syzygium aromaticum* (cengkeh, clove), *Syzygium* spp., *Eugenia* spp.	I	bibit tanaman (seedling), semua bagian tanaman kecuali bunga kering (all plat parts excluding dried flower) vector : *Hindola* spp.	Indonesia : Sumatera, Jawa, Bali, Sulawesi.
10	*Ralstonia solanacearum Ras 2* (Smith) Yabuuchi et al.; Burkholderiales : Ralstoniaceae; penyakit moko	*Musa* spp. (pisang, banana) , *Heliconia*, *Musa x paradisiacal* (pisang kapok, plantain)	I	bibit (seedling), tanah (soil)	Indonesia : Jawa, Sumatera (Simalungun, Padanglawas Utara, Belawan), Bali, NTB, Maluku. Asia : China, Taiwan, India, Malaysia, Philippines, Sri Lanka, Thailand, Vietnam.

					Africa : Ethiopia, Libya, Malawi, Nigeria, Senegal, Sierra Leone, Somalia. America : Argentina, Belize, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, USA , Venezuela. Oceania : Australia .
11	*Spiroplasma citri* (Saglio et al).; Entomoplasmatales: Spiroplasmataceae; stubborn disease	*Citrus* spp. (jeruk, orange), *Pisum sativum, Trifolium pratense, Trifolium repens, Vicia faba, Vinca rosea*	I	bibit tanaman (seedling of) Vector : *Circulifer tenellus, Scaphytopius nitrides, S.*	Indonesia : Jawa. Europe : Cyprus, France, Greece, Italy, Spain. Asia : Iran, Iraq, Israel, Jordan, Lebanon, Oman, Pakistan, Saudi Arabia, Syria, Turkey, United Arab

				acutus delongi, *Neoaliturus haematoceps.*	Emirates, Yemen. Africa : Algeria, Egypt, Libya, Madagascar, Morocco, Somalia, Sudan, Tunisia. America : Argentina, Brazil , Mexico, Peru, Suriname, USA, Venezuela. Oceania : New Zealand.

V. VIRUS / VIRAL

NO	NAMA ILMIAH/ORDO/FAMILI/NAMA UMUM/ *SCIENTIFIC NAME/TAXON/COMMON NAME*	INANG/ *HOST*	GOL / *GROUP*	MEDIA PEMBAWA / *PATHWAY*	DAERAH SEBAR/ *GEOGRAPHICAL DISTRIBUTION*
1.	Banana streak badnavirus	*Musa* spp. (pisang, banana	I	tanaman dan bagian tanaman (plant and part of plant)	Indonesia : Lampung, Jawa Barat Europe : Portugal , Spain . Asia : China, Taiwan, India, Jordan, Malaysia, Philippines,

					Sri Lanka, Thailand. Africa : Benin, Cameroon, Cape Verde, Ivory Coast, Ghana, Guinea, Kenya, Madagascar, Malawi, Mauritius, Morocco, Nigeria, Rwanda, South Africa, Tanzania, Uganda. America : Brazil, Colombia, Costa Rica, Cuba, Ecuador, Grenada, Guadeloupe, Haiti, Honduras, Jamaica, Nicaragua, Puerto Rico, Saint Lucia, Trinidad and Tobago, USA, Virgin Islands, Venezuela. Oceania : Australia, New Caledonia, Papua New Guinea, Samoa, Tonga.
2.	Citrus Exocortis Viroid (CEVd)	(P) : *Citroncirus webberi* (citrange), *Citrus limon* (lemon), *Citrus limonia* (jeruk limau, mandarin lime), *Citrus reticulata* x *Poncirus*	I	Buah (Fruits), polong (pods), titik tumbuh (growing points),	Indonesia : Jawa Eropa : Cyprus, Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Italy, Portugal, Russia, Spain.

		trifoliata (citrumelo), *Poncirus trifoliate* (trifoliate orange) (S) : *Brassica rapa* ssp. *Oleifera* (turnip rape), *Chrysanthemum vestitum*, *Citrus*, *Daucus carota* (wortel, carrot), *Gynura aurantiaca* (java velvet plant), *Gynura procumbens*, *Lycopersicon esculentum* (tomat, tomato), *Petunia hybrida*, *Solanum melongena* (terong, aubergine), *Solanum tuberosum* (kentang, potato), *Tagetes patula* (French marigold), *Vicia faba* (broad bean), *Vitis vinifera* (grapevine)		inflorescence, daun (leaves), batang (stems) dan seluruh tanaman (whole plant).	Asia : China, India, Iran, Irak, Israel, Japan, Jordan, Korea Republic of (South Korea), Lebanon, Malaysia, Oman, Pakistan, Philippines, Saudi Arabia, Syria, Thailand, Turkey, United Arab Emirates, Vietnam, Yemen

