

**DECREE OF THE MINISTER OF AGRICULTURE  
NO. 38/KPTS/HK.310/1/1990  
CONCERNING  
PLANT QUARANTINE REQUIREMENTS AND ACTIONS IN RELATION TO  
THE IMPORTATION INTO THE TERRITORY OF THE REPUBLIC OF  
INDONESIA OF PLANTS AND PLANT PROPAGATING MATERIALS**

**THE MINISTER OF AGRICULTURE,**

- Considering :
- a. that plant quarantine requirements and actions for the importation into the territory of the Republic of Indonesia of plants and plant propagating materials have been laid down by the Decree of the Minister of Agriculture No. 310/763/Kpts/10/1983;
  - b. that subsequent to the issuance of the above mentioned Decree, several decrees concerning the designation of points of entry, declared dangerous plant pests, and the submission of plants and plant products at the points of entry to the plant quarantine inspector have been issued ;
  - c. that in the decrees referred to in Paragraph (a) and (b), intermediate quarantine, which is one of the mean for and has an important role in preventing the introduction of quarantine pest into the territory of the Republic of Indonesia, has not yet been covered;
  - d. that the development in the fields of plant protection and transportation requires prompt actions and comprehensive regulations for the prevention of introduction into territory of the Republic of Indonesia of quarantine pests;
  - e. that based on the above mentioned facts, it is deemed necessary to review and reformulate the provisions regarding plant quarantine requirements and actions in relation to the importation of plants and plant propagating materials into the territory of the Republic of Indonesia.

- Referring to :
1. Ordinance of 27 September 1926 (Government Gazette of 1926 No. 427);
  2. Law No. 2 of 1961 (Government Gazette of 1961 No. 9);
  3. Decree of the President of the Republic of Indonesia No. 44 of 1974;
  4. Decree of the President of the Republic of Indonesia No. 2 of 1977;
  5. Decree of the President of the Republic of Indonesia No. 15 of 1984;
  6. Decree of the President of the Republic of Indonesia No. 64/M of 1988;
  7. Decree of the Minister of Agriculture No. 491/Kpts/Um/7/1980 as amended by Decree of the Minister of Agriculture No. HK.310/22/ Kpts/1/1984 and related to Decree of the Minister of Agriculture No. HK.310/21/Kpts/1/1984;
  8. Decree of the Minister of Agriculture No. 861/Kpts/Org/12/1980;
  9. Decree of the Minister of Agriculture No. OT.210/706/Kpts/9/1983;
  10. Decree of the Minister of Agriculture No. 537/Kpts/KU.400/8/ 1989;

Observing : The International Plant Protection Convention of 1951 as amended in 1979;

## HAS DECIDED

To lay down : DECREE OF THE MINISTER OF AGRICULTURE CONCERNING PLANT QUARANTINE REQUIREMENTS AND ACTIONS IN RELATION TO THE IMPORTATION INTO THE TERRITORY OF THE REPUBLIC OF INDONESIA OF PLANTS AND PLANT PROPAGATING MATERIALS.

### CHAPTER I

#### GENERAL PROVISIONS

##### Article 1

For the purpose of this Decree :

1. " Plant " means any species of plants in any state or form.
2. " Plant product " means :
  - a. any unprocessed living plant materials not intended for growing or propagation, and/or
  - b. any unprocessed dead plant materials, and/or
  - c. any products of processed plant materials which are capable of harboring plant pest.
3. " Plant propagating materials " means plant or part thereof, including seedlings, seeds, fruits, flowers and pollen, which by any means can be used to multiply or propagate the plant.
4. " Pest " means any form of plant or animal life, or any pathogenic agent, injurious or potentially injurious to plants or plant products.
5. " Quarantine Pest " means a pest of potential economic importance to the Republic of Indonesia, not yet present in its territory or present but not widely distributed and being officially controlled.
6. " Import Permit " means a permit issued by the Minister of Agriculture or an official appointed by him for each importation materials into the territory of the Republic of Indonesia of plant propagating.
7. " Phytosanitary Certificate " means certificate on the model adopted by the International Plant Protection Convention, issued by an authorized government agency in the country of origin or country of dispatch, stating that the plants or plant propagating materials have been inspected and found to be free from quarantine pests.
8. " Points of entry " means seaports, river ports, airports, post office, land border posts, and other places deemed necessary, designated by the Minister of Agriculture as the places through which plants and plant propagating materials may be imported.
9. " Quarantine actions " means all actions aimed at preventing the introduction into the territory of the Republic of Indonesia of quarantine pests, which actions include health

inspection, treatment, refusal for entry, detention, observation in a post entry quarantine station, destruction and release.

10. "Treatment" means any method of rendering plants or plant propagating materials free from quarantine pests, including dis-infection and dis-infestation.
11. "Refusal for entry" means refusal for the entry into the territory of the Republic of Indonesia of imported plants and/or plant propagating materials.
12. "Destruction" means the action of destroying plants and/or plant propagating materials.
13. "Release" means the action of admitting plants and/or plant propagating materials into free traffic in the territory of the Republic of Indonesia on the issuance of a certificate of release.
14. "Intermediate quarantine" means a quarantine action performed in a third country against certain plant propagating materials before being imported into the territory of the Republic of Indonesia.
15. "Post - entry quarantine" means the action of isolating and growing designated plant propagating materials, subsequent to their arrival from the country of origin, in a designated place in the territory of the Republic of Indonesia for the purpose of health inspection and other quarantine actions.
16. "Post - entry quarantine station" means a place together with its facilities where post-entry quarantine is performed.
17. "Plant quarantine inspector" means a civil servant who has received training in plant quarantine and under Law No.2 of 1961 has been appointed by an authorized official to perform quarantine actions.
18. "Owner" means any person who is responsible for the importation into the territory of the Republic of Indonesia of the plants and/or plant propagating.

## **CHAPTER II**

### **REQUIREMENTS FOR THE IMPORTATION OF PLANTS AND PLANT PROPAGATING MATERIALS**

#### **Article 2**

Any importation into the territory of the Republic of Indonesia of plants, including plant products, and plant propagating materials shall accord with the provisions of this Decree.

#### **Article 3**

- (1) Any importation into the territory of the Republic of Indonesia of plants, including plant product, shall be accompanied by a Phytosanitary Certificate.
- (2) Any importation into the territory of the Republic of Indonesia of plant propagating materials shall be authorized under an Import Permit and accompanied by a Phytosanitary Certificate.

#### **Article 4**

Import Permit referred to in Article 3 Paragraph (2) shall not be required in case the plant propagating materials :

- a. are hand carried luggage or mail consignments in small quantities;
- b. come from countries where quarantine pests are not present;
- c. are not required to undergo intermediate quarantine and post-entry quarantine referred to in Article 5 Paragraph (1) and (2); and
- d. are not of the species that have never before been imported into the territory of the Republic of Indonesia.

#### **Article 5**

1. In addition to the requirements referred to in Article 3 Paragraph (2), any importation of plant propagating materials set out in Appendix I to this Decree shall undergo :
  - a. intermediate quarantine the fulfillment of which shall be attested by a certificate
  - b. issued by an expert from the intermediate quarantine station;
  - c. post - entry quarantine.
2. In addition to the requirements referred to in Article 3 Paragraph (2), any importation of plant propagating materials set out in Appendix II to this Decree, shall undergo post-entry quarantine.
3. The designation of intermediate quarantine station and the technical procedures to be followed in performing intermediate quarantine shall be determined by the Director of the Centre for Agricultural Quarantine.

#### **Article 6**

1. Plant propagating materials set out in Appendix I to this Decree imported into the territory of the Republic of Indonesia without an Import Permit and a Phytosanitary Certificate, and/or do not meet the requirements referred to in Article 5 Paragraph (1), shall be refused entry or destroyed.
2. Plant propagating materials set out in Appendix II to this Decree imported into the territory of the Republic of Indonesia without an Import Permit and a Phytosanitary Certificate, and/or do not meet the requirements referred to in Article 5 Paragraph (2), shall be refused entry or destroyed.

3. Plant propagating materials other than those listed in Appendix I and Appendix II to this Decree imported into the territory of the Republic of Indonesia without an Import Permit and a Phytosanitary Certificate, and/or do not meet the requirements referred to in Article 5 Paragraph (1), shall be refused entry or destroyed.
4. Plants, including plant products, imported into the territory of the Republic of Indonesia without a Phytosanitary Certificate or exemption from the required Phytosanitary Certificate granted by the Director of the Centre for Agricultural Quarantine as referred to in Article 13, shall be refused entry or destroyed.
5. Plants, including plant products, and/or plant propagating materials imported into the territory of the Republic of Indonesia in such a state of decay or damage that a health inspection is deemed to be impossible, shall be destroyed forthwith.

#### **Article 7**

1. Post-entry quarantine shall be performed in a government owned post-entry quarantine station operated by the Centre for Agricultural Quarantine.
2. Post-entry quarantine can be performed in a station other than that referred to in Paragraph (1), to be designated by the Director of the Centre for Agricultural Quarantine.
3. The designation of post-entry quarantine station by the Director of the Centre for Agricultural Quarantine referred to in Paragraph (2) shall be based on a proposal from the Chief of Regional Plant Quarantine Service whose region comprises the site where the post-entry quarantine station is located.
4. Before submitting the proposal referred to in Paragraph (3), the Chief of Regional Plant Quarantine Service shall consult the Food Crop Agricultural Service or Estate Crop Agricultural Service of the Provincial Government concerned.

#### **Article 8**

1. Any importation into the territory of the Republic of Indonesia of plants, including plant products, and/or plant propagating materials shall only be permitted through the points of entry referred to in Appendix III to this Decree.
2. Plants, including plant products, and/or plant propagating materials imported into the territory of the Republic of Indonesia through places other than those points of entry referred to in Paragraph (1), shall be refused entry or destroyed.

#### **Article 9**

1. At the time, the plants including plant products, and/or plant propagating materials arrive at one of the points of entry referred to in Article 8, for the purpose of health inspection the following submission procedures shall apply :
  - a. in case of non mail consignments, the owner shall notify the arrival of and submit the plants, including plant products, and/or plant propagating materials as well as the required documents to the plant quarantine inspector by filling out a form of application for inspection provided for the purpose.
  - b. in case of mail consignments, the customs officer in the post office shall submit the plants, including plant products, and/or plant propagating materials to the plant quarantine inspector, whereas the owner shall lodge the required documents to the plant quarantine inspector, and shall fill out a form of application for inspection provided for the purpose.
  - c. in the case of hand carried luggage, the owner shall notify and submit the plants, including plant product, and/or plant propagating materials along with the required documents to the plant quarantine inspector.
2. Upon arrival at the point of entry, the plant propagating materials referred to in Paragraph (1) which are set out in Appendix I and/or Appendix II to this Decree shall immediately be forwarded to the post-entry quarantine station by or under the supervision of the plant quarantine inspector.

## **CHAPTER III**

### **QUARANTINE ACTIONS**

#### **Article 10**

1. Quarantine actions against plants, including plant products, and/or plant propagating materials other than those set out in Appendix I and/or Appendix II to this Decree, either as consignments or as hand carried luggage, shall be performed by the plant quarantine inspector at the point of entry.
2. Under certain circumstances the quarantine actions referred to in Paragraph (1) can be performed outside the point of entry.
3. For the purpose of the quarantine actions referred to in Paragraph (2), the plants, including plant products, and/or plant propagating materials, after having been unloaded from the vessel or aircraft or having been submitted to the plant quarantine inspector by the customs officer in the post office, shall be conveyed directly to the customs warehouse or quarantine inspection house, as the case may be, outside the point of entry.

#### **Article 11**

1. If after health inspection, the plant, including plant products, and/or plant propagating materials, are found :
  - a. free from quarantine pests, the plants, including plant products, and/or plant propagating materials, shall be released on the issuance of a certificate of release to the owner.
  - b. not free from quarantine pests, but can be freed therefrom by treatment, the plants, including plant products, and/or plant propagating materials shall be treated and subsequently released on the issuance of a certificate of release to the owner.
  - c. not free from quarantine pests and can not possibly be freed therefrom by treatment, the plants, including plant products, and/or plant propagating materials shall be destroyed immediately.
2. The certificate of release referred to in Paragraph (1) points a and b shall be issued by the Chief of Plant Quarantine Station.

### **Article 12**

1. For the performance of post-entry quarantine, the plant propagating materials sent to the post-entry quarantine station shall first be grown for the purpose of observation and detection for quarantine pests.
2. If from the observation, the plant propagating materials referred to in Paragraph (1) appear :
  - a. free from quarantine pests, the plant propagating materials shall be released on the issuance of a certificate of release to the owner.
  - b. not free from quarantine pests, but can be freed therefrom by treatment, the plant propagating materials shall be treated and subsequently released on the issuance of a certificate of release to the owner
  - c. not free from quarantine pests and can not possibly be freed therefrom them by treatment, the plant propagating materials shall be destroyed forthwith.
3. The certificate of release referred to in Paragraph (2) points a and b shall be issued by the Chief of the Regional Plant Quarantine Service.

### **Article 13**

1. Plants, including plant products, imported into the territory of the Republic of Indonesia without a Phytosanitary Certificate shall only be released if after having been subjected to health inspection and, if necessary, treatment, are found free from quarantine pests and in addition, a exemption from the required Phytosanitary Certificate has been granted by the Director of the Centre for Agricultural Quarantine.
2. The Director of the Centre for Agricultural Quarantine shall only grant such an exemption in case the plants :
  - a. come from a country in which quarantine pests are known not to be present,
  - b. are intended for consumption, and

- c. are in a small quantity that the plant quarantine inspector can inspect them thoroughly.
3. The exemption from the required Phytosanitary Certificate as referred to in Paragraph (2) shall be granted only once to the same owner.

#### **Article 14**

1. Treatment of plants, including plant products, and/or plant propagating materials shall be performed by the plant quarantine inspector or any operator who has met certain requirements.
2. In case the treatment is carried out by an operator as referred to in Paragraph (1), he shall follow the directions prescribed by the Director of the Centre for Agricultural Quarantine and the treatment shall be performed under the supervision of the plant quarantine inspector.

#### **Article 15**

1. The plants, including plant products, and/or plant propagating materials, the entry of which have been refused shall be safeguarded by the plant quarantine inspector against the escape of quarantine pests that might be present in the consignment.
2. The plants, including plant products, and/or plant propagating materials, referred to in Paragraph (1) shall be re-exported within 14 working days.
3. If after elapse of the specified time referred to in Paragraph (2) the plants, including plant products, and/or plant propagating materials have not been re-exported they shall be destroyed.

#### **Article 16**

1. The destruction of the plants, including plant products, and/or plant propagating
2. materials referred to in Article 6, Article 11 Paragraph (1)c, Article 12 Paragraph (2)c, Article 15 Paragraph (3) and of the quarantine pests referred to in Article 17 Paragraph (2) shall be carried out by the plant quarantine inspector.
3. The execution of destruction referred to in Paragraph (1) shall be attended by the owner or his authorized representative and/or witnessed by the police officer and the customs officer or post office official.
4. In each case of destruction an official report shall be made in quadruplicate, the original copy is for the owner, the second copy is for the custom officer or post office official, the third copy is for the plant quarantine inspector, and the fourth copy is for the officer of the agency concerned.



### **Article 17**

1. Quarantine pests falling into categories A1 and A2 as set out in Appendix IV to this Decree, shall be prohibited/prevented from being introduced into the territory of the Republic of Indonesia.
2. The quarantine pests referred to in Paragraph (1) if introduced into the territory of the Republic of Indonesia shall be destroyed at the point of entry.

