

◆ **EPPO Standards** ◆

EPPO A1 AND A2 LISTS OF PESTS RECOMMENDED FOR REGULATION AS QUARANTINE PESTS

PM 1/2(28) English



European and Mediterranean Plant Protection Organization
21 Boulevard Richard Lenoir, 75011 Paris, France
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APPROVAL

EPPO Standard PM 1/2 was first approved by EPPO Council in September 1975. This version was approved by EPPO Council in September 2019. In the terms of Article II of the IPPC, it is a Regional Standard for EPPO Member Government Countries¹.

REVIEW

EPPO Standards are subject to periodic review and amendment. This standard is usually reviewed every year.

AMENDMENT RECORD

Amendments will be issued as necessary, numbered and dated.

DISTRIBUTION

At the difference with other EPPO Standards, the EPPO A1 and A2 lists are not published in the EPPO Bulletin but are available only from the EPPO website and the EPPO Global Database.

https://www.eppo.int/ACTIVITIES/plant_quarantine/A1_list

https://www.eppo.int/ACTIVITIES/plant_quarantine/A2_list

<https://gd.eppo.int/standards/PM1/>

SCOPE

This standard presents and explains the EPPO A1 and A2 Lists of pest recommended for regulation as quarantine pests.

REFERENCES

IPPC (1997) New revised text of the International Plant Protection Convention. IPPC Secretariat, FAO, Rome (IT).

IPPC (2019) *Glossary of phytosanitary terms*. ISPM No. 5 in *International Standards for Phytosanitary Measures*, 35 pp. IPPC Secretariat, FAO, Rome (IT).

OEPP/EPPO (1992) *EPPO Standard PM 5/1(1)*. Check-list of information required for pest risk analysis (PRA). *Bulletin OEPP/EPPO Bulletin* **23**, 191-198.

OEPP/EPPO (2011) *EPPO Standard PM 5/3(5)*. *Decision-support scheme for quarantine pests* from https://www.eppo.int/RESOURCES/eppo_standards/pm5_pra.

OEPP/EPPO (2012) *EPPO Standard PM 5/5(1)*. *Decision-support scheme for an Express Pest Risk Analysis*. *Bulletin OEPP/EPPO Bulletin* **42**(3), 457-462.

OEPP/EPPO (2018) *EPPO Alert List* from: https://www.eppo.int/ACTIVITIES/plant_quarantine/alert_list

OEPP/EPPO (2019) Review of EPPO's approach to Pest Risk Analysis (PRA). EPPO Technical Document (https://www.eppo.int/media/uploaded_images/RESOURCES/eppo_publications/DT1079_PRA_review_2019.pdf).

DEFINITIONS

Quarantine pest (ISPM 5)	A pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled.
EPPO A1 pest	A pest recommended by EPPO to member countries, for regulation as a quarantine pest, and which is not present in the EPPO region.
EPPO A2 pest	A pest recommended by EPPO to member countries, for regulation as a quarantine pest and which is present in the EPPO region.
Regional Plant Protection Organization	An intergovernmental organization with the functions laid down by Article IX of the IPPC.

¹ Referred to in the EPPO Convention as Member Governments.

OUTLINE OF REQUIREMENTS

The EPPO A1 and A2 Lists include the pests which EPPO recommends to be regulated as quarantine pests, in the national phytosanitary regulations of EPPO Member Countries. These recommendations are based on appropriate documentation, and since the 2000s on Pest Risk Analyses (PRAs). This document presents the EPPO A1 and A2 Lists and gives details on their background, development and use.

REQUIREMENTS

General description

The EPPO Convention lays down that one of the aims of EPPO is "*to pursue and develop, by cooperation between the Member Governments, the protection of plants and plant products against pests and the prevention of their international spread and especially their introduction into endangered areas*". EPPO Council has consequently decided to draw up lists of pests whose regulation is relevant for the whole of, or large parts of, the EPPO region. The first List is of A1 pests, not present in the EPPO region. The second List is of A2 pests, present in the EPPO region but not widely distributed (i.e. absent from or not widely distributed in endangered areas in certain countries).

Notwithstanding the above, it is accepted that certain pests appearing in the A1 and A2 Lists, though of concern to some Member Countries, may not be of concern to all the countries from which they are absent or not widely distributed, and in particular that it may not be necessary or useful for all countries to take measures contributing to the protection of those countries which are at risk from these pests. Therefore, the Pest Risk Analysis (PRA) process aims to identify the part of the EPPO region which is endangered.

Establishment and maintenance of the A1 and A2 Lists of pests recommended for regulation as quarantine pests

Addition of pests to the A1 or A2 Lists

EPPO started to elaborate A1 and A2 Lists in the early 1970s and the first Lists were approved in 1975. Additions of pests to the A1 or A2 List were proposed by Member Countries and made on the basis of scientific documentation and expert judgement. From 2000 to 2006, the addition of a pest to the A1 or A2 List was based on the proposal of a Member Country which provided a Pest Risk Analysis (PRA) conforming to EPPO Standard PM 5/3 *Decision support scheme for quarantine pests*, and supported by compilation of data according to EPPO Standard PM 5/1 *Check-list of information required for Pest Risk Analysis*.

Since 2006, a new system has been established and special expert groups have been created to conduct PRAs, called Expert Working Groups (EWG) for PRA. More details about the composition and procedures followed by these EWGs are described in the EPPO Technical Document no. 1079 (2019). PRAs are carried out on pests either proposed by an EPPO Member Country or by the Panel on Phytosanitary Measures (in this case, pests are mainly selected from the EPPO Alert List) or other relevant Panels such as the Panel on Invasive Alien Plants or the Panel on Quarantine Pests for Forestry. The Working Party on Phytosanitary Regulations decides on priorities for PRA, but there is flexibility to ensure that a PRA can be conducted on a new emerging pest even if it is not on the priority list. Pest Risk Analyses on pests are performed by the Expert Working Groups for PRA, following ISPM 11 and EPPO Standards PM 5/3 *Decision-support scheme for quarantine pests* or PM 5/5 *Express Pest Risk Analysis (mainly since 2015)*. The resulting PRA documents are presented to the Panel on Phytosanitary Measures (or to the Panel on Invasive Alien Plants in the case of a PRA on a plant) which makes appropriate recommendations to the EPPO Working Party on Phytosanitary Regulations on the listing and relevant phytosanitary measures to be adopted. The Working Party on Phytosanitary Regulations decides, after due consideration, whether to recommend to EPPO Council the addition of a given pest to one of the Lists. A pest will be added to the A1 List if it is absent from the EPPO region and to the A2 List if it is present in part of the EPPO region.