3.	Fiji phytoreovirus	*Saccharum officinarum* (tebu, sugarcane)	I	bibit tanaman (seedling of)	Indonesia : Sulawesi, Papua Asia : Malaysia , Philippines, Thailand. Africa : Madagascar Oceania : American Samoa, Australia , Fiji, New Caledonia, Papua New Guinea, Samoa, Solomon Islands, Tonga, Vanuatu.
4.	Onions yellow dwarf potyvirus	*Allium ascalonicum* (bawang merah, shallot), *Allium cepa, Alium porrum, Alium sativum*	I	bibit/umbi (seed/bulb)	Indonesia : Jawa Tengah Europe : Austria, Czech Republic and Slovakia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Lithuania, Moldova, Poland, Romania, Slovenia, Switzerland, Ukraine, UK, Scotland. Asia : China, India, Iran, Iraq, Israel, Japan, Thailand, Turkey Africa : Morocco, South Africa. America : Argentina, Brazil, Canada, Chile, Cuba, USA,

					Uruguay. Oceania : Australia, New Zealand.
5.	Sweet potato Feathery mottle virus	*Ipomoea batatas* (ubi jalar, sweet potato)	I	bibit (seedling)	Indonesia : Jawa Tengah, Papua. Widespread where host occurs USA : restricted distribution
6.	Tomato spotted wilt tospovirus (TSWV) Sin: pineapple yellow spot virus, tomato spotted wilt virus group, dahlia oakleaf virus, dahlia ringspot virus, dahlia yellow ringspot virus, groundnut ringspot virus, mung bean leaf curl virus	(P): *Lycopersicum esculentum* (tomat, tomato), *Capsicum annuum* (paprika, bell-pepper) , *Lactuca sativa* (selada, lettuce), *Pisum sativum* (kapri, sweet pea), *Nicotiana tabacum* (tembakau, tobacco), *Solanum tuberosum* (kentang, potato), Solanaceae, *Alstroemeria, Ananas comosus* (nenas, pineapple), *Anemone coronaria, Apium*	I	Stek (cutting), tanaman (plant of) Vektor: *Franklini ella bispinosa, F. intonsa, F.fusca, F.occidentta lis, F. schultzei, F. tenuicornis, Thrips palmi, T.*	Indonesia : Jawa Barat, Pontianak (Kab. Kubu Raya) Europe : Albania, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Finland, France, Germany, Greece, Hungary, Ireland, Italy , Lithuania, Malta, Moldova, Netherlands, Norway, Poland, Portugal , Romania, Russia, Slovakia, Slovenia, Spain , Sweden, Switzerland, Ukraine, UK, Scotland, Serbia, Bosnia and Herzegovina, Montenegro, Macedonia. Asia : Afghanistan, Armenia,

		graveolens (seladeri, celery), *Arachys hypogaea* (kacang tanah, groundnut, peanut), *Aster*, *Begonia*, *Bidens pilosa*, *Benincasa hispida*, Calceolaria, *Chrysanthemum x morifolium*, *Carica papaya* (papaya, pawpaw), *Cichorium endivia*, *Cicer arietinum*, *Citrullus lanatus* (semangka, watermelon), *Columnea hirta*, *Canavalia gladiata*, *Capsicum annuum* (cabai, hot pepper), *Callistephus chinensis*, *Catharanthus roseus*, *Cucumis sativus* (mentimun, cucumber), *Cucurbita*		*setosus*, *T. tabaci*, *T.flavus*, *Scirtothrips dorsalis*	Azerbaijan, China, Taiwan, Georgia (Republic), India , Iran, Israel, Japan, Malaysia , Nepal, Oman, Pakistan, Saudi Arabia, Singapore, Sri Lanka, Thailand, Turkey, Uzbekistan Africa : Algeria, Burkina Faso, DR Congo, Ivory Coast, Egypt, Kenya, Libya, Madagascar, Mauritius, Niger, Nigeria, Réunion, Senegal, South Africa, Sudan, Tanzania, Tunisia, Uganda, Zimbabwe. America : Argentina, Bolivia, Canada, Chile, Colombia, Costa Rica, Guyana, Haiti, Jamaica, Mexico, Paraguay, Puerto Rico, Suriname, USA, Hawaii, Uruguay, Venezuela. Oceania : Australia, Cook Islands, New Zealand, Papua New Guinea.