### **Article 18**

1. All expenses incurred in the performance of quarantine actions including the following :
  - a. procurement of materials and equipment that can not be made available by the Centre for Agricultural Quarantine.
  - b. labour;
  - c. transportation of plants, including plant products, and/or plant propagating materials;
  - d. growing/caring of plants, including plant products, and/or plant propagating materials;
  - e. storing of plants, including plant products, and/or plant propagating materials;
  - f. safeguarding of plants, including plant products, and/or plant propagating materials.
  - g. shall be borne by the owner.
2. Everything requisite for the performance of quarantine actions after official working hours and outside the plant quarantine premises administered by the Centre for Agricultural Quarantine shall be borne by the owner.

### **Article 19**

1. For the performance of quarantine actions the owner shall pay fees to be prescribed by the Minister of Agriculture.
2. All fees collected in connection with the performance of quarantine actions referred to in Paragraph (1) shall constitute the revenue of the State and shall be deposited in the State Treasury.

### **Article 20**

If in the proper performance of the duties of the plant quarantine inspector, loss or damage to the plants, including plant products, and/or plant propagating materials or delay in the clearance of the vessel or aircraft occurs, the government or the plant quarantine inspector shall be exempt from all claims for compensation for such loss or damage or delay.

### **Article 21**

The owner of the destroyed plants, including plant products, and/or plant propagating materials, and/or pests referred to in Article 16 Paragraph (1) shall have no right to claim for or receive any compensation.

### **Article 22**

The plant quarantine inspector designated as an investigation officer, shall be charged with the investigation of the punishable acts referred to in the Ordinance of 27 September 1926 (Government Gazette 1926 No. 427) and Law No. 2 of 1961 (Government Gazette 1961 No. 9).

### **Article 23**

Plants, including plant products, and/or plant propagating materials imported into the territory of the Republic of Indonesia in contravention of the provisions of this Decree, shall be refused entry or destroyed.

### **Article 24**

By the issuance of this Decree, the Decree of the Minister of Agriculture No. HK.310/763/Kpts/10/1983, the Decree of the Minister of Agriculture No. 794/Kpts/TP-830/10/1984, the Decree of the Minister of Agriculture No. 795/Kpts/TP-830/10/1984 and the Decree of the Minister of Agriculture No. 798/Kpts/TP-830/10/1984 are repealed.

### **Article 25**

This Decree shall come into effect on the day of issuance.

**Issued in Jakarta**  
**on the 16<sup>th</sup> of January 1990**  
**The Minister of Agriculture,**

**Sgd**

**W a r d o y o**

**APPENDIX TO THE DECREE OF THE MINISTER OF AGRICULTURE**  
**No. 38/Kpts/HK.310/1/1990, Dated : 16<sup>th</sup> of January, 1990**

**ANNEX-1. Plants and Plant Propagating Materials which are Subjected to Intermediate Quarantine and Post-entry Quarantine**

No	Plant	From Countries where the Pest	Following pests occur Disease
1	2	3	4
1.	Cocoa <i>Theobroma cacao</i> L.	a. Cacao Mosaic Virus b. Cacao Red Mottle Virus c. Cacao Swollen Shoot Virus d. Cacao Yellow Mosaic Virus e. Cacao Vein Clearing Virus f. Cacao Necrosis Virus g. <i>Trachyspaeria fructigena</i> h. <i>Trinipellis perniciosus</i> i. <i>Moniliophthora roreri</i>	Mosaic Red Mottle Swollen shoot Yellow mosaic Vein clearing Necrotic defoliation Trachyspaeria pod rot Witches broom Monilia pod rot
2.	Coconut <i>Cocos nucifera</i> L.	a. MLO b. MLO c. MLO d. Unknown e. Unknown f. Unknown g. Unknown h. Unknown i. Unknown j. Unknown k. Unknown l. Unknown m. Unknown	Lethal Yellowing Kaincope Kribi Awka Bristle tip Bronze leaf Kerala wilt Leaf scorch Little leaf Leaf mottle Thatipaka disease Thanjavur wilt Tinangaja
3.	Oil palm <i>Elaeis guineensis</i> Jacq.	a. <i>Cercospora elaeidis</i> b. <i>Fusarium oxysporum</i> f.sp. <i>elaedis</i> c. MLO d. MLO e. Unknown	Freckle, leaf spot Vascular wilt disease Lethal yellowing Leaf mottle Fatal yellowing
4.	Coffee <i>Coffea</i> sp.	a. <i>Trachyspaeria fructigena</i> b. <i>Pseudomonas garcae</i> c. Unknown d. Unknown a. Unknown	Trachyspaeria pod rot Bacterial leaf spot Crinkle leaf disease Sudden death Stem pitting
5.	Canary date palm <i>Phoenix canarisis</i> Hort. ex Chanb.	a. <i>Fusarium oxysporum</i> f.sp. <i>elaedis</i> b. MLO	Vascular wilt disease Lethal yellowing
6.	Date <i>Phoenix dactylifera</i> L.	a. <i>Fusarium oxysporum</i> f.sp. <i>elaedis</i>	Vascular wilt disease Lethal yellowing

		b. MLO	
7.	Senegal palm <i>Phoenix reclinata</i> Jacq.	a. <i>Fusarium oxysporum</i> f.sp. <i>elaeidis</i> b. MLO	Vascular wilt disease
8.	Arikuri palm <i>Arikuryroba schizophyla</i> (Mart.) L.H. Balley	MLO	Lethal yellowing
9.	Cabade palm <i>Chrysalidocarpus cabade</i>	MLO	Lethal yellowing
10.	Christmas palm <i>Vetchia merillii</i>	MLO	Lethal yellowing
11.	Cluster palm <i>Cayota mitis</i> Lour.	MLO	Lethal yellowing
12.	Fiji island fan palm <i>Pritchardia pacifica</i> Seeman & Wendl.	MLO	Lethal yellowing
13.	Princess Palm <i>Dictyosperma album</i> (Bory) Wendl. & Drude	MLO	Lethal yellowing
14.	Spindle palm <i>Mascarena verschaffeltii</i>	MLO	Lethal yellowing
15.	Palmyra palm <i>Borrasmus flabellifer</i> Linn.	MLO	Lethal yellowing
16.	Talipot palm <i>Carypha elata</i>	MLO	Lethal yellowing
17.	Windmill palm <i>Trachycarpus fortunei</i>	MLO	Lethal yellowing
18.	Thruston palm <i>Pritchardia thrustonii</i>	MLO	Lethal yellowing
19.	Avocado <i>Persea americana</i> Mill	<i>Trachyspaeria fructigena</i>	Trachyspaeria pod rot
20.	Plant(s) which are prohibited, but not research purpose is/are imported under special permission granted by the Minister of Agriculture		

**ANNEX-2. Plants and Plant Propagating Materials which are Subjected to Post-entry Quarantine**

No	Plant	From Countries where the Pest	Following pests occur Disease
1	2	3	4
1.	Grape <i>Vitis vinifera</i> L.	a. <i>Xanthomonas ampelina</i> b. <i>Guignardia bidwellii</i> c. Arabis Mosaic Virus d. Artichoke Italian Latent Virus e. Grapevine Chrome Mosaic Virus (=Hungarian Chrome Mosaic Virus) f. Grapevine Bulgarian Latent Virus. g. Stem Pitting Virus h. MLO  i. BLO j. Peach Rosette Mosaic Virus	Bacterial blight Black rot Mosaic -- Chrome mosaic  Stem pitting (Legno-Riccio) Grapevine flavescence Dores Pierce's disease Rosette mosaic
2.	Apple <i>Pyrus malus</i> L.	a. Apple Stem Grooving Virus (ASGV) b. Ring Spot Virus c. Green Crinkle Virus d. Rough Skin Virus e. Platycarpa Dwarf and Scaly Bark Virus f. Stem Pitting Virus g. MLO h. MLO	Stem grooving Ring spot Green Crinkle Rough skin -- Stem pitting (Legno-Riccio) Apple Chart fruits Apple proliferation (=Wiches broom)
3.	Artichoke <i>Cynara arolymus</i>	Artichoke Italian Latent Virus	--
4.	Clove <i>Syzigium aromaticum</i> (L) Merrill et. Perry	<i>Valsa euginiae</i>	Sudden death
5.	Desmoul; Marinelvy <i>Clasus arbarea</i>	<i>Guignardia bidwellii</i>	Black rot
6.	Flas Geranium <i>Pelargonium zonale</i>	Artichoke Italian Latent Virus	--
7.	Heart leaf ampelopsis <i>Ampelopsis acconitifolia</i>	<i>Guignardia bidwellii</i>	Black rot
8.	Maize <i>Zea mays</i> L	a. Maize Chlorotic Mosaic Virus b. Maize Dwarf Mosaic Virus	Chlorotic dwarf; Maize stunt Dwarf mosaic
9.	Citrus <i>Citrus</i> spp.	a. Citrus Leaf Rugose Virus b. Satsuma Dwarf Orange Virus c. <i>Spiroplasma citri</i>	Leaf rugose -- Stubborn disease

10	Menkahood vine	<i>Guignardia bidwellii</i>	Black rot
11.	Rice <i>Oryza sativa</i>	a. Rice Yellow Mottle Virus b. Transitory Yellowing Virus c. Rice Dwarf Virus d. Rice Block Stretched Dwarf Virus	Yellow mottle Transitory yellowing Dwarf --
12	Papaya <i>Carica papaya</i>	a. Papaya Mosaic Dieback Virus b. Papaya Ring Spot Virus c. Papaya Bunchy-top Virus d. Unknown	Papaya mosaic virus Ring spot Bunchy-top Wailua disease
13.	Banana <i>Musa spp.</i>	MLO	Marbling disease
14.	Plum	Peach Rosette Mosaic Virus	Rosette mosaic
15.	Sugarcane <i>Saccharum officinarum</i> L	a. Abaca Mosaic Virus b. Dwarf Virus c. MLO	Mosaic Dwarf White disease
16.	Tea <i>Cammelia sinensis</i> (C) O.K.	a. <i>Phomopsis theae</i> b. Phloem Necrosis Virus	Cancer; Dieback Phloem necrosis
17.	Sweet Potato <i>Ipomea batatas</i> L.	a. Sweet Potato Internal Cork Virus b. Sweet Potato Mosaic Virus c. MLO	Internal cork Mosaic Witches broom
18.	Cassava <i>Manihot utilissima</i> Pohl.	a. Cassava Brown Streak Virus b. Virus	Brown streak Witches broom (=Super Brotamento)
19.	Woodbine; Virginia creeper <i>Pathenocissus spp.</i>	<i>Guignardia bidwellii</i>	Black rot

**ANNEX-3. Points of entry for Plants and Plant Propagating Materials  
Imported into the Territory of Republic of Indonesia**

**I. Points of entry for plant propagating materials which are subjected to post-entry quarantine :**

- a. Seaports
  - 1. Belawan
  - 2. Boom Baru
  - 3. Tanjung Priok
  - 4. Tanjung Perak
  - 5. Ujung Pandang
  
- b. Airports
  - 1. Polonia
  - 2. Sultan Mahmud Badaruddin II
  - 3. Soekarno - Hatta
  - 4. Djuanda
  - 5. Hasanuddin
  
- c. Post Offices
  - 1. Medan
  - 2. Palembang
  - 3. Jakarta
  - 4. Surabaya
  - 5. Ujung Pandang

**II. In addition to the points of entry mentioned above, plant propagating materials which are not subject to post-entry quarantine may also be imported through the following points of entry :**

- a. Seaports
  - 1. Krueng Raya / Malahayati
  - 2. Pekanbaru
  - 3. Sekupang (Batam)
  - 4. Batu Ampar (Batam)
  - 5. Pangkal Pinang
  - 6. Teluk Bayur
  - 7. Tanjung Pinang
  - 8. Jambi
  - 9. Tanjung Pandan
  - 10. Panjang
  - 11. Cirebon
  - 12. Tanjung Emas/ Semarang
  - 13. Cilacap
  - 14. Bena
  - 15. Tenau

16. Pontianak
17. Banjarmasin
18. Balikpapan
19. Samarinda
20. Tarakan
21. Bitung / Manado
22. Ambon
23. Biak
24. Jayapura
25. Sorong

b. Airports

1. Simpang Tiga (Pekanbaru)
2. Hang Nadim (Batam)
3. Tabing
4. Tanjung Pinang
5. Sultan Taha (Jambi)
6. Branti
7. Ngurai Rai
8. El Tari (Kupang)
9. Supadio (Pontianak)
10. Banjarmasin
11. Balikpapan
12. Tarakan
13. Sam Ratulangi
14. Ambon
15. Biak
16. Sentani

c. Post Offices

All of post offices designated by the responsible Minister or any other authorized official as post offices where customs inspection is carried out.

### **III. Points of entry for imported plants.**

a. Seaports

All of seaports jointly designated, by the Minister of Transports, the Minister of Trade, and the Minister of Treasury as ports which are open for the international trade.

b. Airports

All of airports designated by the President or the Minister of Transports or jointly by the Minister of Transports and Minister of Defense and National Security as :

1. international airports;
2. airports for the purposes of border air traffic;



3. airports for the purposes of scheduled or non scheduled air traffic for tourists from overseas.

c. Post Offices

All of post offices designated by the responsible Minister or any other authorized official, as post offices where customs inspection is carried out.

d. Check-posts

1. Nunukan
2. Entikong

**ANNEX-4. LIST OF PLANT QUARANTINE PESTS**

<b>No</b>	<b>Botanical Name</b>	<b>Common Name</b>	<b>Host</b>	<b>Carrier Host</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>A.</b>	<b>CATEGORY A1</b>			
<b>I.</b>	<b>INSECT</b>			
	<i>Acaphylla steinwadeni</i>	Pink mite	Tea	Plant propagating material of tea
	<i>Acaphyllisa indiae</i>	White mite	Tea	Plant prop. material of tea
	<i>A. parindiae</i>	Pale mite	Tea	Plant prop. material of tea
	<i>Aceria guerreronis</i> Keif. (= <i>Eriphyas guerreronis</i> )	Coconut mite	Coconut	Seedlings and seed of coconut
	<i>Acraea acerata</i> Hew.	Sweet potato butterfly	Sweet potato	Sweet potato plants
	<i>Agrilus mali</i> Matis	Apple borer	Apple	Apple fruit
	<i>Alcidodes dentipes</i> Oliver	Sweet potato weevil	Sweet potato	Tuber and cutting of sweet potato
	<i>Amblipelta cocophaga</i> C.	Coccid	Coconut	Seedlings & seed of coconut
	<i>Amorphoidea lata</i> motsch.	Cotton boll weevil	Cotton	Seed & fruit of cotton, <i>Theopesis lampas</i>
	<i>Anastrepha fraterculus</i> Wied.	South American fruit fly	Citrus, <i>Anona</i> , Avocado, Grape, Rose Apple, Apple, Mango, Guava, Coffee	Citrus fruit, <i>Anona</i> , Avocado, Grape, Rose Apple, Mango, Apple, Guava, Coffee
	<i>Anastrepha ludens</i> (Loew.)	Mexican fruit fly	Citrus, Papaya, Apple, <i>Anona</i> , Mango, Guava, <i>Sapota</i>	Citrus fruit, Papaya, Apple, <i>Anona</i> , Mango, Guava, <i>Sapota</i>
	<i>A. mombinpraeoptans</i> Stein.	Fruit fly	Mango	Mango fruit & soil
	<i>A. obliqua</i> (Macq.)	West Indies fruit fly	Mango, Citrus, Plum, <i>Sapota</i> , Guava	Mango, Citrus, Plum, <i>Sapota</i> , Guava & soil
	<i>A. serpentina</i>	Orange fruit fly	Citrus	Citrus fruit & soil
	<i>A. suspensa</i> (Loew.)	Fruit fly	Guava	Guava fruit & soil
	<i>Antestiopsis facetoides</i> Greath	Cherry & flower feeder	Coffee	Seedlings & seed of coffee
	<i>A. intricata</i> (Ghes & Carayon)	Cherry & flower feeder	Coffee	Seedlings & seed of coffee
	<i>A. orbitalis bechauna</i> (Kirk.)	Cherry & flower feeder	Coffee	Seedlings & seed of coffee
	<i>A. orbitalis ghes-</i>	Cherry & flower	Coffee	Seedlings & seed of coffee