Deletion of pests from the A1 or A2 List

When new information concerning a pest is reviewed by the Panel on Phytosanitary Measures (or the relevant Panels) and leads to the conclusion that the phytosanitary risk has changed and its management as a quarantine pest is no longer justified, the Panel on Phytosanitary Measures recommends to the Working Party that the pest should be deleted from the A1 or A2 List. The EPPO Working Party on Phytosanitary Regulations decides, after due consideration, whether to recommend to EPPO Council the deletion of a given pest from the List. The pests removed from the EPPO A1 and A2 Lists are noted as "formerly" listed (see Appendix 1, Pests in numerical order).

Transfer of pests from the A1 to the A2 List

The transfer of a pest from the A1 to the A2 List, or vice versa, is decided by the Working Party on the basis of adequate documentation justifying the change in status. To consider a pest to be present in the EPPO region and consequently transfer this pest to the EPPO A2 List, the following elements should be taken into account: the life cycle of the pest, the

measures being implemented in the country where the pest was detected, the aim of the measures and the prospects of successful eradication. The EPPO Working Party on Phytosanitary Regulations decides, after due consideration, whether to recommend to EPPO Council the transfer of a given pest. The date when a pest was transferred from A1 to A2 List is indicated in EPPO Global Database.

Changes in taxonomy and consequences for the EPPO Lists

When the preferred name of a pest is changed after its addition to the EPPO A1 and A2 Lists, it is updated accordingly at the next revision of the lists. If the taxonomic revision of a listed species results in splitting it into different species or merging it with others, the categorization of all species concerned is reconsidered by the Panel on Phytosanitary Measures and the Working Party on Phytosanitary Regulations. Whenever possible, the former name of the species is kept as a synonym in EPPO Global Database, so that searches can still be made on that name.

EPPO A1 and A2 Lists

The detailed contents of the EPPO A1 and A2 Lists are presented in Appendix 1.

PREVIOUS VERSIONS OF THIS STANDARD

Several previous versions of the EPPO A1 and A2 Lists have already been approved and published, and are hereby established as the original versions of this standard. They are:

PM 1/2(1) EPPO recommendations on new quarantine measures. *Bulletin OEPP/EPPO Bulletin 5* (special supplement, 1975).

PM 1/2(2) EPPO recommendations on new quarantine measures (2nd edition). *Bulletin OEPP/EPPO Bulletin 12* (special supplement, 1982).

PM 1/2(3) EPPO lists of A1 and A2 quarantine organisms. *EPPO Publications Series B*, no. 92 (1988).

PM 1/2(4) Note on the A1 and A2 lists. In Specific Quarantine Requirements. *EPPO Technical Documents*, no. 1008 (1990).

Versions PM 1/2(5 to current one), corresponding to the modifications decided by EPPO Council since 1991, have been published electronically on EPPO website and the EPPO Global Database.

APPENDIX 1 (2019-09)

EPPO A1 LIST OF PESTS RECOMMENDED FOR REGULATION AS QUARANTINE PESTS

BACTERIA AND PHYTOPLASMAS

- Acidovorax citrulli* A1/379
'*Candidatus* Liberibacter africanus' & 'Ca. L. asiaticus'¹ A1/151
'*Candidatus* Liberibacter solanacearum' (Solanaceae haplotypes) A1/365
'*Candidatus* Phytoplasma americanum' (Potato purple-top wilt) A1/128
'*Candidatus* Phytoplasma phoenicium' (Almond witches' broom) A1/399
'*Candidatus* Phytoplasma pruni' (Western X-disease) A1/140
'*Candidatus* Phytoplasma ulmi' (Elm phloem necrosis) A1/26
Coconut lethal yellowing phytoplasma (Palm lethal yellowing) A1/159
Peach rosette phytoplasma A1/138
Peach yellows phytoplasma A1/139
Ralstonia syzygii A1/400
Xanthomonas citri subsp. *aurantifolii* A1/397
Xanthomonas citri subsp. *citri* A1/1
Xanthomonas euvesicatoria pv. *allii* A1/353
Xanthomonas oryzae pv. *oryzae* A1/2
Xanthomonas oryzae pv. *oryzicola* A1/3

FUNGI

- Alternaria mali* A1/277
Anisogramma anomala A1/201
Apiosporina morbosa A1/10
Atropellis pinicola A1/5
Atropellis piniphila A1/280
Bretziella fagacearum and its vectors A1/6
 Pseudopityophthorus minutissimus
 Pseudopityophthorus pruinosis
Cronartium coleosporioides A1/248
Cronartium comandrae A1/249
Cronartium comptoniae A1/250
Cronartium himalayense A1/251
Cronartium quercuum A1/252
Gymnosporangium clavipes A1/253
Gymnosporangium globosum A1/254
Gymnosporangium juniperi-virginianae A1/255
Gymnosporangium yamadae A1/257
Ophiognomonium clavignenti-juglandacearum A1/329
Ophiostoma wageneri A1/179
Phyllosticta citricarpa A1/194
Pseudocercospora angolensis A1/298
Pseudocercospora pini-densiflorae (= *Mycosphaerella gibsonii*) A1/7
Puccinia pittieriana A1/155