		pepo, *Crotalaria juncea*, *Cyphoman dra betacea*, *Cynara scolymus*, *Cyclamen*, *Dahlia*, *Dieffenbachia*, *Eustoma grandiflorum*, *Ficus elastica*, *Ficus pumila*, *Gerbera* spp. , *Gerbera jamesonii*, *Galinsoga parviflora*, *Glycine max* (kedelai, soybean), *Gossypium hirsutum* (kapas, cotton), *helianthus annuus* (bunga matahari, sunflower), *Impatiens walleriana*, *Jacquemontia tamnifolia*, *Kalanchoe*, *Lens culinaris* ssp. *culinaris* (lentil), *Lathyrus sativus*,			

		Lupinus spp. (Lupine), *Mentha piperita*, *Nicandra physalodes*, *Nicotiana rustica*, *Oncidium*, *Ocimum basilicum*, *Pelargonium*, *Petunia hybrida*, *Phaseolus*, *Vigna radiata* (kacang hijau, mungbean), *Vigna mungo*, *Vigna cylindrica* (buncis, common bean), *Physalis peruviana*, *Phalaenopsis*, *Sechium edule*, *Senecio cruentus*, *Stephanotis floribunda*, *Sinningia*, *Sinningia speciosa*, *Solanum melongena* (terung, eggplant), *Tagetes*, *Tephrosia purpurea*, *Vicia faba*,			

		Vigna unguiculata, *Vitis vinifera* (anggur, grapevine), *Valerianella locusta*, *Zinnia elegans*, *Zantedeschia aethiopica*, *Ageratum conyzoides*, *Calendula officinalis*, *Canna indica*, *Coleus*, *Mirabilis jalapa*, *Saintpaulia ionantha*, *Salvia officinalis*, *Valeriana officinalis*			

VI. GULMA / WEEDS

NO	NAMA ILMIAH/ORDO/FAMILI/NAMA UMUM/ *SCIENTIFIC NAME/TAXON/COMMON NAME*	MEDIA PEMBAWA/ *PATHWAY*	GOL / *GROUP*	DAERAH SEBAR/ *GEOGRAPHICAL DISTRIBUTION*
1.	*Asystasia gangetica* subsp. *micrantha* (Nees) Ensermu ; Acanthaceae ; (=*Asystasia intrusa)* ; Chinese violet	Tanaman perkebunan/ plantation crops	II	Indonesia: Sumatera, Jawa (Barat), Kalimantan (Timur, Barat) Africa: Daerah tropis dan sub tropis. Asia: India, Srilanka, Malaysia
2.	*Cuphea balsamona* Cham. & Schltdl. ;Lythraceae Schlecht	Kentang, Kubis, Wortel, tanaman sayuran (vegetable crops)	II	Indonesia : Sulawesi Tengah, Jawa Barat, Sumatera Barat Asia: China, Malaysia America: Argentina, Bolivia, Brazil, Colombia, Chile, Venezuela, Dominican Republic, Ecuador, Paraguay, Peru, Uruguay, French Guiana, Central America, Southern USA

3.	*Rivina humilis* L. ; Phytolaccaceae ; Pigeonberry, Rouge Plant, Baby Peppers, Bloodberry, Coralito	Tanaman perkebunan/ plantation crops	II	Indonesia : Jawa, Sumatera, Bali America: Southern USA, Karibia, Central Amerika, South Amerika.