<i>quierei</i> Carayon	feeder		
<i>Antherigona soccata</i> Rond.	Sorghum shoot fly	Sorghum, Rice, Wheat, Grass	Plants of sorghum, rice wheat & grass
<i>A. grandis</i> Bohem	Mexican cotton boll weevil	Cotton	Seed & fruit of cotton, soil
<i>A. vestitus</i> Bohem	Peruvian cotton boll weevil	Cotton, <i>Althaea rosea</i> , <i>Hibiscus rosasinensis</i> , <i>Sida paniculata</i> , <i>Ceien-fuegosia heterophylla</i>	Seed & fruit of cotton, <i>Althaea rosea</i> , <i>Hibiscus rosasinensis</i> , <i>Sida paniculata</i> , <i>Ceien-fuegosia heterophylla</i>
<i>Aonidomytilus albus</i> (Ckll.)	Cassava scale	Cassava	<i>Cassava cutting</i>
<i>Apate monochus</i> Fes.	Black borer	Cotton	Seed & fruit of cotton, coffee, date palm
<i>Augosoma centaurus</i>	Stem tissue borer	Oil palm	Plant prop. material of oil palm
<i>Bhothynus gibbosus</i> (De Geer)	Carrot beetle	Carrot, Celery, Maize, Potato, Sweet potato, Sugar beet	Roots of carrot, celery, maize, potato, sweet potato, sugar beet, soil
<i>Brevipalpus californicus</i>	Scarlet mite	Tea	Plant prop. material of tea
<i>Busseola fusca</i> Fuller	Maize stalk borer	Maize, Wheat, Sugarcane	Stem of maize, wheat, plant prop. material of sugarcane
<i>Carposina niponensis</i> Wals.	Peach fruit moth	Apple, Pear, Peach, Plum	Fruit of apple, pear, peach, plum
<i>C. sasaki</i> Mats.	Peach fruit moth	Apple, Pear, Peach, Plum	Fruit of apple, pear, peach, plum
<i>Cataenococcus theaecola</i>	Root mealy bug	Tea	Plant prop. material of tea
<i>Ceciloide aciculata</i> (Muller)	-	Asparagus	Plant prop. material of asparagus
<i>Cephus cinctus</i>	Wheat stem sawly	Wheat	Stem of wheat
<i>Ceratitis capitata</i> Wied. (= <i>Pardalapsis capitata</i> )	Mediterranean fruit fly	Citrus, <i>Anona</i> , Apple, Mango, Chili, Grape, Cacao, Tomato, Avocado, Cotton	Fruits of citrus, <i>Anona</i> , apple, mango, chili, grape, tomato, cacao, avocado, cotton & soil
<i>C. quinaria</i> B.	Rhodesian fruit fly	Rose apple	Fruit of rose apple & soil
<i>C. rosa</i> Karsch.	Natal fruit fly	Citrus, Apricot, Rose apple	Fruits of citrus, apricot rose apple & soil

<i>Chaetanepthrips orchidi</i>	Banana rust thrips	Banana	Plant prop. material of banana
<i>Chilo partellus</i> (Swinhoe) (= <i>C. zonellus</i> Swinhoe)	Spotted stalk borer	Sorghum, Grass, Rice, Sugarcane	Plants of sorghum, grass, rice, sugarcane
<i>C. orichalcociliella</i> Strand.	Coastal stalk borer	Sorghum, Grass, Sugarcane	Plants of sorghum, grass, sugarcane
<i>Chrysanophulus aonidum</i> (L.)	-	Citrus	Plant prop. material of citrus
<i>Cicadulina latens</i> Fenech.	Leaf borer	Maize	Plant of maize
<i>C. abila</i> Naude	Leaf borer	Maize	Plant of maize
<i>Coclaenomenodera elaeidis</i> Meyrick.	Leaf miner	Coconut, Oil palm	Plant prop. material of coconut and oil palm
<i>Crioceris asparagi</i> (L.)	Asparagus beetle	Asparagus	Plant prop. material of asparagus
<i>C. duodecimpunctata</i> (L.)	Asparagus beetle	Asparagus	Plant prop. material of asparagus
<i>Cryptophlebia leucotreta</i> Myer.	False codling moth	Maize	Fruit of maize
<i>Cydia pomonella</i> (L.)	Codling moth	Apple	Fruit of apple
<i>Cylas puncticolis</i> Boh.	Sweet potato weevil	Sweet potato	Tuber & cutting of sweet potato
<i>Dacus ciliatus</i> Loew.	Lesser punk	Cucurbit	Fruit of cucurbit & soil
<i>D. depressus</i> Shiraki	Cherry fruit fly	Pumpkin	Fruit of pumpkin & soil
<i>Dacus jarvisi</i> (Tryon)	Fruit fly	Apple	Fruits of apple, <i>Careya australis</i> , <i>Cydonia oblonga</i> and soil
<i>D. passiflorae</i> (Frogg.)	Fruit fly	Passion, Citrus, Papaya	Fruits of passion, citrus, papaya and soil
<i>D. psidii</i> (Frogg.)	Fruit fly	Guava	Fruit of guava & soil
<i>D. tryoni</i> (Frogg.)	Queensland Fruit fly	Citrus, Papaya, Apple, Mango, Banana, Tomato, Cucumber	Fruits of citrus, guava, papaya, apple, mango, banana, tomato, cucumber and soil
<i>D. tsuneosis</i> Miyake	Japanese Fruit fly	Citrus	Fruit of citrus & soil
<i>D. curvipennis</i> Frogg.	Banana Fruit fly	Banana	Fruit of banana
<i>Diabrotica undecimpunctata</i> Mann.	Spotted Cucumber beetle	Cucumber, Maize	Plants of cucumber, maize and soil
<i>Diapsis thoracica</i>	Stolcked eye fly	Grass	Plant of grass

Wetsw. <i>Diasprepes abbreviatus</i> L.	Root borer	Citrus, Coffee, Sugarcane, Sweet potato, Copra, <i>Piper</i> spp.	Plant prop. materials of citrus, coffee, sugar cane, sweet potato, copra, <i>Piper</i> spp.
<i>Diatraea saccharalis</i> Fab.	Stem borer	Sugarcane, Rice, Wheat, Maize	Seedlings of sugarcane, rice, wheat, maize
<i>Diocalandra taitens</i> Guer.	Coconut weevil	Coconut	Root of coconut plant
<i>Diparopsis castanea</i> Hamp.	Red boll worm	Cotton	Seed & fruit of cotton, <i>Ceifenfuegosia heldebrandii</i> , <i>Gossypioides kirkii</i> , <i>Thespesia</i> spp.
<i>Diploxys fallax</i> Stal.	Rice shield bug	Gramineae	Gramineae plants
<i>Distantiella theobromae</i> (Distant.)	Cocoa capsid	Cocoa	Plant prop. material of cocoa
<i>Dulinus unicolor</i> (Signoret)	Tigre du caffer	Coffee	Plant prop. material of coffee
<i>Eldana saccharina</i> (Wlk.)	Sugarcane stalk borer	Cereals, Rice, Cassava, Grasses	Plants of cereals, rice, cassava, grasses
<i>Empoasca devastans</i> Distant.	Indian cotton jassid	Cotton, Potato, Tomato, Jute, Cacao, <i>Piper</i> spp.	Plant prop. materials of cotton, potato, tomato, jute, cacao, <i>Piper</i> spp.
<i>E. fascialis</i> Jacobi	Cotton jassid	Cotton	Plant prop. material of cotton
<i>E. lybica</i> De Berg.	Cotton jassid	Cotton	Plant prop. material of cotton
<i>Epilachna fulvosignata</i> Reiche	<i>Epilachna</i> beetle	Sorghum, Rice, Wheat, Sesame, Potato, Soybean, French bean, Lettuce, Cotton, Solanaceous weeds	Plants of sorghum, rice, wheat, sesame, potato, soybean, French bean, lettuce, cotton, Solanaceous weeds
<i>E. hirta</i> (Thumb.)	<i>Epilachna</i> beetle	Sorghum, Rice, Wheat, Sesame, Potato, Soybean, French bean, Lettuce, Cotton, Solanaceous weeds	Plants of sorghum, rice, wheat, sesame, potato, soybean, French bean, lettuce, cotton, Solanaceous weeds
<i>E. similis</i> (Thumb.)	<i>Epilachna</i> beetle	Sorghum, Rice, Wheat, Sesame, Potato, Soybean, French bean, Lettuce, Cotton, Solana-	Plants of sorghum, rice, wheat, sesame, potato, soybean, French bean, lettuce, cotton, Solanaceous weeds

<i>E. varivestis</i> (Muls.)	<i>Epilachna</i> beetle	ceous weeds Sorghum, Rice, Wheat, Sesame, Potato, Soybean, French bean, Lettuce, Cotton, Solanaceous weeds	Plants of sorghum, rice, wheat, sesame, potato, soybean, French bean, lettuce, cotton, Solanaceous weeds
<i>Euscepes postfasciatus</i> (Fairm.)	West Indies Sweet potato weevil	Sweet potato	Tuber & cutting of sweet potato
<i>Eutinobothrus brasiliensis</i>	Brazilian cotton	Cotton, <i>Rosela</i> , <i>Hibiscus</i> spp.	Fruit & seed of cotton, <i>Rosela</i> , <i>Hibiscus</i> spp.
<i>Graphognatus</i> spp.	White fringed weevil	Rice, Peanut, Maize, Vegetable, Ornamental plants	Plants of rice, peanut, maize, vegetable, ornamental plants, cotton
<i>Grapholita molesta</i> Busek.	Oriental fruit moth	Apple, Cherry	Fruits of apple, cherry, plum, apricot
<i>G. pakard</i> Zeller	Cherry fruit worm	Cherry	Fruits & plants of blue cherry, cherry, weld choke cherry, plum
<i>G. prunivora</i> Wals. (= <i>G. lespeyresia</i> )	Lesser apple worm	Apple, Cherry	Fruits & plants of plum, apple, cherry, prune
<i>Harmolita grandis</i>	Wheat strand worm	Soybean	Soybean seed & soil
<i>H. tritica</i> (Fitch.)	Wheat joint worm	Soybean	Soybean seed & soil
<i>Heliothis zea</i> (Boddie)	Cotton boll worm	Maize, Cotton	Fruits of maize & cotton
<i>Helopeltis anacardii</i> Miller	Cashew <i>Helopeltis</i>	Cashew	Fruit & plant of cashew
<i>H. bergrothi</i> Reut.	<i>Helopeltis</i> bug	Cocoa	Seed, seedling & fruit of cocoa
<i>H. schoutedeni</i> Reut.	Tea mosquito bug	Tea	Plant prop. material of tea
<i>Hercinothrips bincinctus</i> Bagnall	Thrips	Banana	Plant prop. material of banana
<i>Heteronychus consimilis</i> Kolbe	Black maize beetle	Maize, Sugarcane, Rice	Plant prop. material of maize, sugarcane, rice and soil
<i>H. licas</i> (Klug.)	Black maize beetle	Maize, Sugarcane, Rice	Plant prop. material of maize, sugarcane, rice and soil
<i>Hilda patruelis</i> Stal.	Ground nut hopper	Peanut, Cashew, Sunflower, <i>Crotalaria</i>	Plants of peanut, cashew, sunflower, <i>Crotalaria</i>
<i>Homorocoryphus nitidulus vicinus</i> Wlk.	Edible grasshopper	Maize, Rice, Wheat	Plants of maize, rice, wheat
<i>Horcias nobilellus</i>	Cotton plant	Cotton, Malva-	Plant prop. material of cotton

(Berg.) <i>Hylemya antiqua</i> (Meirsn.)	bug Onion maggot	ceae Liliaceae	& Malvaceae Plant prop. material of Lilia- ceae
<i>H. arambourgi</i> Se- guy.	Barley fly	Maize, Wheat	Plant prop. material of maize and wheat
<i>H. cilicruca</i>	Corn maggot	Maize	Maize seed
<i>Icerya purchasi</i> Mask.	Cottony cushion scale	Citrus, Orna- mental plants	Leaf, fruit, stem & other parts of citrus and ornamental plants
<i>Laodelphax striatella</i> Fall.	Small brown plant hopper	Rice, Maize, Wheat, Oats	Seeds of rice, maize, wheat and oat
<i>Lapacumides dedalus</i>	Stem borer and bunch stalk	Oil palm	Plant prop. material of oil palm
<i>Leptinotarsa decem- lineata</i> Say.	Colorado potato beetle	Potato	Potato plant & soil
Leptopharsae heveae Drake et Poor	Lace bug	Rubber	Plant prop. material of rubber
Leucoptera coffeela (Guer. & Menev.)	White coffee leaf miner	Coffee	Plant prop. material of coffee
<i>L. coffeina</i> Webb.	Coffee leaf miner	Coffee	Plant prop. material of coffee
<i>L. coma</i> Ghesq.	Coffee leaf miner	Coffee	Plant prop. material of coffee
<i>L. merigi</i>	Coffee leaf miner	Coffee	Plant prop. material of coffee
<i>Listronotus oregonensis</i> (Le C.)	Carrot weevil	Carrot, Celery, Parsley, Vege- tables	Fruits of carrot, celery, pars- ley, vegetables and soil
<i>Lobesia botrana</i> (Schiff.)	Vine moth	Grape, Plum, Strawberry	Seeds & fruits of grape, plum, strawberry
<i>Longitarsus nigripennis</i> Motsch.	Pollu beetle	Pepper	Fruit, leaf & flower of pepper and soil
<i>Megalognatha rufi- bentris</i> Baly.	Maize tassel beetle	Maize	Maize plant
<i>Melanogromyza sim- plex</i> Loew. (= <i>Ophiomya simplex</i> )	Asparagus miner	Asparagus	Plant prop. material of aspara- gus
<i>Melittoma insulare</i> Freeman.	Stem borer	Coconut, Oil palm	Seedlings & seeds of coconut and oil palm
<i>Mononychellus tanajoa</i> (Bondar)	Mite	Cassava	Cassava cuttings
<i>Myopardalis par- dalina</i> (Biggot)	Baluchistan fruit fly	Melon, Pump- kin, Cucumber, Water melon	Fruits of melon, pumpkin, cu- cumber, water melon
<i>Mythimna unipuncta</i> (Haw.)	Rice army worm	Maize, To- bacco, Sugar- cane	Seeds & plants of maize, to- bacco, sugarcane
<i>Nematocera</i> spp.	Shiny cereal weevil	Maize, Wheat, Cereal, Coffee,	Plants of maize, wheat, cereal, coffee, tea, legumes