- Septoria malagutii* A1/142
Stagonosporopsis andigena A1/141
Stegophora ulmea A1/315
Melampsora farlowii A1/15
Mycodiella (= *Mycosphaerella*) *laricis-leptolepidis* A1/16
Sphaerulina musiva (*Davidiella populorum*) A1/17
Coniferiporia (*Phellinus*) *weirii* A1/19
Phyllosticta solitaria A1/20
Phymatotrichopsis omnivora A1/21
Tilletia indica A1/23
Thecaphora solani A1/4
Chrysomyxa arctostaphyli A1/8
Cronartium fusiforme A1/9
Cronartium harknessii A1/11

VIRUSES AND VIRUS-LIKE ORGANISMS

- American plum line pattern virus (*Ilarvirus*) A1/28
Andean potato latent virus (*Tymovirus*) A1/244
Andean potato mild mosaic virus (*Tymovirus*) A1/384
Andean potato mottle virus (*Comovirus*) A1/245
Bean golden mosaic virus (*Begomovirus*) A1/204
Cherry rasp leaf virus (*Cheravirus*) A1/127
Chrysanthemum stem necrosis orthospovirus A1/313
Citrus blight disease A1/278
Citrus leprosis virus A1/284
Citrus tatter leaf virus (*Capillovirus*) A1/191
Citrus yellow mosaic virus (*Badnavirus*) A1/285
Coconut cadang-cadang viroid (*Cocadviroid*) A1/192
Lettuce infectious yellows virus (*Crinivirus*) A1/212
Peach mosaic virus (*Trichovirus*) A1/27
Peach rosette mosaic virus (*Nepovirus*) A1/219
Potato black ringspot virus (*Nepovirus*) A1/246
Potato virus T A1/247
Potato yellow dwarf virus nucleorhabdovirus A1/29
Potato yellow vein virus (*Crinivirus*) A1/30
Potato yellowing virus A1/220
Raspberry leaf curl virus (*Nepovirus*) A1/31
Rose rosette emaravirus A1/415
Strawberry latent C virus A1/129
Tomato mottle virus (*Begomovirus* - and other American Geminiviridae of capsicum and tomato) A1/225
Watermelon silver mottle orthospovirus A1/294

INSECTS AND MITES

- Acleris gloverana* A1/281
Acleris variana A1/32
Agrius anxius A1/362
Aleurocanthus woglumi A1/103
Anastrepha fraterculus A1/229
Anastrepha ludens A1/230

¹ A third species, '*Candidatus* Liberibacter americanum' has been found in association with huanglongbing

Anastrepha obliqua A1/231
Anastrepha suspensa A1/200
Anoplophora glabripennis A1/296
Anthonomus bisignifer A1/189
Anthonomus eugenii A1/202
Anthonomus grandis A1/34
Anthonomus signatus A1/164
Apriona cinerea A1/373
Apriona germari A1/371
Apriona rugicollis A1/372
Aromia bungii A1/380
Bactericera cockerelli A1/366
Bactrocera dorsalis A1/233
Bactrocera latifrons A1/404
Bactrocera minax A1/234
Bactrocera tryoni A1/235
Bactrocera tsuneonis A1/236
Blitopertha orientalis A1/33
Ceratitidis rosa A1/237
Ceratothripoides brunneus A1/405
Ceratothripoides claratris A1/406
Choristoneura conflictana A1/205
Choristoneura freemani (= *C. occidentalis* Freeman) A1/207
Choristoneura fumiferana A1/206
Choristoneura rosaceana A1/208
Conotrachelus nenuphar A1/35
Dendroctonus adjunctus A1/43
Dendroctonus brevicomis A1/263
Dendroctonus frontalis A1/264
Dendroctonus ponderosae A1/265
Dendroctonus pseudotsugae A1/266
Dendroctonus rufipennis A1/267
Diabrotica barberi A1/210
Diabrotica speciosa A1/303
Diabrotica undecimpunctata A1/292
Diabrotica virgifera zea A1/199
Diaphorina citri A1/37
Dryocoetes confusus A1/268
Epitrix subcrinita A1/358
Epitrix tuberis A1/165
Euphranta canadensis A1/41
Euphranta japonica A1/41
Gnathotrichus sulcatus A1/269
Gonipterus gibberus A1/301
Grapholita (Cydia) packardi A1/209
Grapholita (Cydia) prunivora A1/36
Helicoverpa zea A1/195
Heteronychus arator A1/297
Homalodisca vitripennis A1/336
Ips calligraphus A1/270
Ips confusus A1/271
Ips grandicollis A1/272
Ips lecontei A1/273
Ips pini A1/274
Ips plastographus A1/275
Keiferia lycopersicella A1/367
Leucinodes africensis A1/385
Leucinodes orbonalis A1/368
Leucinodes pseudorbonalis A1/386
Leucinodes rimavallis A1/387
Listronotus bonariensis A1/168
Lycorma delicatula A1/396
Malacosoma americanum A1/276
Malacosoma disstria A1/213
Margarodes prieskaensis A1/214
Margarodes vitis A1/215
Margarodes vredendalensis A1/216
Massicus raddei A1/414
Melanotus communis A1/305
Metamasius hemipterus A1/356
Naupactus leucoloma A1/293
Nemorimyza maculosa A1/152
Neoleucinodes elegantalis A1/381
Oemona hirta A1/374
Oligonychus perditus A1/217
Orgyia pseudotsugata A1/218
Pheletes (Limonium) californicus A1/304
Phyllocoptes fructiphilus (vector of *Rose rosette emaravirus*) A1/416
Pissodes nemorensis A1/44
Pissodes strobi A1/258
Pissodes terminalis A1/259
Premnotrypes latithorax, *P. suturicallus* & *P. vorax* A1/143
Prodiplosis longifila A1/407
Rhagoletis fausta A1/241
Rhagoletis indifferens A1/242
Rhagoletis mendax A1/243
Rhagoletis pomonella A1/41
Rhynchophorus palmarum A1/332
Ripersiella hibisci A1/300
Saperda candida A1/ 359
Scirtothrips aurantii A1/221
Scirtothrips citri A1/222
Spodoptera eridania A1/196
Spodoptera frugiperda A1/197
Spodoptera litura A1/42
Sternochetus mangiferae A1/286
Thrips palmi A1/175
Unaspis citri A1/226
Zeugodacus (Bactrocera) cucumis A1/203
Zeugodacus (Bactrocera) cucurbitae A1/232