VII. TUNGAU / MITES

No.	NAMA ILMIAH/NAMA UMUM *SCIENTIFIC NAME/TAXON/COMMON NAME*	INANG/ *HOST*	GOL / *GROUP*	MEDIA PEMBAWA/ *PATHWAYS*	DAERAH SEBAR/ *GEOGRAPHICAL DISTRIBUTION*
1.	*Calacarus carinatus* Green	(P) *: Camellia japonica* , *Capsicum* spp., *Viburnum* spp., *Camellia sinensis* (teh, tea)	II	tanaman dan bagian tanaman (plant and part of plant)	Indonesia : Jawa, Sumatera Europe : Spain. Asia : Cambodia, Georgia (Republic), India, Indochina, Japan, Laos, Malaysia, Sri Lanka, Vietnam. Africa : Kenya, Mauritius. America : USA Oceania : Australia, New Zealand.
2.	*Oligonychus coffeae*	(P) : *Camellia sinensis* , *Coffea* spp. (kopi, coffee), *Coffea arabica*	II	daun tanaman (leaf of)	Indonesia : Jawa, Sumatera Europe : Russia. Asia : Bangladesh, China, Taiwan, Georgia (Republic), India, Myanmar,

		(S) : *Anacardium occidentale* , *Citrus* , *Cinnamomum camphora*, *Corchorus capsularis* , *Elaeis guineensis* , *Eucalyptus globulus*, *Gossypium* , *Hevea brasiliensis*, *Indigovera*, *Lagerstroemia*, *Manihot esculenta*, *Mangifera indica* , *Morus alba*, *Vigna mungo*, *Ricinus communis*, *Terminalia catappa*, *Vitis vinifera*			Pakistan,Philippines, Sri Lanka, Thailand, Vietnam. Africa : DR Congo, Egypt, Ethiopia, Kenya, Malawi, Mauritius, South Africa, Tanzania. America : Colombia, Costa Rica, Ecuador, USA . Oceania : Australia.

3.	*Panonychus citri*	(P) : *Citrus deliciosa* (Mediterranean mandarin), *Citrus limon* (lemon), *Citrus x paradisi* (jeruk bali, pommelo), *Citrus reticulata* (jeruk keprok, mandarin), *Citrus sinensis* (jeruk manis, navel orange), *Citrus unshiu* (satsuma), *Averhoa carambola* (belimbing, star fruit)	II	bibit (seedling)	Indonesia : Jawa Barat (Bogor), Jawa Timur (Malang), Lampung (Way Kanan) Europe : Croatia, Belarus, Latvia, Lithuania, Estonia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan, Uzbekistan, Ukraina, Russia, Serbia, Slovenia, Bosnia and Herzegovina, Montenegro, Macedonia, France, Greece, Italy, Spain Asia : Azerbaijan, China, Taiwan, Georgia, India, Iran, Israel, Japan, Korea Republic of (South Korea), Lebanon, Malaysia, Sri Lanka, Turkey, Vietnam. Africa : Morocco, Mozambique,

					South Africa, Tunisia. America : Argentina, Bermuda, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Mexico, Peru, USA, Hawaii, Venezuela. Oceania : Australia, New Zealand.
4.	*Tenuipalpus orchidarum* (Parfitt)	Orchidaceae (anggrek, orchids)	II	tanaman (live plant)	Indonesia : Jawa

VIII. OPTK PADA TANAMAN KEHUTANAN/TANAMAN KAYU

NO.	NAMA ILMIAH/ORDO/FAMILI/NAMA UMUM/ *SCIENTIFIC NAME/TAXON/COMMON NAME*	INANG/ *HOST*	GOL / *GROUP*	MEDIA PEMBAWA/ *PATHWAY*	DAERAH SEBAR/ *GEOGRAPHICAL DISTRIBUTION*
	I. SERANGGA / INSECT				
1.	*Pineus boerneri* (Annand) ; Hemiptera; Adelgidae ; pine woolly aphid	(P) *Pinus densiflora*, *Pinus elliottii* ,*Pinus halepensis Pinus kesiya* , *Pinus massoniana* ,*Pinus merkusii Pinus oocarpa* ,*Pinus pinaster*, *Pinus pungens* ,*Pinus roxburghii*. (S) *Pinus arizonica*, *Pinus canariensis*, *Pinus caribaea*,	II	batang, kayu	Indonesia : Kalimantan, Sumatera Africa : Kenya, Malawi, South Africa, Tanzania, Uganda, Zimbabwe America : Hawaii, Chile, Oceania : Australia, New Zealand