<i>Oligonychus yothersi</i>	Mite	Tea, Legumes	
<i>Oryctes boas</i> (F.)	Rhinoceros beetle	Tea Coconut, Oil palm, <i>Arenga</i> spp., <i>Areca</i> spp., <i>Borassus</i> spp. <i>Corypha</i> spp., <i>Phoenix</i> spp., <i>Raphia</i> spp.	Plant prop. material of tea Seedlings, seeds & plants of coconut, oil palm, <i>Arenga</i> spp., <i>Areca</i> spp., <i>Borassus</i> spp. <i>Corypha</i> spp., <i>Phoenix</i> spp., <i>Raphia</i> sp
<i>O. elegans</i>	Rhinoceros beetle	Date palm	Fruit of date palm
<i>O. monoceros</i> (Oliv.)	Rhinoceros beetle	Coconut, Oil palm, <i>Arenga</i> spp., <i>Areca</i> spp., <i>Borassus</i> spp. <i>Corypha</i> spp., <i>Phoenix</i> spp., <i>Raphia</i> spp.	Seedlings, seeds & plants of coconut, oil palm, <i>Arenga</i> spp., <i>Areca</i> spp., <i>Borassus</i> spp. <i>Corypha</i> spp., <i>Phoenix</i> spp., <i>Raphia</i> sp
<i>Ostrinia nubilalis</i> (Hb.) (= <i>Pyrausta nubilalis</i> Meyr.)	European corn borer	Maize, wheat, hops, Gramineae	Plants of maize, wheat, hops, gramineae
<i>Oulema oryzae</i> Kuw. (= <i>Lema oryzae</i> )	Rice leaf beetle	Rice, Gramineae	Plants of rice, gramineae
<i>Pachymerus lacerdae</i> Chev.	Seed borer	Oil palm	Seedling of oil palm
<i>P. nucleorum</i> Freeman	Coconut borer	Oil palm, coconut	Seeds of oil palm, coconut
<i>Panonychus citri</i>	Citrus red mite	Citrus	Citrus plants
<i>P. ulmi</i> (Koch.)	European red mite	Apple, Pear, Peach, Plum, Prunes, Elm	Parts of apple, pear, peach, plum, prunes, and elm plants
<i>Pieris rapae</i> L.	Imported cabbage worm	<i>Crucifer</i> , weed of <i>Crucifer</i> , water lettuce, sweet alyssum, mignonette	Leaf of <i>Crucifer</i> , weed of <i>Crucifer</i> , water lettuce, sweet alyssum, mignonette
<i>Pimelephila ghesquierei</i> Tams.	Pyralide	Oil palm, coconut	Seeds of oil palm and coconut
<i>Planococcus kenyae</i> (Le Pelley)	Wealy bug	Coffee	Plant prop. material of coffee
<i>Popilia japonica</i> Newman	Japanese beetle	Rose, maize, soybean, vegetables	Flower cuttings, seeds of maize, soybean, vegetables
<i>Prostephanus truncatus</i> (Horn.)	Grain borer	Maize	Seedling & seed of maize
<i>Pseudotheraptus</i>	Coccid bug	Coconut	Seed of coconut



<i>Psila roses</i>	Carrot rust fly	Carrot, Celery, Parsnip, Parsley	Roots of carrot, celery, parsnip, parsley & soil
<i>Quadraspidiotus perniciosus</i> (Comstock)	San Jose scale	Citrus	Plant prop. material of citrus
<i>Raviella indica</i> Hirst.	Coconut mite	Coconut	Seed of coconut
<i>Recidia mica</i>	Cicadelids	Oil palm	Seed of oil palm
<i>Retracus elaedis</i>	Oil palm mite	Oil palm	Seed of oil palm
<i>Rhagoletis cerasi</i>	European fruit fly	Cherry, <i>Prunus</i> spp., <i>Lonicera tatarica</i> , <i>Xylostema</i> spp.	Fruits of cherry, <i>Prunus</i> spp., <i>Lonicera tatarica</i> , <i>Xylostema</i> spp.
<i>R. cingulata</i> (Loew.)	Cherry fruit fly	Cherry, Apple, Plum, Pear	Fruits of cherry, apple, plum, pear and soil
<i>R. pomonella</i> (Walsh.)	Apple maggot fly	Apple, Plum, Pear	Fruits of cherry, apple, plum, pear
<i>Rhynchophorus palmarum</i> (L.)	Boring weevil	Coconut, Oil palm, <i>Areca</i> spp., <i>Caryota</i> spp., <i>Corypha</i> spp., <i>Phoenix</i> spp.	Seeds of coconut, oil palm, <i>Areca</i> spp., <i>Caryota</i> spp., <i>Corypha</i> spp., <i>Phoenix</i> spp.
<i>R. phoenicis</i>	Boring weevil	Coconut, Oil palm, <i>Areca</i> spp., <i>Caryota</i> spp., <i>Corypha</i> spp., <i>Phoenix</i> spp.	Seeds of coconut, oil palm, <i>Areca</i> spp., <i>Caryota</i> spp., <i>Corypha</i> spp., <i>Phoenix</i> spp.
<i>Rioxa pornia</i>	Islandian fruit fly	Passion, Apple, Citrus, Pear, Tomato	Fruits of passion, apple, citrus, pear, tomato
<i>Sacadodes pyralis</i> Dyar.	False pink boll worm	Cotton, <i>Hibiscus sabdariffa</i> , <i>Ceilen-fuegosia affinis</i>	Seeds & fruits of cotton, <i>Hibiscus sabdariffa</i> , <i>Ceilen-fuegosia affinis</i>
<i>Saccharosydne saccharivora</i> (Westn.)	Sugarcane plant hopper	Sugarcane	Seed of sugarcane
<i>Sahlbergella singularis</i> Hagl.	Cocoa capsid	Cocoa	Plant prop. material of cocoa
<i>Schizonycha</i> spp.	Chafer grub	Maize, Wheat, Yam, Peanut, Sunflower, Sugarcane, Weeds	Plants of maize, wheat, yam, peanut, sunflower, Sugarcane, weeds & soil
<i>Sesamia calamistis</i> Hamps. (= <i>Sesamia vuteria</i> )	Southern pink stalk borer	Maize, Sorghum, Rice, Sugarcane	Seeds of maize, rice, sorghum, sugarcane

<i>S. cretica</i> Ledener	Stalk borer	Maize, Sorghum, Sugarcane	Seeds of maize, sorghum, sugarcane
<i>Sitophilus granarius</i> L.	Maize weevil	Maize, Grains	Seeds of maize, grains
<i>Sogatodes cubanus</i> Crawf.	Plant hopper	Rice	Straw of rice
<i>S. oryzicola</i> (Muir.)	Plant hopper	Rice	Straw of rice
<i>Sophronica ventralis</i> Auriv.	Berry borer	Coffee	Seedling, seed & fruit of coffee
<i>Steneotarsenemus laticeps</i> (Halber)	Bulb scale mite	Amaryllis	Seed of amaryllis
<i>Stenoma decora</i> Zeller	Shoot and pod borer	Cocoa	Seed & fruit of cocoa
<i>Synanthedon dasyceles</i> Bradley.	Sweet potato clear wing	Sweet potato	Tuber of sweet potato
<i>Tetranychus kanzawai</i>	Kanzawai spider mite	Tea	Plant prop. material of tea
<i>Trichispa sericea</i> Guerin.	Rice hispid	Rice, Gramineae	Plants of rice, gramineae
<i>Toxotrypana curvicauda</i> Gerst.	Fruit fly	Papaya, Mango	Fruits of papaya, mango and soil
<i>Xyleborus ferrugineus</i> F.	Bark beetle	Cocoa	Plant prop. material of cocoa
<i>Zonocerus elegans</i> Thumb.	Elegant grasshopper	Sweet potato, Cocoa, Cotton, Cassava, Gramineae	Plants of sweet potato, cocoa, cotton, cassava, gramineae
<i>Z. variegatus</i> L	Elegant grasshopper	Sweet potato, Cocoa, Cotton, Cassava, Gramineae	Plants of sweet potato, cocoa, cotton, cassava, gramineae
<i>Zygogramma exclamatoris</i>	Sunflower beetle	Sunflower	Parts of sunflower
<b>II. SNAIL</b>			
<i>Achatina craveri</i> Smith	-	Coffee	Plant prop. material of coffee, seed of sesame
<i>A. zanzibarica</i> Bourg.	-	Cotton	Plant prop. material of cotton, soil
<i>Ariolimax columbianus</i> (Gould.)	-	Banana	Plant prop. material of banana
<i>Arion circumscriptus</i> Johnson	European slug, Grey garden slug	Potato, Maize, Carrot, Tobacco, Strawberry	Tuber & seedling of potato plants of maize, carrot, celery, tobacco, strawberry, barley, rye, poppy, rape
<i>A. intermedius</i>	Hedgehog snail	Potato, Carrot	Tuber & seedling of potato, seedlings of carrot, celery, tulips
<i>A. rufus</i> (L.)	Large red slug	Potato, To-	Seedlings of potato, wheat,

<i>A. subfuscus</i>	-	bacco, Wheat, Medicinal herbs	tobacco, medicinal herbs, poppy, rape, rye, barley
<i>Ceciloides aciculata</i> (Muller.)	-	Potato, Carrot, Grape, Legumes	Tuber & seedling of potato, carrot, celery, <i>Rhododendron</i>
<i>Deroceras agreate</i> (L.)	Field slug	Asparagus	Plant prop. material of asparagus
<i>Discus rotandusus</i> Muller.	Rounded snail	Potato, Strawberry	Tuber & seedling of potato, plant prop. material of strawberry, vegetable root, plants of <i>Trifolium</i> sp., <i>Cynara deglimus</i>
<i>Drymaeus dormani</i> Binney	Citrus tree snail	Orchids	Plant of orchids
<i>Geomalacus maculosus</i> Allman.	-	Citrus	Plant prop. material of citrus
<i>Helicarian salius</i> Benson	-	Sugar beet	Plant prop. material of sugar beet
<i>Helix aspersa</i> Muller.	Brown garden snail	Tea	Plant prop. material of tea
<i>H. pomatia</i> L.	Roman snail, edible snail, vineyard snail	Grape, Strawberry, Tomato, Citrus, Wheat, Vegetables	Plant prop. materials of grape, strawberry, tomato, citrus, wheat and vegetables
<i>H. rufescens</i> Pennant.	-	Grape, Tobacco	Plant prop. materials of grape, tobacco
<i>Lanistes ovum</i> Trosch.	-	Strawberry	Plant prop. material of strawberry
<i>Lehmania valentiana</i> (Perusac)	Iberian slug, Canadian slug	Rice	Plant of rice
<i>Limax maximus</i> L.	-	Potato, Orchid, Vegetables	Tuber & seedling of potato, orchid plants, vegetable root
<i>Limax cinereoniger</i> Wolf	-	Potato, Celery, Tomato, Carrot, Cucumber, Pump-kin, Cabbage, Mushroom	Tubers & seedlings of potato, celery, tomato, carrot, cucumber, pumpkin, cabbage, mushroom
<i>Linicolaris kambeul</i> Bruguire	-	Potato, Celery, Carrot	Tubers & seedlings of potato, celery, carrot
<i>Marisa cornuarieties</i> L.	-	Maize, Peanut	Plants of maize, peanut
<i>Milax budapestensis</i> (Hazay)	Keeled slug, subterranean slug	Rice	Plant of rice
<i>M. gegates</i> (Drap.)	Greenhouse slug, smooth jet	Potato, Carrot, Wheat, Vegetables	Tubers & seedlings of potato, carrot, wheat & vegetables
		Potato, Cabbage, Carrot,	Tubers & seedlings of potato, cabbage, carrot, strawberry

<i>M. sowerbyi</i> (Ferces-sac)	slug	-	Strawberry Potato, Celery, Carrot	Tubers & seedlings of potato, celery & carrot
<i>Ottala lactea</i> (Muller)		-	<i>Allium</i> spp.	Tuber of <i>Allium</i> spp.
<i>Oxychilus cellarius</i> (Muller)	Cellar snail		Cucumber, Or- chid, Leguminose, Pumpkin	Plants of cucumber, orchid, Leguminose, pumpkin
<i>O. draparnaudi</i> (Beck.)		-	Cucumber, Or- chid Leguminose, Pumpkin	Plants of cucumber, orchid, Leguminose, pumpkin
<i>Pila glokosa</i> Swain- son		-	Apple, Rice	Plants of apple, rice
<i>P. polita</i> Jeshages		-	Rice	Plant of rice
<i>Pomacea lineata</i> (Spix.)		-	Rice	Plant of rice
<i>Strophocheiles oblon- gus</i> (Muller)		-	Coffee	Plant of coffee
<i>Theba pisana</i> (Muller)	White garden snail, Mediter- ranean white snail		Citrus, Cab- bage, Tomato, Legumi-nose	Plant prop. materials of citrus, cabbage, tomato, Leguminose, <i>Medicago sativa</i>
<i>Vaginulus bedleyi</i> Simmoth.		-	Sweet potato, Coffee, To- bacco	Sweet potato cutting, coffee, tobacco, and lucerne

### III. NEMATODE

<i>Anguina tritici</i> (Steinbuch)	Seed gall nematode		Wheat	Seedlings & seeds of wheat, oat, rye, barley, and soil
<i>Aphelenchoides ara- chidis</i> Boss.	Ground nut testa nematode		Peanut	Ground nut, pod, and soil
<i>A. ritzemabosi</i> (Schwartz.)	Bud and leaf nematode		Ornamental plants	Seeds of ornamental plants and soil
<i>Ditylenchus destruc- tor</i> Thorne	Potato rot nematode		Potato, carrot, sweet potato	Tuber & seed of potato Plant of sweet potato, carrot, gladiol, iris, tulips, <i>Mentha arvensis</i> and soil
<i>D. myceliophagus</i> J.B. Goodey	Mushroom nematode		Mushroom	Seed of mushroom, inorganic matter, soil
<i>Globodera pallida</i> (Stone) Mulvey & Stone	White cyst nematode		Potato	Tuber, seed & root of potato and soil
<i>G. rostochiensis</i> (Wollen-weber) Mul- vey & Stone	Golden cyst nematode		Potato	Tuber, seed & root of potato and soil
<i>G. tabacum</i> Mulvey & Stone	Tobacco cyst nematode		Tobacco	Root of tobacco and soil
<i>Heterodera avenae</i>	Oat cyst nema-		Wheat	Roots of wheat, oats, grasses,