NEMATODES

Nacobbus aberrans A1/144
Radopholus similis (attacking citrus, formerly *R. citrophilus*) A1/161
Xiphinema americanum sensu stricto A1/150
Xiphinema bricolense A1/260
Xiphinema californicum A1/261

GASTROPODA

Pomacea canaliculata A1/418

PARASITIC AND INVASIVE PLANTS

Arceuthobium spp. (non-European) A1/24

Arceuthobium abietinum

Arceuthobium americanum

Arceuthobium campylopodum

Arceuthobium douglasii

Arceuthobium laricis

Arceuthobium minutissimum

Arceuthobium occidentale

Arceuthobium pusillum

Arceuthobium tsugense

Arceuthobium vaginatum

Cortaderia jubata A1/422

Lespedeza cuneata A1/426

Lygodium japonicum A1/427

Triadica sebifera A1/429

EPPO A2 LIST OF PESTS RECOMMENDED FOR REGULATION AS QUARANTINE PESTS

BACTERIA AND PHYTOPLASMAS

Paraburkholderia caryophylli A2/55
'*Candidatus* Phytoplasma mali' (Apple proliferation) A2/87
'*Candidatus* Phytoplasma pyri' (Pear decline) A2/95
'*Candidatus* Phytoplasma solani' (Stolbur) A2/100
Clavibacter michiganensis subsp. *insidiosus* A2/49
Clavibacter michiganensis subsp. *michiganensis* A2/50
Clavibacter michiganensis subsp. *sepedonicus* A2/51
Curtobacterium flaccumfaciens pv. *flaccumfaciens* A2/48
Dickeya dianthicola (*Erwinia chrysanthemi* pv. *dianthicola*) A2/53
Erwinia amylovora A2/52
Grapevine flavescence dorée phytoplasma A2/94
Pantoea stewartii A2/54
Pseudomonas syringae pv. *actinidiae* A2/370
Pseudomonas syringae pv. *persicae* A2/145
Ralstonia pseudosolanacearum A2/401
Ralstonia solanacearum A2/58
Xanthomonas arboricola pv. *corylina* A2/134
Xanthomonas arboricola pv. *pruni* A2/62
Xanthomonas axonopodis pv. *poinsettiicola* A2/350
Xanthomonas cynarae pv. *gardneri* A2/391
Xanthomonas euvesicatoria pv. *euvesicatoria* A2/390
Xanthomonas euvesicatoria pv. *perforans* A2/392
Xanthomonas fragariae A2/135
Xanthomonas phaseoli pv. *dieffenbachiae* A2/417
Xanthomonas phaseoli pv. *phaseoli* A2/60
Xanthomonas translucens pv. *translucens* A2/183
Xanthomonas vesicatoria A2/157
Xylella fastidiosa A2/166
Xylophilus ampelinus A2/133

FUNGI

Botryosphaeria laricina A2/12
Ceratocystis platani A2/136
Ciborinia camelliae A2/190
Cronartium kamschaticum A2/18
Cryphonectria parasitica A2/69
Diaporthe vaccinii A2/211
Fusarium circinatum A2/306
Fusarium foetens A2/345
Fusarium oxysporum f.sp. *albedinis* A2/70
Geosmithia morbida & *Pityophthorus juglandis* A2/388
Glomerella gossypii A2/71
Gymnosporangium asiaticum A2/13
Heterobasidium irregulare A2/389
Lecanosticta acicola A2/22
Melampsora medusae A2/74
Monilinia fructicola A2/153
Phialophora cinerescens A2/77

Phytophthora fragariae & *Phytophthora rubi* A2/79
Phytophthora kernoviae A2/375
Phytophthora lateralis A2/337
Phytophthora ramorum A2/376
Plenodomus tracheiphilus A2/287
Puccinia hemerocallidis A2/346
Puccinia horiana A2/80
Stagonosporopsis chrysanthemi A2/66
Stenocarpella macrospora A2/67
Stenocarpella maydis A2/68
Synchytrium endobioticum A2/82
Thekopsora minima A2/402
Verticillium dahliae & *Verticillium nonalfalfae* (hop-infecting strains) A2/85

VIRUSES AND VIRUS-LIKE ORGANISMS

Beet leaf curl virus A2/90
Beet necrotic yellow vein virus (*Benyvirus*) A2/160
Blueberry leaf mottle virus (*Nepovirus*) A2/198
Blueberry scorch virus (*Carlavirus*) A2/347
Chrysanthemum stunt viroid (*Pospiviroid*) A2/92
Citrus bark cracking viroid (*Cocadviroid*) A2/403
Citrus tristeza virus (*Closterovirus*) A2/93
Cucumber vein yellowing virus (*Ipomovirus*) A2/316
Cucurbit yellow stunting disorder virus (*Crinivirus*) A2/324
Impatiens necrotic spot orthotospovirus A2/291
Pepino mosaic virus (*Potexvirus*) A2/369
Plum pox virus (*Potyvirus*) A2/96
Potato spindle tuber viroid (*Pospiviroid*) A2/97
Raspberry ringspot virus (*Nepovirus*) A2/98
Satsuma dwarf virus (*Sadwavivirus*) A2/279
Squash leaf curl virus (*Begomovirus*) A2/224
Strawberry vein banding virus (*Caulimovirus*) A2/101
Tobacco ringspot virus (*Nepovirus*) A2/228
Tomato chlorosis virus (*Crinivirus*) A2/323
Tomato infectious chlorosis virus (*Crinivirus*) A2/348
Tomato ringspot virus (*Nepovirus*) A2/102
Tomato spotted wilt orthotospovirus A2/290
Tomato yellow leaf curl virus (*Begomovirus*) and related viruses A2/182

INSECTS AND MITES

Acrobasis pirivorella (= *Numonia pirivorella*) A2/184
Aculops fuchsiae A2/185
Agrilus bilineatus A2/430
Agrilus fleischeri A2/431
Agrilus planipennis A2/322
Aleurocanthus spiniferus A2/186
Anoplophora chinensis A2/187
Bactrocera zonata A2/302
Bemisia tabaci A2/178