		Pinus clausa, *Pinus cooperi* , *Pinus douglasiana* , *Pinus durangensis*, *Pinus echinata*, *Pinus engelmannii*, *Pinus glabra*, *Pinus greggii* , *Pinus hartwegii*, *Pinus lawsonii* , *Pinus leiophylla*, *Pinus maximinoi*, *Pinus michoacana*, *Pinus montezumae* , *Pinus occidentalis*, *Pinus palustris*, *Pinus patula*, *Pinus pinea*, *Pinus pseudostrobus*, *Pinus radiata*, *Pinus rigida*, *Pinus serotina*, *Pinus sylvestris*, *Pinus taeda*, *Pinus taiwanensis* , *Pinus teocote*, *Pinus na*			

2	*Heterobostrychus aequalis (*Waterhouse); Coleoptera; Bostrichidae Powder post beetle	*Camelia sinensis*, *Ceiba pentandra*, *Forest trees*	II	batang, kayu	Indonesia : Jawa, Bali Europe : Germany Africa: South Africa, Madagascar Asia: India, Thailand, Philippines, Malaysia, Sri Lanka, Bangladesh Oceania : Papua New Guinea
	II. CENDAWAN / FUNGI				
1.	*Uromycladium tepperianum* (Saccardo) Mc. Alpine ; Uredinales ; Pileolariaceae; rust	Sengon, *Acacia saligna* (Port jackson wattle)	I	bibit tanaman, batang, kayu	Indonesia : Maluku, Jawa (Timur, Barat, Tengah), Sulawesi Asia: Malaysia, Filipina Africa: South Africa

IX. KEONG DAN SIPUT/SNAIL AND SLUG

No.	NAMA ILMIAH/ORDO/FAMILI/NAMA UMUM/ *SCIENTIFIC NAME/TAXON/COMMON NAME*	INANG/ *HOST*	GOL / *GROUP*	MEDIA PEMBAWA/ *PATHWAYS*	DAERAH SEBAR/ *GEOGRAPHICAL DISTRIBUTION*
1.	*Calacarus carinatus* Green	(P) *: Camellia japonica* (kamelia, camellia), *Capsicum* spp. (cabae,, chili), *Viburnum* spp., *Camellia sinensis* (teh, tea)	II	tanaman dan bagian tanaman (plant and part of plant)	Indonesia : Jawa, Sumatera Europe : Spain. Asia : Cambodia, Georgia (Republic), India, Indochina, Japan, Laos, Malaysia, Sri Lanka, Vietnam. Africa : Kenya, Mauritius. America : USA Oceania : Australia, New Zealand.
2.	*Oligonychus coffeae*	(P) : *Camellia sinensis*, *Coffea*, *Coffea arabica*, *Coffea* spp. (kopi, coffee)	II	daun tanaman (leaf of)	Indonesia : Jawa, Sumatera Europe : Russia. Asia : Bangladesh, China, Taiwan, Georgia (Republic), India, Myanmar, Pakistan, Philippines,

		(S) : *Anacardium occidentale (cashew nut, jambu mete), Citrus (jeruk, citrus), Cinnamomum camphora (kayu manis, camphor tree), Corchorus capsularis (yute, white yute), Elaeis guineensis (kelapa sawit, oil palm), Eucalyptus globules (eukaliptus, tasmania bluegum) , Gossypium (kapas, cotton),* *Hevea brasiliensis (karet, rubber), Indigovera (nila, indigo), Lagerstroemia,*			Sri Lanka, Thailand, Vietnam. Africa :DR Congo, Egypt, Ethiopia, Kenya, Malawi, Mauritius, South Africa, Tanzania. America : Colombia, Costa Rica, Ecuador, USA . Oceania : Australia.

		Manihot esculenta (ubi kayu, cassava), Mangifera indica (mangga, mangoes), *Morus alba (murbai, mora), Vigna mungo (black gram), Ricinus communis (jarak, castor bean), Terminalia catappa (ketapang, singapore almond), Vitis vinifera (anggur, grape)*			
3.	*Pila polita* (Jeshayes)	*Oryza sativa* (padi, paddy).	II	Tanaman	Indonesia: Sumatera, Jawa (Timur)
4.	*Pomacea insularum*	Tumbuhan air/ Aquatic Plants	II	*Packaging*	Indonesia: Kalimantan

5.	*Tenuipalpus orchidarum* (Parfitt)	Orchidaceae (anggrek, orchids)	II	tanaman (*live plant of*)	Indonesia : Jawa

MENTERI PERTANIAN,

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