Filipjev.	tode, cereal nematode		rye & soil
<i>H. cacti</i> Filipjev.	Cactus cyst nematode	Cactus	Seed of cactus and soil
<i>H. carrotae</i> Jones.	Carrot cyst nematode	Carrot	Carrot tuber & soil
<i>H. cruciferae</i> Franklin.	Crucifer cyst nematode	Cruciferae	Roots of crucifer plant & soil
<i>H. fici</i> Kirjanova	Fig cyst nematode	Fig	Root of fig & soil
<i>H. goettingiana</i> Liebs.	Pea cyst nematode	Mung bean, Pea, Soybean, Kidney bean	Roots of mung bean, pea, soybean, kidney bean, <i>Cicer aeritinum</i> , <i>Lens esculenta</i> , soil
<i>H. oryzicola</i> Luc. & Memy	Rice cyst nematode	Rice	Root of rice & soil
<i>H. sacchari</i> Schimdt	Sugarcane cyst nematode	Sugarcane	Roots of sugarcane, rice, maize & soil
<i>H. trifolii</i> Gofart.	Clover cyst nematode	Leguminose	Roots of leguminose, Caryophyllaceae, Labiatae, Portulacaceae, Scropulariceae & soil
<i>H. vigni</i> Edward & Mura	Pea cyst nematode	Long bean	Roots of long bean, <i>Cajanus cajan</i> & soil
<i>H. zaeae</i> Koshy, Swasup & Koshy	Corn cyst nematode	Maize	Root of maize & soil
<i>Hirschmaniella spinicauda</i> Schuurmans & Stekhoven	Rice nematode	Rice	Seed, seedling & root of rice, <i>Juncus</i> spp., <i>Typha</i> spp. & soil
<i>Meloidogyne acronela</i> Caltzee	Root knot nematode	Cotton	Root of cotton & soil
<i>M. africana</i> Whitehead	Root knot nematode	Coffee	Root of coffee & soil
<i>M. artiella</i> Franklin	Root knot nematode	Wheat, <i>Vicia</i> spp., Cabbage	Roots of wheat, oats, cabbage, barley, <i>Vicia</i> spp., <i>Cicer aeritinum</i> and soil
<i>M. bauruensis</i>	Root knot nematode	Soybean	Root of soybean & soil
<i>M. brevicauda</i> Loos	Root knot nematode	Tea	Root of tea & soil
<i>M. clochista</i>	Root knot nematode	Rice	Root of rice & soil
<i>M. coffeicola</i> Lordello & Zamith.	Root knot nematode	Coffee	Root of coffee & soil
<i>M. decalineata</i> Whitehead	Root knot nematode	Coffee	Root of coffee & soil
<i>M. ethiopica</i> Whitehead	Root knot nematode	Long bean, tomato, <i>Vigna</i> spp.	Root of long bean, tomato, <i>Vigna</i> spp. & soil
<i>M. exigua</i> Goeldi	Root knot nematode	Coffee, chilli, coriander, wa-	Root of coffee, chilli, coriander, watermelon, Citrus spp.,

		termelon, Citrus spp., shallot	shallot & soil
<i>M. graminicola</i> (Sledge & Golden) Whitehead	Root knot nematode	Rice, cerealea	Root of rice, cerealea & soil
<i>M. indica</i> Whitehead	Root knot nematode	Citrus	Root of citrus & soil
<i>M. inortata</i> Lordello	Root knot nematode	Soybean, tobacco	Root of soybean, tobacco, <i>Anthurium</i> spp. & soil
<i>M. mali</i> Ito, Oshima & Ichinobe	Root knot nematode	Apple, grape	Root of apple, grape, rose, <i>Acer palmarum</i> , <i>Morus bombycus</i> , <i>Trifolium repens</i> , & soil
<i>M. megadora</i> Whitehead	Root knot nematode	Coffee	Root of coffee & soil
<i>M. naasi</i> Franklin	Root knot nematode	Cerealea, Sugar beet	Roots of Cerealea, sugar beet & soil
<i>M. otifae</i> Himiligy	Root knot nematode	Coffee	Roots of coffee, <i>Peuraria</i> spp. & soil
<i>Nacobus abberans</i> Thorne	False knot nematode	Potato, Tomato, Cabbage, Cactus	Seed & tuber of potato, plants of potato, cabbage, cactus, sugar beet & soil
<i>Rhadinaphelenchus coco-philus</i> (Cobb) Goodey	Red ring disease	Coconut, Oil palm, Palm	Seed, seedling & all parts of coconut, oil palm, palm & soil
<b>IV. FUNGI</b>			
<i>Aecidium cautensis</i> Arth.	Rust	Potato	Seed & tuber of potato
<i>Alternaria cucumerina</i> (E. & E.) Elliot	<i>Alternaria</i> leaf spot	Cucumber	Seedling & part of cucumber plant
<i>Angiosorus solani</i> Thirium & O. Bern	Potato smut	Potato	Seed & tuber of potato, <i>Solanum stolonifer</i>
<i>Ascochyta boltshauseri</i> Sacc.	<i>Ascochyta</i> leaf spot	Mung bean	Seed & seedling of mung bean
<i>A. gossypii</i> Urn.	Blight	Cotton, Chili, Oca, Soybean, Tobacco, <i>Vigna angiculata</i> , Egg-plant	Seeds, seedlings & plant debris of cotton, chili, oca, soybean, tobacco, eggplant, <i>Vigna angiculata</i>
<i>A. phaseolus</i> Sacc.	Leaf spot (blotch) of bean	Soybean, <i>Vigna</i> spp., <i>Phaseolus</i> spp.	Seeds & seedlings of soybean, <i>Vigna</i> spp., <i>Phaseolus</i> spp.
<i>Calonectria rigidiuscula</i> (Berk. & Br.) Sacc. (= <i>Fusarium rigidiuscula</i> )	Green point, cushion gall	Cocoa	Seed of cocoa
<i>Ceratocystis fimbri-</i>	Ceratocystis	Cocoa	Seed of cocoa

<i>ata</i>	wilt		
<i>Cephalosporium gre-</i> <i>gatum</i> Alling & Chamb.	Brown stem rot	Soybean	Seed & seedling of soybean
<i>Cercospora elaeidis</i> Steyaert	Freckle, <i>Cercospora</i> leaf spot	Oilpalm	Seed & seedling of oil palm
<i>Chaetoseptoria well-</i> <i>manii</i> Stev.	Leaf spot of mung bean	Mung bean, <i>Phaseolus</i> spp.	Seeds & seedlings of mung bean, <i>Phaseolus</i> spp.
<i>Claviceps gigantea</i> (Fuentes) Ullst. & Rodrigues	Ergot	Maize	Seed & seedling of maize
<i>Crinipellis pernicioso-</i> <i>sa</i> (Stahel) Singer	Witches broom	Cocoa, Bamboo	Plant prop. materials of cocoa, bamboo
<i>Cylindrocladium</i> <i>crota-lariae</i> (Loss) Ball. & Saber (= <i>Calonectria cro-</i> <i>talariae</i> )	Black rot	Peanut	Seed & seedling of peanut
<i>Deuterophoma tra-</i> <i>cheiphila</i> Petri. & Boll.R.	Malsecco	Citrus	Plant prop. material of citrus
<i>Diaporthe paseolorus</i> (Cooke & Ellis) <i>Sacc.var. caulivora</i> Athrow & Cadwell	Stem/twig can- cer	Soybean	Seed & seedling of soybean
<i>D. citri</i> Wolf.	Melanose	Citrus	Plant prop. material of citrus
<i>D. vexans</i> (Sacc. & Syd.) Gratz.	Blight	Pea, Eggplant	Seeds & seedlings of peanut, eggplant
<i>Didymella bryoniae</i> (Auersiv.) Rehm.	Gummy stem blight	Cucumber	Seedling & plant debris of cu- cumber & other cucurbit plants
<i>Dothiorella gregaria</i> Sacc.	Surface rot	Avocado	Plant prop. material of avo- cado
<i>Elsinoe mangiferae</i> Bintan & Jenkin	Scab	Mango	Seed & fruit of mango
<i>E. phaseoli</i> Kins	Jen-scab bean	Mung bean, Long bean, Red pea, Kidney bean	Seeds & seedlings of mung bean, long bean, red pea, kid- ney bean
<i>Exobasidium reticu-</i> <i>latum</i> Ito & Saxada	<i>Japanesse</i> <i>exoba-sidium</i> blight	Tea	Plant prop. material of tea
<i>Fusarium monili-</i> <i>forme</i> f.sp. asparagi	<i>Fusarium</i> wilt; Root rot; de- cline	Asparagus	Seed of asparagus
<i>F. oxysporum</i> f.sp. <i>elaedis</i>	<i>Fusarium</i> wilt; Brown sheath rot	Oil palm	Seed & seedling of oil palm
<i>F. oxysporum</i> f.sp.	<i>Fusarium</i> wilt	Pea	Plant prop. material of pea

<i>pisi</i> <i>F. xylarioides</i> (Steyaert) Heym & Sacc. (= <i>Gibberella</i> <i>xylarioides</i> )	Tracheomycosis	Coffee	Plant prop. material of coffee
<i>Gaemannomyces</i> <i>graminis</i> (Sacc.) Arx. & Oliver var. <i>graminis</i>	Arkansas foot rot; Crown sheath; Black sheath rot; Brown sheath rot	Rice	Seedling, straw & plant debris of rice
<i>Guignardia bidwellii</i> (Ellis) Viala & Rovoz	Black rot	Grape	Plant prop. material of grape
<i>Helicobasidium pur-</i> <i>pureum</i> Pat.	Root rot	Sweet potato	Tuber of sweet potato
<i>Hemileia coffeicola</i> Maubl. & Roger	Grey rust; pow- dery rust	Coffee	Plant prop. material of coffee
<i>Lepothyrium theae</i>	Dieback	Tea	Plant prop. material of tea
<i>Marasmiellus coco-</i> <i>philus</i> Peglar.	Lethal bone	Coconut	Seed & seedling of coconut
<i>Microcyclus ulei</i> P. Henn.	South American Leaf Blight	Rubber	Rubber plant, other plants, vehicles, people and other matters
<i>Moniliophthora ro-</i> <i>rerii</i> (Clif.) H.C.Evant. et.al.	<i>Moniliophthora</i> pod rot	Cacao	Seeds & seedlings of cacao, <i>Herrania</i> spp.
<i>Monilochaetes in-</i> <i>fustans</i> Ell. & Hals.T.	Scurf; soil stain	Sweet potato	Seed & tuber of sweet potato
<i>Mycena citricolor</i> (Berk. & Curt.) Sacc. (= <i>Omphalia flavida</i> Maubl. et Rangel)	American leaf spot	Coffee, Mango, <i>Begonia</i> spp., <i>Cissus</i> spp., <i>Cit-</i> <i>rus</i> spp., <i>Com-</i> <i>melina</i> spp.	Plant prop. materials of coffee, mango, <i>Begonia</i> spp., <i>Cissus</i> spp., <i>Citrus</i> spp., <i>Commelina</i> spp.
<i>Mycosphaerella</i> <i>aleuritides</i> (Miyake) On.	Angular leaf spot	Tung	Seed & fruit of tung
<i>M. fijiensis</i> Morelet var. <i>difformis</i>	Black sigatoka	Banana	Plant prop. material of banana
<i>Oospora pustulans</i> Owen & Wakef.	Skin spot	Potato	Seed & tuber of potato
<i>Peronosclerospora</i> <i>sacchari</i> Miyake, Sirai & Hara	Sugarcane downy mildew	Maize, Sor- ghum, Sugar- cane	Seeds & seedlings of maize, sorghum, sugar cane
<i>P. sorghi</i> (West & Uppal.) C.G. Shaw	Downy mildew	Sorghum, Wheat, <i>Pani-</i> <i>cum</i> spp.	Seeds & seedlings of sorghum, <i>Panicum</i> spp., wheat
<i>Peronospora</i> <i>manshurica</i> (Naum)	Downy mildew	Soybean	Seed & seedling of soybean



Syd. <i>P. pisi</i> Syd. Emend & Campbell	Downy mildew	Pea	Seeds, seedlings & plant debris of pea, <i>Ficia faba</i> , <i>Wetches</i> sp.
<i>P. tabacina</i> Adam	Blue mold	Tobacco	Seedling & products of tobacco
<i>Phaeolus manihotis</i> Henn.	Root rot	Cassava	Seedling & tuber of cassava
<i>Phoma andina</i> Turkes	Black potato blight; <i>Phoma</i> potato leaf spot	Potato, Tomato	Seed & tuber of potato, tomato plant
<i>Phomopsis perseae</i> Serova.	Fruit rot	Avocado	Seed & fruit of avocado
<i>P. theae</i> Petch.	Stem cancer	Tea	Plant prop. material of tea
<i>P. vexans</i> (Sacc. & Syd.) Harter	Phomopsis blight	Pea, Eggplant	Seeds & seedlings of pea, eggplant
<i>Phyllosticta solitaria</i> (Ell. Ev.)	Apple blotch	Apple	Plant prop. materials of apple, <i>Crataegus</i> sp., <i>Pyrus coronaria</i>
<i>Phymatotricum omnivorum</i> (Dugg.)	Texas root rot	Peanut, Cassava, Cotton, <i>Pinus</i> spp., <i>Rosa</i> spp., <i>Hibiscus</i> spp., <i>Phoenix</i> spp., <i>Caesalpinia</i> spp.	Peanut pods, plants of cassava, cotton, <i>Pinus</i> spp., <i>Rosa</i> spp., <i>Hibiscus</i> spp., <i>Phoenix</i> spp., <i>Caesalpinia</i> spp.
<i>Phytophthora capsici</i>	<i>Phytophthora</i> pod rot	Cacao	Seed & pod of cacao
<i>P. citrophthora</i>	<i>Phytophthora</i> pod rot	Cacao	Seed & pod of cacao
<i>P. fragaria</i>	Red core; Red stele disease	Strawberry	Plant prop. material of strawberry
<i>P. megakarya</i>	<i>Phytophthora</i> pod rot	Cacao	Seed & pod of cacao
<i>P. megaspermae</i> Drechs. var. sorjiae Hild.	<i>Phytophthora</i> pod rot	Cacao	Seed & pod of cacao
<i>P. phaseoli</i> Thaxter.	Downy mildew; Collar rot of lima bean	Mung bean	Seed & seedling of mungbean
<i>Plenodomus destruens</i> Harter	Foot rot	Sweet potato	Seed & tuber of sweet potato
<i>Puccinia asparagi</i>	Rust	Asparagus	Plant prop. material of asparagus
<i>P. graminis</i> Purs. f.sp. <i>tritici</i> Eric & Henn.	Black rust; stem rust	Wheat	Seed & plant debris of wheat
<i>P. pittieriana</i> P. Henn.	Common rust	Potato	Seed & tuber of potato