Cacoecimorpha pronubana A2/104
Cacyreus marshalli A2/181
Carposina sasakii A2/163
Ceratitis capitata A2/105
Comstockasis perniciosus (= *Quadraspidotus perniciosus*) A2/117
Dacus ciliatus A2/238
Daktulosphaira vitifoliae A2/106
Dendrolimus sibiricus A2/308
Dendrolimus superans A2/330
*Diabrotica virgifera virgifera*¹ A2/199
Drosophila suzukii A2/363
Dryocosmus kuriphilus A2/317
Epitrix cucumeris A2/299
Epitrix papa A2/360
Eutetranychus orientalis A2/288
Euwallacea fornicatus sensu lato & *Fusarium euwallaceae* A2/398
Frankliniella occidentalis A2/177
Garella (= *Erschoviella*) *musculana* A2/318
Gonipterus scutellatus A2/38
Grapholita (Cydia) inopinata A2/193
Helicoverpa armigera A2/110
Ips hauseri A2/326
Ips subelongatus A2/325
Lepidosaphes ussuriensis A2/319
Leptinotarsa decemlineata A2/113
Liriomyza huidobrensis A2/283
Liriomyza sativae A2/282
Liriomyza trifolii A2/131
Lopholeucaspis japonica A2/289
Lymantria mathura A2/331
Maconellicoccus hirsutus A2/314
Malacosoma parallela A2/320
Megaplatypus mutatus A2/344
Opogona sacchari A2/154
Paysandisia archon A2/338
Platynota stultana A2/408
Polygraphus proximus A2/382
Popillia japonica A2/40
Rhagoletis cingulata A2/239
Rhynchophorus ferrugineus A2/339
Scirtothrips dorsalis A2/223
Scolytus morawitzi A2/309
Sirex ermak A2/327
Spodoptera littoralis A2/120
Strobilomyia viaria A2/333
Tecia solanivora A2/310
Tetranychus evansi A2/349
Tetropium gracilicorne A2/311
Thaumatotibia leucotreta A2/377
Toxoptera citricidus A2/45
Trichoferus campestris A2/343

Trioza erytrae A2/46
Trirachys sartus (= *Aeolesthes sarta*) A2/307
Trogoderma granarium A2/121
Turanoclytus (= *Xylotrechus*) *namanganensis* A2/328
Tuta absoluta A2/321
Xylotrechus altaicus A2/312

NEMATODES

Aphelenchoides besseyi A2/122
*Bursaphelenchus xylophilus*² A2/158
Ditylenchus dipsaci A2/174
Globodera pallida A2/124
Globodera rostochiensis A2/125
Heterodera glycines A2/167
Meloidogyne chitwoodi A2/227
Meloidogyne enterolobii A2/361
Meloidogyne fallax A2/295
Meloidogyne mali A2/409
Radopholus similis (not attacking citrus) A2/126
Xiphinema rivesi A2/262

INVASIVE PLANTS

Alternanthera philoxeroides A2/393
Ambrosia confertiflora A2/420
Ambrosia trifida A2/432
Andropogon virginicus A2/421
Baccharis halimifolia A2/378
Cardiospermum grandiflorum A2/410
Crassula helmsii A2/340
Ehrharta calycina A2/423
Gymnocoronis spilanthoides A2/411
Hakea sericea A2/424
Heracleum persicum A2/354
Heracleum sosnowskyi A2/355
Humulus scandens A2/425
Hydrocotyle ranunculoides A2/334
Ludwigia peploides & *L. grandiflora* A2/364
Microstegium vimineum A2/394
Myriophyllum heterophyllum A2/395
Parthenium hysterophorus A2/383
Pistia stratiotes A2/412
Polygonum perfoliatum A2/352
Pontederia (= *Eichhornia crassipes*) A2/351
Prosopis juliflora A2/428
Pueraria montana var. *lobata* A2/341
Salvinia molesta A2/413
Solanum elaeagnifolium A2/342

GASTROPODA

Pomacea maculata A1/419

¹ *Diabrotica virgifera zea* remains on the EPPO A1 List

² Its non-European vectors in the genus *Monochamus* remain on the EPPO A1 List.

EPPO A1 AND A2 PESTS IN ALPHABETICAL ORDER

- Acidovorax citrulli* A1/379
Acleris gloverana A1/281
Acleris variana A1/32
Acrobasis pirivorella (= *Numonia pyrivorella*) A2/184
Aculops fuchsiae A2/185
Agrilus anxius A1/362
Agrilus bilineatus A2/430
Agrilus fleischeri A2/431
Agrilus planipennis A2/322
Aleurocanthus spiniferus A2/186
Aleurocanthus woglumi A1/103
Alternanthera philoxeroides A2/393
Alternaria mali A1/277
Ambrosia confertiflora A2/420
Ambrosia trifida A2/432
American plum line pattern virus (*Iilarvirus*) A1/28
Anastrepha fraterculus A1/229
Anastrepha ludens A1/230
Anastrepha obliqua A1/231
Anastrepha suspensa A1/200
Andean potato latent virus (*Tymovirus*) A1/244
Andean potato mild mosaic virus (*Tymovirus*) A1/384
Andean potato mottle virus (*Comovirus*) A1/245
Andropogon virginicus A2/421
Anisogramma anomala A1/201
Anoplophora chinensis A2/187
Anoplophora glabripennis A1/296
Anthonomus bisignifer A1/189
Anthonomus eugenii A1/202
Anthonomus grandis A1/34
Anthonomus signatus A1/164
Aphelenchoides besseyi A2/122
Apiosporina morbosa A1/10
Apriona cinerea A1/373
Apriona germari A1/371
Apriona rugicollis A1/372
Arceuthobium spp. (non-European) A1/24
Aromia bungii A1/380
Atropellis pinicola A1/5
Atropellis piniphila A1/280
Baccharis halimifolia A2/378
Bactericera cockerelli A1/366
Bactrocera dorsalis A1/233
Bactrocera latifrons A1/404
Bactrocera minax A1/234
Bactrocera tryoni A1/235
Bactrocera tsuneonis A1/236
Bactrocera zonata A2/302
Bean golden mosaic virus (*Begomovirus*) A1/204
Beet leaf curl virus A2/90
Beet necrotic yellow vein virus (*Benyvirus*) A2/160
Bemisia tabaci A2/178
Blitopertha orientalis A1/33
Blueberry leaf mottle virus (*Nepovirus*) A2/198
Blueberry scorch virus (*Carlavirus*) A2/347
Botryosphaeria laricina A2/12
Bretziella fagacearum and its vectors A1/6
Bursaphelenchus xylophilus A2/158
Cacoecimorpha pronubana A2/104
Cacyreus marshalli A2/181
‘*Candidatus Liberibacter africanus*’ & ‘*Ca. L. asiaticus*’ A1/151
‘*Candidatus Liberibacter solanacearum*’ (Solanaceae haplotypes) A1/365
‘*Candidatus Phytoplasma americanum*’ (Potato purple-top wilt) A1/128
‘*Candidatus Phytoplasma americanum*’ (Western X-disease) A1/140
‘*Candidatus Phytoplasma mali*’ (Apple proliferation) A2/87
‘*Candidatus Phytoplasma phoenicium*’ (Almond witches’ broom) A1/399
‘*Candidatus Phytoplasma pyri*’ (Pear decline) A2/95
‘*Candidatus Phytoplasma solani*’ (Stolbur) A2/100
‘*Candidatus Phytoplasma ulmi*’ (Elm phloem necrosis) A1/26
Cardiospermum grandiflorum A2/410
Carposina sasakii A2/163
Ceratitidis capitata A2/105
Ceratitidis rosa A1/237
Ceratocystis platani A2/136
Ceratothripoides brunneus A1/405
Ceratothripoides claratris A1/406
Cherry rasp leaf virus (*Cheravirus*) A1/127
Choristoneura conflictana A1/205
Choristoneura freemani (= *C. occidentalis* Freeman) A1/207
Choristoneura fumiferana A1/206
Choristoneura rosaceana A1/208
Chrysanthemum stem necrosis orthotospovirus A1/313
Chrysanthemum stunt viroid (*Pospiviroid*) A2/92
Chrysomyxa arctostaphyli A1/8
Ciborinia camelliae A2/190
Citrus bark cracking viroid (*Cocadviroid*) A2/403
Citrus blight disease A1/278
Citrus leprosis virus A1/284
Citrus tatter leaf virus (*Capillovirus*) A1/191
Citrus tristeza virus (*Closterovirus*) A2/93
Citrus yellow mosaic virus (*Badnavirus*) A1/285
Clavibacter michiganensis subsp. *insidiosus* A2/49
Clavibacter michiganensis subsp. *michiganensis* A2/50
Clavibacter michiganensis subsp. *sepedonicus* A2/51
Coconut cadang-cadang viroid (*Cocadviroid*) A1/192
Coconut lethal yellowing phytoplasma (Palm lethal yellowing) A1/159
Comstockaspis perniciosus (= *Quadraspidiotus perniciosus*) A2/117
Coniferiporia (*Phellinus*) *weirii* A1/19

Conotrachelus nenuphar A1/35
Cortaderia jubata A1/422
Crassula helmsii A2/340
Cronartium coleosporioides A1/248
Cronartium comandrae A1/249
Cronartium comptoniae A1/250
Cronartium fusiforme A1/9
Cronartium harknessii A1/11
Cronartium himalayense A1/251
Cronartium kamschaticum A2/18
Cronartium quercuum A1/252
Cryphonectria parasitica A2/69
Cucumber vein yellowing virus (Ipomovirus) A2/316
Cucurbit yellow stunting disorder virus (Crinivirus)
A2/324
Curtobacterium flaccumfaciens pv. *flaccumfaciens*
A2/48
Dacus ciliatus A2/238
Daktulosphaira vitifoliae A2/106
Dendroctonus adjunctus A1/43
Dendroctonus brevicomis A1/263
Dendroctonus frontalis A1/264
Dendroctonus ponderosae A1/265
Dendroctonus pseudotsugae A1/266
Dendroctonus rufipennis A1/267
Dendrolimus sibiricus A2/308
Dendrolimus superans A2/330
Diabrotica barberi A1/210
Diabrotica speciosa A1/303
Diabrotica undecimpunctata A1/292
Diabrotica virgifera virgifera A2/199
Diabrotica virgifera zea A1/199
Diaphorina citri A1/37
Diaporthe vaccinii A2/211
Dickeya (Erwinia) chrysanthemi A2/53
Ditylenchus dipsaci A2/174
Drosophila suzukii A2/363
Dryocoetes confusus A1/268
Dryocosmus kuriphilus A2/317
Ehrharta calycina A2/423
Epitrix cucumeris A2/299
Epitrix papa A2/360
Epitrix subcrinita A1/358
Epitrix tuberis A1/165
Erwinia amylovora A2/52
Euphranta canadensis A1/41
Euphranta japonica A1/41
Eutetranychus orientalis A2/288
Euwallacea fornicatus sensu lato & Fusarium
euwallaceae A2/398
Frankliniella occidentalis A2/177
Fusarium circinatum A2/306
Fusarium foetens A2/345
Fusarium oxysporum f. sp. *albedinis* A2/70
Garella (=Erschoviella) musculana A2/318
Geosmithia morbida & Pityophthorus
juglandis A2/388
Globodera pallida A2/124
Globodera rostochiensis A2/125
Glomerella gossypii A2/71
Gnathotrichus sulcatus A1/269
Gonipterus gibberus A1/301
Gonipterus scutellatus A2/38
Grapevine flavescence dorée phytoplasma A2/94
Grapholita (Cydia) inopinata A2/193
Grapholita (Cydia) packardii A1/209
Grapholita (Cydia) prunivora A1/36
Gymnocoronis spilanthoides A2/411
Gymnosporangium asiaticum A2/13
Gymnosporangium clavipes A1/253
Gymnosporangium globosum A1/254
Gymnosporangium juniperi-virginianae A1/255
Gymnosporangium yamadai A1/257
Hakea sericea A2/424
Helicoverpa armigera A2/110
Helicoverpa zea A1/195
Heracleum persicum A2/354
Heracleum sosnowskyi A2/355
Heterobasidion irregulare A2/389
Heterodera glycines A2/167
Heteronychus arator A1/297
Homalodisca vitripennis A1/336
Humulus scandens A2/425
Hydrocotyle ranunculoides A2/334
Impatiens necrotic spot orthotospovirus A2/291
Ips calligraphus A1/270
Ips confusus A1/271
Ips grandicollis A1/272
Ips hauseri A2/326
Ips lecontei A1/273
Ips pini A1/274
Ips plastographus A1/275
Ips subelongatus A2/325
Keiferia lycopersicella A1/367
Lecanosticta acicola A2/22
Lepidosaphes ussuriensis A2/319
Leptinotarsa decemlineata A2/113
Lespedeza cuneata A1/426
Lettuce infectious yellows virus (Crinivirus) A1/212
Leucinodes africensis A1/385
Leucinodes orbonalis A1/368
Leucinodes pseudorbonalis A1/386
Leucinodes rimavallis A1/387
Liriomyza huidobrensis A2/283
Liriomyza sativae A2/282
Liriomyza trifolii A2/131
Listronotus bonariensis A1/168
Lopholeucaspis japonica A2/289
Ludwigia peploides & L. grandiflora A2/364
Lycorma delicatula A1/396