<i>P. stackmanii</i>	Rust	Cotton	Seed & plant debris of cotton
<i>Pyrenochaeta terrestris</i> (Hans.) Borenz.	Pink rot	Sweet potato, Alliaceae	Plants of sweet potato, Alliaceae, plant prop. materials, water, soil
<i>Pythium myriotylum</i> Drechs.	<i>Pythium</i> disease wilt; pod rot; dumping off	Peanut	Pod & plant debris of peanut and soil
<i>Rhizoctonia solani</i> (= <i>Thanateporus cucumeris</i> )	Target leaf spot	Rubber	Leaves of rubber
<i>Rosellinia necratic</i>	White root rot; Grey rust	Sorghum, Coffee	Seed & plant debris of sorghum and soil
<i>Sclerospora graminicola</i> (Sacc.) Schroet.	Graminicola downy mildew	Maize, Sorghum, Sugarcane, <i>Panicum</i> spp.	Seeds & seedlings of maize, sorghum, <i>Panicum</i> spp., plant prop. material of sugarcane
<i>Septoria lycopersici</i> Speg. var. <i>mallagutii</i> Ciic. & Boerima	<i>Septoria</i> potato leaf spot; Angular potato leaf spot	Potato, Tomato	Seed & tuber of potato, tomato plant
<i>S. nodorum</i> Berk.	Gum blotch	Wheat	Seed, seedling & plant debris of wheat
<i>S. pisi</i> West	Downy mildew	Pea	Seeds, seedlings & plant debris of pea, <i>Ficia faba</i> , <i>Wetches</i> sp.
<i>Sphaceloma arachidis</i> Bintanc. & Jenkins	Scab	Peanut	Seedling of peanut
<i>S. manihoticola</i> Bintanc. & Jenkins	Super elongation	Cassava	Seed & tuber of cassava
<i>Sphacelotheca cruenta</i> (Kuhn.) Potter	Loose smut	Sorghum	Seed, seedling & plant debris of sorghum
<i>S. reiliana</i> (Kuhn.) Clint.	Heat smut	Maize, Sorghum	Seeds, seedlings & plant debris of maize, sorghum
<i>Spongospora subterrania</i> Toosen (Holland)	Slimy rot	Potato	Seed & tuber of potato
<i>Synchytrium endobioticum</i> (Schilb.) Perc.	Black wart	Potato, <i>Solanum dulcamara</i> , <i>S. nigrum</i>	Seeds & tubers of Potato, <i>Solanum dulcamara</i> , <i>S. nigrum</i>
<i>Tilletia caries</i> (DC) Tul.	Common bunt; Rough spored bunt	Wheat, <i>Agropyron</i> spp., <i>Bromus</i> spp., <i>Elymus</i> spp., <i>Fastuca</i> spp., <i>Hordeum</i> spp., <i>Poa</i> spp.	Seeds, seedlings & plant debris of wheat, <i>Agropyron</i> spp., <i>Bromus</i> spp., <i>Elymus</i> spp., <i>Fastuca</i> spp., <i>Hordeum</i> spp., <i>Poa</i> spp.
<i>T. foetida</i> (Wallr.) Liro	Smooth spored bunt	Wheat, <i>Agropyron</i> spp., <i>Bro-</i>	Seeds, seedlings & plant debris of wheat, <i>Agropyron</i> spp.,

		<i>mus</i> spp., <i>Elymus</i> spp., <i>Fastuca</i> spp., <i>Hordeum</i> spp., <i>Poa</i> spp.	<i>Bromus</i> spp., <i>Elymus</i> spp., <i>Fastuca</i> spp., <i>Hordeum</i> spp., <i>Poa</i> spp.
<i>Trachysphaera fructigena</i> Tabor & Bunting	<i>Trachysphaera</i> pod rot	Cacao, Coffee, <i>Mimosa elengi</i> , <i>M. commersonii</i> , <i>Musa</i> spp., <i>Pyrus</i> spp., Avocado	Cacao pod, coffee plant, <i>Mimosa elengi</i> , <i>M. commersonii</i> , <i>Musa</i> spp., <i>Pyrus</i> spp., avocado
<i>Uncinula necator</i> (Schweneits) Burril	Powdery mildew	Grape	Plant prop. material of grape
<i>Urocystis agropyri</i>	Flag smut	Wheat	Seed, seedling & plant debris of wheat
<i>U. cepulae</i> Frost.	Onion smut	Onion	Seed & tuber of onion
<i>U. colchici</i> Rubenth.	Onion smut	Onion	Seed & tuber of onion
<i>Ustilago tritici</i> Pers. & Rostr.	Loose smut	Wheat, Gramineae	Seeds, seedlings & plant debris of wheat, gramineae
<i>Verticillium dahliae</i>	<i>Verticillium</i> wilt	Cacao	Plant prop. material of cacao
<b>V. BACTERIA</b>			
<i>Corynebacterium flaccumfaciens</i> (Hedges) Dowson.	Bacterial wilt	Soybean, Maize, Kidney bean, Mung bean	Seeds & seedlings of soybean, maize, kidney bean, mung bean
<i>C. michiganense</i> pv. <i>michiganense</i> (Smith) Jensen	Cancer bacteria	Tomato, Chili, Eggplant	Seedlings, fruits & plant debris of tomato, chili, eggplant, <i>Solanum mammosum</i> , <i>S. dauglasii</i> , <i>S. nigrum</i> , <i>S. trifolium</i>
<i>C. nebraskense</i> Schuster, Vidaver & Mandel	Leaf freckle, blight wilt	Maize	Seedling, fruit & plant debris of maize
<i>C. sepedonicum</i> (Spieck. & Kotth.) Skapt. & Burkh.	Bacterial ring	Potato, Tomato, Eggplant	Seed & tuber of potato, seedlings of tomato, eggplant
<i>C. tritici</i> (Hutch.) Burkh.	Spike blight	Wheat	Seedling, fruit & plant debris of wheat
<i>Erwinia amylovora</i> (Burril) Winslow et.al.	Fire blight	Apple, Almond, Apricot, Cherry, Pear, Peach	Seedlings of apple, pear, almond, apricot, cherry, peach, <i>Amelanchier</i> spp., <i>Cydonia oblonga</i> , <i>Rubus</i> spp., <i>Sorbus</i> spp.
<i>E. ananas</i> (Serrano)	Marbling bacteria (marbled fruit)	Pineapple	Seed & fruit of pine-apple
<i>E. aroidea</i> (Holland) Tonsen	Slimy rot	Potato	Seed & tuber of potato
<i>E. atroceptica</i> (Van Hall.) Jennison	Black leg	Potato	Seed & tuber of potato

<i>E. herbicola</i> (Lohnis) Dye	Pink disease	Pineapple, Rice, Sorghum, Maize, Alfalfa	Seed & fruit of pine-apple, seedlings of rice, sorghum, maize, alfalfa
<i>E. stewartii</i> (Smith) Dye	<i>Erwinia</i> wilt	Maize, Sor- ghum, Wheat, Mung bean, Sugarcane	Seeds & seedlings of maize, sorghum, wheat, mung bean, <i>Agrotis alba</i> <i>Alvena sativa</i> , <i>Coix lachryma</i> , <i>Echinochloa</i> <i>americana</i> , <i>Trapsacum</i> spp., <i>Panicum</i> spp., plant prop. material of sugarcane. VECTOR : <i>Agrotis manchus</i> , <i>Chatemenia denticulata</i> , <i>C.</i> <i>pulicaria</i> , <i>Diabrotica nigri-</i> <i>cornis</i> , <i>D. undecimpunctata</i> , <i>D. versivera</i> , <i>Hylemya cili-</i> <i>cruca</i>
<i>E. tracheiphila</i> (Holland) E.F. Smith	Bacterial wilt	Cucumber	Plant debris of cucumber VECTOR : <i>Diabrotica unde-</i> <i>cimpunctata</i>
<i>E. vitivora</i> (Bacc.) Duplesis	Bacterial blight	Grape	Seedling & fruit of grape
<i>Pseudomonas andro-</i> <i>pogonis</i> (E.F. Smith) Stapp.	Bacterial leaf stripe	Maize, Wheat	Seeds & seedlings of maize, wheat, <i>Trifolium pratense</i> , <i>Vicia sativa</i>
<i>P. campestris</i> var. <i>theicola</i>	Bacterial leaf spot and cancer	Tea	Seedling of tea
<i>P. garcaeae</i> Amaral. Teix. & Pinh.78	Bacterial leaf spot	Coffee, Soy- bean, Cotton, Tomato, Potato, Long bean	Seedlings & plant debris of coffee, soybean, cotton, to- mato, potato, long bean, <i>Hi-</i> <i>biscus esculentus</i> , <i>Physalis</i> <i>floridana</i>
<i>P. maculicola</i> (Mc Culloch)	Proppery leaf spot	Cabbage, Broc- coli, Colraghbi, Turnip	Seedlings of cabbage, broc- coli, colraghbi, turnip
<i>P. panici</i> (Elliot) Stapp.	Bacterial streak	Rice, Sorghum	Seeds, seedlings & plant de- bris of rice, sorghum
<i>P. rubrisubalbicans</i> North & Smith	Mottled stripe, pink rot	Sugarcane, Sweet potato, Alliaceae	Seeds & seedlings of sugar- cane, sweet potato, Alliaceae
<i>P. solanacearum</i> E.F. Smith (race-2)	Moko disease	Banana, <i>Heli-</i> <i>conia</i> spp.	Plant prop. materials of ba- nana, <i>Heliconia</i> spp.
<i>P. syringae</i> pv. <i>tabaci</i> (Wolf. & Foster ) Young, Dye & Wilkie	Wild fire	Tobacco, Chili, Potato, Tomato, Eggplant, Soy- bean	Seeds & seedlings of tobacco, chili, potato, tomato, eggplant, soybean
<i>P. theae</i>	Bacterial leaf spot	Tea	Plant prop. material of tea
<i>Streptomyces ipo-</i> <i>moeae</i>	Soil rot; pox; ground rot	Sweet potato	Seed & tuber of sweet potato

(=*Actinomyces ipomoeae*)

*Xanthomonas ampelina* Panag. Bacterial blight Grape Plant prop. material of grape

*X. campestris* var. Bacterial leaf Cabbage Seedling & plant debris of  
*armoraceae* (Mc Culloch) Buck. cabbage

## VI. VIRUS AND VIRUS-LIKE DISEASE

Abaca Mosaic Virus	Mosaic	Banana, Sugar-cane	Plant prop. materials of banana, sugarcane
Alfalfa Mosaic Virus	Mosaic	Eggplant, Chili	Seedlings of eggplant, chili, <i>Medicago sativa</i>
American Cassava Mosaic Virus	Mosaic	Cassava	Plant prop. material of cassava
Andean Potato Latent Virus	-	Potato	Seed, tuber & plant debris of potato
Andean Potato Mottle Virus	Mosaic	Potato	Seed, tuber & plant debris of potato
Andean Potato Calico Strain (TRSV-Ca)	-	Potato	Seed, tuber & plant debris of potato
Apple Mosaic Virus	Mosaic	Apple	Plant prop. material of apple
Apple Ring Spot Virus	Ring spot	Apple	Plant prop. material of apple
Apple Rosette Virus	Rosette	Apple	Plant prop. material of apple
Apple Stem Grooving Virus	Stem grooving	Apple	Plant prop. material of apple
Arabis Mosaic Virus	Mosaic	Grape, Sugar beet, Strawberry, Soy-bean, Tomato, <i>Rosa</i> spp.	Plant prop. materials of grape, sugar beet, strawberry, soy-bean, tomato, <i>Rosa</i> spp.
Arracacha Virus B Oca Strain (AVB-O)	-	Potato	Seed tuber of potato, <i>Oxalis tuberosa</i>
Artichoke Italian Latent Virus	-	Grape	Plant prop. materials of grape, <i>Cichorium intybus</i> , <i>Cynara scolymus</i> , <i>Pelargonium zonale</i>
Asparagus Latent Virus	-	Asparagus, Mung bean, Tobacco	Plant prop. materials of asparagus, mung bean, tobacco, <i>Compressus globosa</i> , <i>Tetragonia expansa</i> , <i>Nicotiana clefandii</i> , <i>N. glauca</i> , <i>Chenopodium amaranticolor</i> , <i>C. quinosa</i>
Asparagus Stunt Virus	Stunt	Asparagus	Plant prop. materials of asparagus, <i>Chenopodium amaranticolor</i> , <i>C. quinosa</i>
Avocado Sun Blotch Virus	Sun Blotch	Avocado	Plant prop. materials of avocado, <i>Cinnamomum caniph-</i>

Barley Stripe Mosaic Virus	Stripe Mosaic	Wheat, Barley	<i>ora, C. zeylanicum, Ocetea bullata</i> Seeds & seedlings of wheat, barley
Bean Pod Mottle Virus	Pod Mottle	Soybean, Mung bean, Kidney bean	Seeds, seedlings & plant debris of soybean, mung bean, kidney bean, <i>Desmodium paniculum, Lespedeza cuniala, L. stipulacea, L. striata, Mucuna daeringianum, Stizalobium spp., Trifolium incarnatum.</i>
Beet Curly Top Virus	Curly Top	Sugar beet, chili, Tomato, potato, crucifer, celery, kidney bean, mung bean, cucumber, tobacco	VECTOR : <i>Ceratonia trifurcata, Colapsis flavida, C. lata, Diabrotica baleata, Ephicauta vittala</i>
Beet Leaf Curl Virus	Leaf curl	Sugar beet	Seed & plant debris of sugar beet VECTOR : <i>Piesma quadratum</i>
Brinjal Mosaic Virus	Mosaic	Egg plant	Seedling of egg plant
Cabbage Black Ringspot Virus	Ringspot	Cabbage	Seed, seedling & plant debris of cabbage, plants of Cruciferae, Begoniaceae, Solanaceae, Verbenaceae
Cacao Mosaic Virus	Mosaic	Cocoa	Seed, seedling & plant debris of cocoa
Cacao Necrosis Virus	Necrosis, Die-back Defoliation	Cocoa, soybean, kidney bean	Seed, seedling & plant debris of cocoa, soybean, kidney bean
Cacao Swollen Shoot Virus	Swollen shoot	Cocoa	Seed, seedling & plant debris of cocoa
Cacao Yellow Mosaic Virus	Yellow mosaic	Cocoa	Seed, seedling & plant debris of cocoa
Cacao Vein Clearing Virus	Vein clearing	Cocoa	Seed, seedling & plant debris of cocoa
Cassava Brown Streak Virus	Brown streak	Cassava	Plant prop. material of cassava
Cassava Latent Virus	-	Cassava	Plant prop. material of cassava
Citrus Leaf Rugose Virus	Leaf rugose	Citrus	Plant prop. material of citrus
Coffee Blister Spot Virus	Blister spot	Coffee	Plant prop. material of coffee VECTOR : <i>Toxoptera aurantii</i>
Cotton Leaf Curl Virus	Leaf curl	Cotton	Seeds of cotton, <i>Althaea rosea, Hibiscus cannabinus, H.</i>

Cowpea Chlorotic Mottle Virus	Chlorotic mottle	Cow pea, soybean	<i>esculentus</i> , <i>H. sabdarifa</i> , <i>Malvaviscus arboreus</i> , <i>Sida alba</i>
Cucumber Green Mottle Mosaic Virus	Mottle mosaic	Cucumber	Seeds & plant debris of cow pea, soybean Seedling & plant debris of cucumber
Dwarf Virus	Dwarf	Sugar cane	Plant prop. material of sugar cane
Fan Leaf Virus	Fan Leaf	Grape	Seed & plant debris of grape
Feathery Mottle Virus	Mottle	Sweet potato	Seed & tuber of sweet potato
Flat Limb Virus	Flat limb	Apple	Plant prop. material of apple
Grapevine Bulgarian Latent Virus	-	Grape	Plant Prop. material of grape
Grapevine Chrome Mosaic Virus (=Hungarian Chrome Mosaic Virus)	Chrome mosaic	Grape	Plant prop. material of grape
Grapevine Corky Bark Virus	Corky bark	Grape	Plant prop. material of grape
Grassy Shoot Virus	Yellowing, albino disease	Sugarcane	Plant prop. material of sugarcane VECTOR : <i>Aphis maidis</i> , <i>A. sacchari</i> , <i>Longinguis indosacchari</i> , <i>Matsumuratettix hiroglyphicus</i>
Green Crinkle Virus	Green crinkle	Apple	Plant prop. material of apple
Hoja Blanca Virus	White leaf	Rice, Wheat	Seeds & plant debris of rice, wheat, oat, barley, rye VECTOR : <i>Sogatodes cubanus</i> , <i>S. oryzicola</i>
Internal Cork Virus	-	Sweet potato	Seed & tuber of sweet potato
Leaf Crumple Virus	Leaf crumple	Cotton	Seed & plant debris of cotton
Leaf Mosaic Virus	Mosaic	Cotton	Seed & plant debris of cotton
Leaf Mottle Virus	Mottle	Cotton	Seed & plant debris of cotton
Leaf Pucker Virus	Leaf pucker	Apple, Cherry, Plum	Plant prop. materials of apple, cherry, plum
Leaf Roll Virus	Leaf roll	Grape	Plant prop. material of grape
Maize Dwarf Mosaic Virus	Dwarf mosaic	Maize, Sugarcane, Sorghum	Seeds, seedlings & plant debris of maize, sorghum, sugarcane VECTOR : <i>Anuraphis maidirado-cis</i> , <i>Brevicoryne brassicae</i> , <i>Dactynotus</i> spp., <i>Myzuspersicae</i> , <i>Rhopalosiphon maidis</i> , <i>R. padi</i>
Maize Chlorotic	Chlorotic dwarf	Maize, Sorghum	Plant debris of maize, sor-