Lygodium japonicum A1/427
Lymantria mathura A2/331
Maconellicoccus hirsutus A2/314
Malacosoma americanum A1/276
Malacosoma disstria A1/213
Malacosoma parallela A2/320
Margarodes prieskaensis A1/214
Margarodes vitis A1/215
Margarodes vredendalensis A1/216
Massicus raddei A1/414
Megaplatypus mutatus A2/344
Melampsora farlowii A1/15
Melampsora medusae A2/74
Melanotus communis A1/305
Meloidogyne chitwoodii A2/227
Meloidogyne enterolobii A2/361
Meloidogyne fallax A2/295
Meloidogyne mali A2/409
Metamasius hemipterus A1/356
Microstegium vimineum A2/394
Monilinia fructicola A2/153
Mycodiella (=Mycosphaerella) *laricis-leptolepidis* A1/16
Myriophyllum heterophyllum A2/395
Nacobbus aberrans A1/144
Naupactus leucoloma A1/293
Nemorimyza maculosa A1/152
Neoleucinodes elegantalis A1/381
Oemonia hirta A1/374
Oligonychus perditus A1/217
Ophiognomonina clavignenti-juglandacearum A1/329
Ophiostoma wagneri A1/179
Opogona sacchari A2/154
Orgyia pseudotsugata A1/218
Pantoea stewartii A2/54
Paraburkholderia caryophylli A2/55
Parthenium hysterophorus A2/383
Paysandisia archon A2/338
Peach mosaic virus (*Trichovirus*) A1/27
Peach rosette mosaic virus (*Nepovirus*) A1/219
Peach rosette phytoplasma A1/138
Peach yellows phytoplasma A1/139
Pepino mosaic virus (*Potexvirus*) A2/369
Pheletes (*Limonium*) *californicus* A1/304
Phialophora cinerescens A2/77
Phyllocoptes fructiphilus (vector of *Rose rosette emaravirus*) A1/416
Phyllosticta citricarpa A1/194
Phyllosticta solitaria A1/20
Phymatotrichopsis omnivora A1/21
Phytophthora fragariae A2/79
Phytophthora kernoviae A2/375
Phytophthora lateralis A2/337
Phytophthora ramorum A2/376
Phytophthora rubi A2/79
Pissodes nemorensis A1/44
Pissodes strobi A1/258
Pissodes terminalis A1/259
Pistia stratiotes A2/412
Platynota stultana A2/408
Plenodomus tracheiphilus A2/287
Plum pox virus (*Potyvirus*) A2/96
Polygonum perfoliatum A2/352
Polygraphus proximus A2/382
Pomacea canaliculata A1/418
Pomacea maculata A2/419
Pontederia (=Eichhornia) *crassipes* A2/351
Popillia japonica A2/40
Potato black ringspot virus (*Nepovirus*) A1/246
Potato spindle tuber viroid (*Pospiviroid*) A2/97
Potato virus T A1/247
Potato yellow dwarf virus nucleorhabdovirus A1/29
Potato yellow vein virus (*Crinivirus*) A1/30
Potato yellowing virus A1/220
Premnotrypes latithorax, *P. suturicallus* & *P vorax* A1/143
Prodiplosis longifila A1/407
Prosopis juliflora A2/428
Pseudocercospora angolensis A1/298
Pseudocercospora pini-densiflorae (=Mycosphaerella *gibsonii*) A1/7
Pseudomonas syringae pv. *actinidiae* A2/370
Pseudomonas syringae pv. *persicae* A2/145
Puccinia hemerocallidis A2/346
Puccinia horiana A2/80
Puccinia pittieriana A1/155
Pueraria montana var. *lobata* A2/341
Radopholus similis (attacking citrus, formerly *R. citrophilus*) A1/161
Radopholus similis (not attacking citrus) A2/126
Ralstonia pseudosolanacearum A2/401
Ralstonia solanacearum A2/58
Ralstonia syzygii A1/400
Raspberry leaf curl virus (*Nepovirus*) A1/31
Raspberry ringspot virus (*Nepovirus*) A2/98
Rhagoletis cingulata A2/239
Rhagoletis fausta A1/241
Rhagoletis indifferens A1/242
Rhagoletis mendax A1/243
Rhagoletis pomonella A1/41
Rhynchophorus ferrugineus A2/339
Rhynchophorus palmarum A1/332
Ripersiella hibisci A1/300
Rose rosette emaravirus A1/415
Salvinia molesta A2/413
Saperda candida A1/ 359
Satsuma dwarf virus (*Sadwavirus*) A2/279
Scirtothrips aurantii A1/221
Scirtothrips citri A1/222
Scirtothrips dorsalis A2/223