Dwarf Virus			ghum, <i>Setaria faberi</i> , <i>S. lutescens</i> VECTOR : <i>Deltocephalus sonorus</i> , <i>Graminiella nigri-form</i>
Maize Chlorotic Mottle Virus	Chlorotic mottle	Maize, Wheat, Sorghum	Seeds, seedlings & plant debris of maize, wheat, sorghum, <i>Bromus arvensis</i> , <i>Panicum vurgatum</i> , <i>Setaria glauca</i> VECTOR : <i>Diabroica longicornis</i> , <i>D. undecimpunctata</i> , <i>D. virgivera</i> , <i>Dulema melanopa</i> , <i>Systema frontalis</i>
Maize Mosaic Virus	Mosaic; enanismo rayado	Maize	Seed, seedling & plant debris of maize VECTOR : <i>Peregrinus maidis</i>
Maize Rough Dwarf Virus	Rough dwarf; enanismo ruvido	Maize, Wheat, Sorghum	Plant debris of maize, sorghum, wheat VECTOR : <i>Laodelphax striatellus</i>
Maize Streak Virus	Streak	Maize, Wheat, Sorghum, Sugarcane	Plant debris of maize, sorghum, wheat, plant prop. material of sugar cane VECTOR : <i>Cicadulina bipunctella-zeae</i> , <i>C. latens</i> , <i>C. mbila</i> , <i>C. parasae</i> , <i>C. storeyi</i>
Maize Stripe Virus	Stripe	Maize, Sorghum	Plant debris of maize, sorghum, barley VECTOR : <i>Peregrinus maidis</i>
Marginal Chlorotic Virus	Chlorotic	Peanut	Seed & seedling of peanut
Mosaic Virus	Mosaic	Sweet potato	Seed & tuber of sweet potato
Papaya Leaf Reduction Virus	Leaf reduction	Papaya	Plant debris of papaya VECTOR : <i>Myzuz persicae</i>
Papaya Yellow Necrotic Virus	Yellow necrotic	Papaya	Plant debris of papaya, <i>Chenopodium quinosa</i>
Pea Enation Mosaic Virus (=Pea Virus 1)	Enation mosaic	Pea, Soybean, Kidney bean	Seeds, seedlings & plant debris of pea, soybean, kidney bean VECTOR : <i>Acyrrhosiphon pisum</i> , <i>Macrosiphum eporbi</i> , <i>M. solanifolii</i> , <i>Myzuz persicae</i> , <i>Physalis floridana</i>
Pea Streak Virus	Streak	Pea	Plant debris of pea and other leguminose plant VECTOR : <i>Acyrrhosiphon pisum</i>
Peach Rosette Mosaic Virus	Rosette mosaic	Grape, Plum	Plant prop. materials of grape, plum VECTOR : <i>Criconomoides</i>



Peanut Clump Virus	Clump	Peanut	spp., <i>Xyphinema americanum</i>
Peanut Stunt Virus	Stunt	Peanut	Seed & seedling of peanut
			Seed & seedling of peanut, <i>Crotalaria spectabilis</i> , <i>Lupinus angusta</i> , <i>Trifolium incarnatum</i>
Peanut Yellow Mottle Virus	Yellow mottle	Peanut, Long bean	Seeds & seedlings of peanut, long bean
Phloem Necrotic Virus	Phloem necrosis	Tea	Plant prop. material of tea
Platycarpa Dwarf Virus	Dwarf	Apple	Plant prop. material of apple
Platycarpa Scaly Bark Virus	Scaly bark	Apple	Plant prop. material of apple
Potato Virus T	-	Potato	Seed & tuber of potato
Potato Virus U	-	Potato	Seed & tuber of potato
Potato Spindle Tuber Virus	-	Potato, Tomato, Chili, Tobacco	Seed & tuber of potato, plants of chili, tomato, tobacco
Potato Vein Yellowing Virus	Vein yellowing	Potato	Seed & tuber of potato
Raspberry Ring Spot Virus	Ring spot	Strawberry, Grape, Cherry, Apricot, Plum, Peach	Seeds & plant debris of strawberry, grape, plum cherry, apricot, peach
Rice Dwarf Stunt Virus	Dwarf stunt	Rice	Plant debris of rice
Rice Yellow Mottle Virus	Yellow mottle	Rice	Plant debris of rice, grasses VECTOR : <i>Chaetonema abyssinca</i> , <i>C. kenyensis</i> , <i>C. pulla</i> , <i>Dactylispa bancispina</i> , <i>D. balyi</i> , <i>D. virodice-yana</i> , <i>Monocepta flaveata</i> , <i>M. haematura</i>
Ring Spot Virus	Ring spot	Coffee	Seed & plant debris of coffee
Ring Skin Virus	Rough skin	Apple	Plant prop. material of apple
Russet Crack Virus	-	Sweet potato	Seed & tuber of sweet potato
Satsuma Dwarf Orange Virus	Dwarf	Citrus	Plant prop. material of citrus
Soybean Dwarf Virus	Dwarf	Soybean	Plant debris of soybean
Squash Mosaic Virus	Mosaic	Cucumber, Pea	Seedlings & plant debris of cucumber, pea, <i>Coriander</i> spp. VECTOR : <i>Acalymna tripitata</i> , <i>A. thesturi</i> , <i>Diabrotica balteata</i> , <i>D. undecimpunctata</i> , <i>Epilachna chrysomelina</i>
Stem Pitting Virus	Stem pitting; legnoriccio	Grape, Apple	Plant prop. materials of grape, apple
Stripe Virus	Stripe	Rice, Maize,	Plant debris of rice, plant of

		Wheat	maize, wheat, <i>Agrotis alba</i> , <i>Beckman-</i> <i>nia syzigasiline</i>
Strawberry Latent C Virus	-	Strawberry	Plant prop. material of straw- berry VECTOR : <i>Chaetosiphum</i> <i>fragafolii</i>
Strawberry Latent Ringspot Virus	Ringspot	Strawberry	Plant prop. materials of straw- berry, <i>Aesculus carnea</i> , <i>Kuonymus europaeus</i> , <i>Mentha</i> <i>arvensis</i> , <i>Robinia pseudoala-</i> <i>cida</i> , <i>Rubus idaeus</i> , <i>Stellarix</i> <i>media</i>
Tomato Spotted Wilt Virus	Wilt	Tomato, To- bacco, Peanut, Cucumber	Seed & seedlings of tomato, peanut, cucumber, tobacco
Transitory Yellowing Virus	Yellowing;	Rice	Plant debris of rice
Virus	Maclusano	Soybean	Seed & seedling of soybean and other leguminose plant
Virus	Amachiento;		
Virus	shoot	Maize	Plant debris of maize
Virus	Proliferation	Maize	VECTOR : <i>Peregrinus maidis</i>
Virus	Maize line dis- ease	Maize	Plant debris of maize
Virus	Rayadofino, fine striping disease	Cotton	VECTOR : <i>Balbulus maidis</i>
Virus	Terminal stunt	Cotton	Seed & plant debris of cotton
Virus	Stenoses, small leaf	Cotton	Seed & plant debris of cotton
Virus	crystosis		
Virus	Wrinkled, stunt, wiches broom	Rice	Plant debris of rice
Virus Like Disease	Enation	Grape	Seed & plant debris of grape
Virus Like Disease	Fleck	Grape	Seed & plant debris of grape
Virus Like Disease	Gummy bark	Citrus	Plant prop. material of citrus
Virus Like Disease	Impietra sierra	Citrus	Plant prop. material of citrus
Virus Like Disease	Rumple	Citrus	Plant prop. material of citrus
Virus Like Disease	Vein necrosis	Grape	Plant prop. material of grape
<b>VII. MLO, BLO, PROTOZOA, ETC.</b>			
MLO	Apple chart fruits	Apple	Plant prop. material of apple
MLO	Apple prolifera- tion (=witles broom)	Apple	Plant prop. material of apple
MLO	Cadang-cadang	Coconut	Seedling, fruit & plant debris of coconut
MLO	Cape St. Paul disease	Coconut	Seedling, fruit & plant debris of coconut
MLO	Cape Three	Coconut	Seedling, fruit & plant debris

MLO	Point disease Grapevine flav- erense Doree	Grape	of coconut Plant prop. materials & plant debris of grape, <i>Chrysanthe- mum</i> spp., <i>Vicia faba</i> , <i>Vinca rosea</i>
MLO	Kaincope	Coconut	Seedling, fruit & plant debris of coconut
MLO	Kribi	Coconut	Seedling, fruits & plant debris of coconut
MLO	Leaf mottle	Oil palm	Seedlings, fruits & plant debris of oil palm, coconut
MLO	Lethal yellowing	Coconut, Date palm	Seedlings, fruits & plant debris of coconut, oil palm, date palm, palm, <i>Arikurryrha schy- zophyla</i> , <i>Borassus flabellifer</i> , <i>Corypha elata</i> , <i>Chrysalido- carpus carbade</i> , <i>Caryotanitis</i> , <i>Dyctyosperma albiens</i> , <i>Phoe- nix canariensis</i> , <i>P. reclinata</i> , <i>Mascarena verschafeltii</i> , <i>Pritchardia pasifica</i> , <i>P. thrustonii</i> , <i>Trachycarpus fo- tunei</i> , <i>Vetchia merillii</i>
MLO	Marbling dis- ease	Banana	Plant prop. material & plant debris of banana
MLO	White tip	Sugarcane	Seedling & plant debris of sugarcane
MLO <i>Spiroplasma</i> sp.	Pierces disease Corn stunt	Grape Maize, Sorghum	Plant prop. material of grape Seeds & seedlings of maize, sorghum, <i>Euchlaena mexi- cana</i> , <i>Panicum</i> spp., <i>Vicia faba</i> , <i>Vinca rosea</i> VECTOR : <i>Baldulus tripsaci</i> , <i>Dalbulus eliminatus</i> , <i>D. maidis</i> , <i>Delto- cephalus sonorus</i> , <i>Graminiella nigrifrons</i>
<i>S. citri</i>	Stubborn	Citrus	Plant prop. materials of citrus, <i>Pisum sativum</i> , <i>Trifolium pratense</i> , <i>T. repense</i> , <i>Vicia faba</i> , <i>Vinca rosea</i> VECTOR : <i>Neolitus hae- matoceps</i> , <i>N. tenellus</i> , <i>Scaphytopius acutus</i> , <i>S. ni- tridus</i>
<i>Phytomonas leptova- sorum</i> Stahel	Phloem necro- sis, wilt disease, red disease	Coffee	Plant prop. material of coffee and soil VECTOR : <i>Linus</i> spp., <i>Rhi- zaesus</i> spp.
<i>P. staheli</i> sp.n.	Sudden wither	Oil palm	Plant prop. materials of oil

disease

palm, *Asclepia curassivica*, soil

VECTOR : *Haplaxius pallidus*, *Sagalossa valida*

### V III. UNKNOWN DISEASE

-	Asteroid mosaic	Grape	Plant prop. material of grape
-	Awka	Coconut	Seedling, fruit & plant debris of coconut
-	Bristle tip	Coconut	Seedling, fruit & plant debris of coconut
-	Bronze leaf	Coconut	Seedling, fruit & plant debris of coconut
-	Coconut wilt	Coconut	Seedling, fruit & plant debris of coconut
-	Fatal yellowing	Oil palm	Seedling, fruit & plant debris of oil palm
-	Head drop	Coconut	Seedling, fruit & plant debris of coconut
-	Kerala wilt	Coconut	Seedling, fruit & plant debris of coconut
-	Leaf mottle	Coconut	Seedling, fruit & plant debris of coconut
-	Leaf scorch	Coconut	Seedling, fruit & plant debris of coconut
-	Little leaf	Coconut	Seedling, fruit & plant debris of coconut
-	Malaysian wilt	Coconut	Seedling, fruit & plant debris of coconut
-	Soccoro wilt	Coconut	Seedling, fruit & plant debris of coconut
-	Stem pitting	Coffee	Seedling & plant debris of coffee
-	Sudden death	Coffee	Seedling & plant debris of coffee
-	Thanjavur wilt	Coconut	Seedling, fruit & plant debris of coconut
-	Thatipaka disease	Coconut	Seedling, fruit & plant debris of coconut
-	Tinangaja wilt	Coconut	Seedling, fruit & plant debris of coconut

### IX. WEEDS

Botanical Name	Common Name	Effect on the eco-system & host	Carrier
Abulatilon theophrasti Medik.	Velvet leaf	Food crop, Cotton, Fiber crop	Soil, seeds of food crop, cotton, fiber crop
Aeginotia indica L.	-	Sugarcane	Plant prop. material of sugar cane

<i>Agropyron repens</i> (L.) Beauv.	Quack grass	Food crop, Livestock, Tobacco, Coffee, Citrus, Grape, Horticulture	Soil, food crop seeds, livestock, coffee, grape, tobacco, citrus, horticulture
<i>Ambrosia artemisiifolia</i> L.	Common rag weed	Vegetables, Maize, Cerealea, Alfalfa, Sunflower	Soil, seeds & seedlings of vegetables, maize, sunflower, alfalfa, animals (cow, horse, etc), inorganic matter
<i>A. integrifolia</i> Muhl. (=A. trifida L.)	Giant rag weed	Cerealea	Soil, seed & Seedling of cerealea
<i>A. psilostachya</i> DC	Western rag weed	Food crop, Live-stock	Soil, seed & seedling of cereals
<i>A.tenuifolia</i> Spreng	False rag weed	Swannal/Swans	Soil and livestock
<i>Anagallis arvensis</i> L.	Red chick weed; scarlet pimpernel	Food crop, Tobacco, Grape, Rape seed, Sunflower, Flax, Safflower	Soil, seed, horticulture, tobacco, grape, rape seed, flax, sunflower, safflower
<i>Boerhavia erecta</i> Linn	Erect spiderling	Maize, Rice	Soil, seed & seedlings of maize, rice
<i>Borreria laevicaulia</i> (Miq.) Ridl	-	Field crop	Soil, seed & seedlings of field crop
<i>Cenchrus echinatus</i> L.	Burgrass	Food crop, Sugar cane, Livestock, Cotton, Coffee, Banana, Soil	Soil, seed & seedlings of food crop, sugar cane cotton, coffee, citrus, banana, livestock
<i>Chenopodium album</i> L.	Fathen/lambs-quarters	Food crop, Cotton, Tea, Horticulture	Seeds & seedlings of food crop, horticulture, tea, cotton
<i>Circium arvense</i> (L.) Scop.	Canada thistle	Cerelea, horticulture, oily crop	Soil, seeds & seedlings of cerelea, horticulture, oily crop (seed, root, stem, cutting)
<i>Cryptocorine ciliata</i> (Roxb)	-	Irrigation	Water
<i>Digitaria scalarum</i> (Scheinf.) Chiov.	Cough grass/ Blue cough	Food crop, coffee, tea, cotton, sugar cane	Seeds & seedlings of food crop, coffee, tea, cotton, sugar cane
<i>Egeria densa</i> planch.	Brazilian <i>Elodea</i>	Irrigation, lake	Water
<i>Eichornia azurea</i> Kunth.	Anchored water-hyacinth	Irrigation, canal, river	Water
<i>Eichornia natans</i> Solm.	-	Irrigation	Water
<i>Elodea canadensis</i> Michx	Common <i>Elodea</i>	Irrigation, canal	Water
<i>Elodea nuttallii</i>	Western	Irrigation	Water

(Planch) St. John	<i>Elodea</i> ; Florida <i>Elodea</i>		
<i>Hypericum perforatum</i> L.	St. John worth	Food crop, livestock	Seeds of food crop, livestock
<i>Limnobium boscii</i> Rich. [= <i>Limnobium spongia</i> (Bosc.) Steud]	American frog bit	Irrigation	Water
<i>Lolium</i> spp.	Darnel	Food crop, horticulture, oily crop, sunflower, flax, safflower	Seeds & seedlings of food crop, horticulture, oily crop, sunflower, flax, safflower
<i>Myriophyllum alterniflorum</i> DC.	-	Irrigation	Water
<i>Myriophyllum verticillatum</i> L.	Water mill foil/Whorled	Irrigation	Water
<i>Nelumbo pentaphylla</i> (Walt.) Fern. [= <i>Nelumbo lutea</i> (Wild.) Pers.]	American lotus	Pool, swamp	Water
<i>Orobanche aegyptiaca</i> Pers.	Broomrape weed	Wheat, maize, sorghum, barley	Seeds & seedlings of wheat, maize, sorghum, barley
<i>Orobanche cernua</i> Loeffl.	Nodding broomrape	Wheat, maize, sorghum, barley	Seeds & seedlings of wheat, maize, sorghum, barley
<i>Orobanche crenata</i> Forsk.	Crenate broomrape	Wheat, maize, sorghum, barley	Seeds & seedlings of wheat, maize, sorghum, barley
<i>Orobanche minor</i> Sm.	Small broomrape	Wheat, maize, sorghum, barley	Seeds & seedlings of wheat, maize, sorghum, barley
<i>Orobanche ramosa</i> L. (= <i>Pholipaca ramosa</i> C.A.M.) [= <i>Kopsia ramosa</i> (L.) Dumortier]	Hemp broomrape	Wheat, maize, sorghum, barley	Seeds & seedlings of wheat, maize, sorghum, barley
<i>Oryza barthi</i> Chev.	-	Rice, Canal	Seedling of rice, water
<i>Oryza longistaminata</i> Chev. & Rhser.	-	Rice, Canal	Seedling of rice, water
<i>Oryza punctata</i> Kotshy & Steud	-	Rice, Canal	Seedling of rice, water
<i>Parthenium hysterophorus</i> L.	Ragweed; Parthenium	Estate	Soil, imported livestock
<i>Plantago lanceolata</i> L.	Buckhorn plantain	Coffee, Cotton, Livestock, Fruit	Seeds & seedlings of coffee, cotton, fruit, livestock, horticulture
<i>Potamegeton crispus</i> L.	Pondweed; Curly leaf	River, Canal, Lake	Water
<i>Potamegeton pectinatus</i> L.	Sago pondweed	Irrigation	Water
<i>Rumex crispus</i> L.	Curly dock	Food crop,	Seeds & seedlings of food

<i>Solanum nodiflorum</i> Joq.	-	Sugar cane, Horticulture, Tea, Livestock Meadow, Waste land	crop, horticulture, livestock, plant prop. materials of sugar-cane, tea Animal, livestock, soil
<i>Striga densiflora</i> (Beth.)	Witch weed	Cerealea	Seedling of cerealea
<i>Striga gesneriodes</i> (Willd.) Vatke	Cowpea witch weed	Cerealea, Long bean	Seedlings of cerealea, long bean
<i>Striga hermonthica</i> (Del.) Benth (= <i>Striga orobanchoides</i> Benth.)	Witch weed	Wheat, Maize, Rice, Cerealea	Seedlings of wheat, rice, maize, cerealea
<i>Thlaspi arvense</i> L.	Field penny cress	Food crop	Seed & seedling of food crop
<i>Tribulus terrestris</i> L.	Puncture vine	Food crop, Coffee, Cotton, Livestock, Sugarcane	Seed & seedling of food crop, livestock, plant prop. materials of sugar cane, coffee, cotton
<i>Trichachne insularis</i> (L.) Ness. [= <i>Digitaria insularis</i> (L.) Mez.]	Sour grass	Pineapple	Soil, seed & seedling of pineapple
<i>Typha latifolia</i> L.	Common cattle	Swamps	Water
<i>Vallisneria americana</i> Michx	American eel grass	Irrigation, Lake	Water
<b>B. CATEGORY A-2</b>			
<b>I. INSECT</b>			
<i>Altha alastor</i> Tams.	Slug caterpillar	Coconut	Plant prop. material of coconut, fruits
<i>Conopomorpha (=Acrocercops) cramerella</i> (Sn.)	Cacao pod borer	Cacao	Fruits of cacao, nam-nam ( <i>Cynometra cauliflora</i> ), rambutan
<i>Contarinia sorghicola</i> Coq.	Sorghum midge	Sorghum	Seeds of sorghum, gramineae
<i>Dactylispa balyi</i> Gest.	Black hedgehog beetle	Maize	Soil, cagon grass, glagah ( <i>Miscanthus japonicus</i> )
<i>Dacus bryoniae</i> (Tr.)	Fruit fly	Mango	Fleshy fruits
<i>Dacus musae</i> (Tr.)	Fruit fly	Banana	Fruit of banana
<i>Dacus neohumeralis</i> (Tr.)	Fruit fly	Mango	Fruits of mango, melon, sapota, citrus, tomato, cucumber, water melon, roseapple, pumpkin, mangosteen, mulberry, papaya, apple, grape, banana, and soil
<i>Darna bradleyi</i> Hell.	Slug caterpillar	Oil palm	Seedlings of oil palm, coconut
<i>Dihammus fistulator</i> Germ.	Stem borer	Coffee	Seedlings of coffee, castor, eggplant, cacao, cassava, <i>Jatropha</i> sp.

<i>Epicauta ruticeps</i> (Ill.)	Beetle (leaf feeder)	Cassava	Plant prop.materials of teak-wood, vegetables (spinach, maize, chili, cucumber, solanaceae)
<i>Etiella hebsini</i> Butl.	Pod borer	Yard long bean	Plants & parts of soybean, long bean, red bean plants
<i>Hexamitodera semi-velutina</i> Hell.	Trunk borer	Clove	Plant prop.material of clove, roseapple, guava
<i>Idiocerus clypealis</i> Leth.	Mango leaf hopper	Mango	Seedling & fruit of mango
<i>Idiocarpus niveo-sparsus</i> Leth.	Mango leaf hopper	Mango	Seedling & fruit of mango
<i>Noorda albizonalis</i> Sps.	Red banded borer of mango	Mango	Fruits of mango, horse mango, 'bacang' mango
<i>Oribius</i> spec. aff. <i>improvidis</i> Mshl.	Snout beetle	Maize	Plant & its part of maize, soil
<i>Parasa balitkae</i>	Slug caterpillar	Coconut	Seedling & fruit of coconut
<i>Pectinophora gossypiella</i> Saund.	Pink cotton; Boll-worm	Cotton	Seedling & fruit of cotton, <i>Thepesia lampas</i> , <i>Abutilon</i>
<i>Phragmataecia castanea</i> Hubner.	Giant stem borer	Sugarcane	Sugarcane stem, glagah ( <i>Miscanthus japonicus</i> )
<i>Phragmataecia gummata</i> Sw. (= <i>parvipuncta</i> )	Giant stem borer	Sugarcane	Sugarcane stem, glagah ( <i>Miscanthus japonicus</i> )
<i>Planococcus</i> (= <i>Pseudococcus</i> ) <i>deceptor</i> Betr.	Root scale	Coffee	Seedling of coffee
<i>Rhytidodera simulans</i> Wlk.	Trunk borer	Mango	Seed & part of mango plant
<i>Rhytidodera simulans</i> Wlk.	Trunk borer	Mango	Seed & part of mango plant
<i>Sexava coriacea</i> L.	<i>Sexava</i> grasshopper	Coconut	Orchid, 'cadaca', sago, <i>Zalacca</i> , palm, banana, <i>Areca</i> sp., screw pine, coconut, coconut fiber, ginger race, soil
<i>Sexava karnyi</i> Lfs.	<i>Sexava</i> grasshopper	Coconut	Orchid, 'cadaca', sago, <i>Zalacca</i> , palm, banana, <i>Areca</i> sp., screw pine, coconut, coconut fiber, ginger race, soil
<i>Sexava nubila</i> Stal.	<i>Sexava</i> grasshopper	Coconut	Orchid, 'cadaca', sago, <i>Zalacca</i> , palm, banana, <i>Areca</i> sp., screw pine, coconut, coconut fiber, ginger race, soil
<i>Tenuipalpus orchidarum</i>	Red mite	Orchid	Orchid
<i>Trogoderma granarium</i> Everts.	Khapra beetle	Cereals	Cerelea, legumes, live-stock, gunny, wood etc
<b>II. NEMATODE</b> <i>Aphelenchoides</i>	White tip	Rice	Rice seed, straw & soil



<i>besseyi</i> Christie				
<i>Ditylenchus angustus</i> (Butl.) Filipjev	Root	Rice		Rice seed, straw & soil
<i>Ditylenchus dipsaci</i> (Kuhn.) Filipjev	Eel worm	Onion		Tuber of onion, carrot, potato, garlic, radish, sweet potato, plants of <i>Ambrosia</i> spp., <i>Chrysanthemum</i> spp., <i>Cirsium</i> spp., <i>Iris</i> spp., <i>Avena</i> spp., <i>Helianthus</i> spp., <i>Secale</i> spp., <i>Erigeron</i> spp., <i>Agropyron</i> spp., <i>Lactusa</i> spp., <i>Tagetes</i> spp., <i>Lepidium</i> spp., <i>Tulipha</i> spp. <i>Trifolium</i> spp., <i>Delphinium</i> spp., <i>Plantago</i> spp., <i>Hyacinthes</i> spp. & soil
<i>Hirschmaniella oryzae</i> Breda de Haan	Root nematode	Rice		Rice plant, straw & soil
<i>Pratylenchus coffeae</i> (Zimm)	Root necrotic nematode	Coffee		Seedlings of coffee, banana, abaca, seedling & tuber of potato & soil
<i>Rhadopolus</i> sp.	Citrus nematode	Citrus		Plant prop. material of citrus
<i>Tylenchulus semi-penetrans</i> Cobb.	Citrus nematode	Citrus		Plant prop. material of citrus
<b>III. FUNGI</b>				
<i>Botrytis alii</i> Munn.	Neck rot	Onion		Seeds & tubers of onion and garlic
<i>Coryneum myristicaceae</i> Stein	Dry rot of fruit	Nutmeg		Part of nutmeg plant
<i>Elsinoe iwatae</i> Kajiwara et.al.	Scab	Mung bean		Plant & host plant
<i>Ephelis oryzae</i> (Syd.)	Udbatta	Rice		Seedling of rice
<i>Fusarium oxysporum</i> Schl.f. sp. <i>passiflorae</i>	<i>Fusarium</i> wilt	Passion fruit		Plant prop. material of passion fruit
<i>Marssonina coronaria</i> (Ell. & Dav.)	Leaf spot	Apple		Plant prop. material of apple
<i>Oncobasidium theobromae</i> Talbot & Keane	Vascular Streak Dieback (VSD)	Cacao		Plant prop. material of cacao
<i>Peronosclerospora philippinensis</i> (Weston)	Downy mildew	Maize		Seedling of maize
<i>Peronospora cubensis</i> (Berk. & Curt) Rostov	Powdery mildew	Cucumber		Cucurbitaceae
<i>Phakospora vitis</i> (Thum.) Syd. ( <i>Physopella</i> )	Rust	Grape		Plant prop. material of grape

<i>ampelopsidis</i>				
<i>Phoma lingam</i> (Tode ex.Fr.) Demazieres	Black leg	Cabbage	Vegetables seed of cruciferae	
<i>Phyllosticta euginea</i>	Leaf blight	Clove	Plant & its part of clove except dried flower	
<i>Phytophthora capsici</i>	Foot rot	Pepper	Stem cutting & leaf	
<i>Plasmodiophora brassicae</i> Waronichin	Club rot	Cabbage	Plants of <i>Nasturtium officinale</i> , Gramineae, Rosaceae, Papaveraceae Cruciferae, soil	
<i>Plasmopara viticola</i> Perk & Curt	Powdery mildew	Grape	Plant prop. material of grape	
<i>Stagnospora sacchari</i> Lo & Ling	Smut	Sugarcane	Sugarcane stem cutting, <i>Acyrthosipum pisum</i>	
<b>IV. BACTERIA</b>				
<i>Erwinia chrysanthemi</i> Burkholder Mc.Fadden & Dimock	Bacterial foot rot	Rice	Plant prop. material of rice, <i>Chrysanthemum</i> sp., soil	
<i>Pseudomonas solanacearum</i> pv. <i>celibensis</i>	Blood disease	Banana	Plant prop. material of banana	
<i>Pseudomonas syringae</i>	Halo blight	Yard long bean	Seedlings of legumes, weeds, maize, kidney, bean, plants of pepper <i>Hibiscus</i> spp., apple, citrus, rose, avocado, <i>Chrysanthemum</i> sp.	
<i>Pseudomonas syzygie</i>	Xylem bacterial disease	Clove	Plant prop. materials of clove, roseapple, guava, parts of clove plants except dried flower	
<i>Xanthomonas campestris</i> pv. <i>vesicatoria</i> (Dodge) Dowson	Leaf spot	Chili	Seedlings of chili	
<i>Xanthomonas vascularum</i> (Cobb.) Dowson	Gom disease	Sugarcane	Plant prop. material of sugarcane	
<b>V. B L O</b>				
-	Citrus vein phloem degeneration	Citrus	Fruits, leaf & stem of citrus, <i>Diaphorina citri</i> , orange, jasmine	
<b>VI. VIRUS</b>				
Bunchy-top Virus	Stunting	Banana	Plant prop. material of banana, abaca, Musaceae, <i>Caladium</i> spp., <i>Pentalonia nigronervosa</i>	
Onion Yellow Dwarf Virus	Yellow stunting	Onion	Seeds & tubers of <i>Allium cepa</i> , <i>A. porrum</i> , <i>A. ascalonicus</i> , <i>A. sativum</i>	

Potato Virus Y  
(PVY)

Betel

Tobacco

Seedlings & plant prop. material of tobacco, tomato, chili

**VII. DISEASE OF UNKNOWN ETIOLOGY**

-	Megass disease	Coconut	Seedling of coconut
-	Leaf yellowing	Coconut	All parts of coconut plant
-	Leaf defoliation	Clove	Plant of clove
-	Wilt	Coconut	All parts of coconut plant
-	Natuna wilt	Coconut	Seedling of coconut