Scolytus morawitzii A2/309
Septoria malagutii A1/142
Sirex ermak A2/327
Solanum elaeagnifolium A2/342
Sphaerulina musiva (*Davidiella populorum*) A1/17
Spodoptera eridania A1/196
Spodoptera frugiperda A1/197
Spodoptera littoralis A2/120
Spodoptera litura A1/42
Squash leaf curl virus (*Begomovirus*) A2/224
Stagonosporopsis andigena A1/141
Stagonosporopsis chrysanthemi A2/66
Stegophora ulmea A1/315
Stenocarpella macrospora A2/67
Stenocarpella maydis A2/68
Sternochetus mangiferae A1/286
Strawberry latent C virus A1/129
Strawberry vein banding virus (*Caulimovirus*) A2/101
Strobilomyia viaria A2/333
Synchytrium endobioticum A2/82
Tecia solanivora A2/310
Tetranychus evansi A2/349
Tetropium gracilicorne A2/311
Thaumatotibia leucotreta A2/377
Thecaphora solani A1/4
Thekopsora minima A2/402
Thrips palmi A1/175
Tilletia indica A1/23
Tobacco ringspot virus (*Nepovirus*) A2/228
Tomato chlorosis virus (*Crinivirus*) A2/323
Tomato infectious chlorosis virus (*Crinivirus*) A2/348
Tomato mottle virus (*Begomovirus*) (and other American Geminiviridae of capsicum and tomato) A1/225
Tomato ringspot virus (*Nepovirus*) A2/102
Tomato spotted wilt orthospovirus A2/290
Tomato yellow leaf curl virus (*Begomovirus*) and related viruses A2/182
Toxoptera citricidus A2/45
Triadica sebifera A1/429
Trichoferus campestris A2/343
Trioza erytraeae A2/46
Trirachys sartus (= *Aeolesthes sarta*) A2/307
Trogoderma granarium A2/121
Turanoclytus (= *Xylotrechus*) *namanganensis* A2/328
Tuta absoluta A2/321
Unaspis citri A1/226
Verticillium nonalfalfae & *V. dahliae* (hop-infecting strains) A2/85
Watermelon silver mottle orthospovirus A1/294
Xanthomonas arboricola pv. *corylina* A2/134
Xanthomonas arboricola pv. *pruni* A2/62
Xanthomonas axonopodis pv. *poinsettiicola* A2/350
Xanthomonas citri subsp. *aurantifolii* A1/397
Xanthomonas citri subsp. *citri* A1/1
Xanthomonas cynarae pv. *gardneri* A2/391
Xanthomonas euvesicatoria pv. *allii* A1/353
Xanthomonas euvesicatoria pv. *euvesicatoria* A2/390
Xanthomonas euvesicatoria pv. *perforans* A2/392
Xanthomonas fragariae A2/135
Xanthomonas oryzae pv. *oryzae* A1/2
Xanthomonas oryzae pv. *oryzicola* A1/3
Xanthomonas phaseoli pv. *dieffenbachiae* A2/417
Xanthomonas phaseoli pv. *phaseoli* A2/60
Xanthomonas translucens pv. *translucens* A2/183
Xanthomonas vesicatoria A2/157
Xiphinema americanum sensu stricto A1/150
Xiphinema bricolense A1/260
Xiphinema californicum A1/261
Xiphinema rivesi A2/262
Xylella fastidiosa A2/166
Xylophilus ampelinus A2/133
Xylotrechus altaicus A2/312
Zeugodacus (*Bactrocera*) *cucumis* A1/203
Zeugodacus (*Bactrocera*) *cucurbitae* A1/232

EPPO A1 AND A2 PESTS IN NUMERICAL ORDER

- | | |
|---|--|
| 1 <i>Xanthomonas citri</i> subsp. <i>citri</i> | 47 formerly <i>Xanthomonas populi</i> |
| 2 <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> | 48 <i>Curtobacterium flaccumfaciens</i> pv. <i>flaccumfaciens</i> |
| 3 <i>Xanthomonas oryzae</i> pv. <i>oryzicola</i> | 49 <i>Clavibacter michiganensis</i> subsp. <i>insidiosus</i> |
| 4 <i>Thecaphora solani</i> | 50 <i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i> |
| 5 <i>Atropellis pinicola</i> | 51 <i>Clavibacter michiganensis</i> subsp. <i>sepedonicus</i> |
| 6 <i>Bretziella fagacearum</i> and its vectors | 52 <i>Erwinia amylovora</i> |
| 7 <i>Pseudocercospora pini-densiflorae</i>
(= <i>Mycosphaerella gibsonii</i>) | 53 <i>Dickeya dianthicola</i> (<i>Erwinia chrysanthemi</i> pv. <i>dianthicola</i>) |
| 8 <i>Chrysomyxa arctostaphyli</i> | 54 <i>Pantoea stewartii</i> |
| 9 <i>Cronartium fusiforme</i> | 55 <i>Paraburkholderia caryophylli</i> |
| 10 <i>Apiosporina morbosa</i> | 56 formerly <i>Pseudomonas syringae</i> pv. <i>glycinea</i> |
| 11 <i>Cronartium harknessii</i> | 57 formerly <i>Pseudomonas syringae</i> pv. <i>psi</i> |
| 12 <i>Botryosphaeria laricina</i> | 58 <i>Ralstonia solanacearum</i> |
| 13 <i>Gymnosporangium asiaticum</i> | 59 formerly <i>Xanthomonas campestris</i> pv. <i>hyacinthi</i> |
| 14 formerly <i>Hamasporea longissima</i> | 60 <i>Xanthomonas phaseoli</i> pv. <i>phaseoli</i> |
| 15 <i>Melampsora farlowii</i> | 61 formerly <i>Xanthomonas phaseoli</i> var. <i>fuscans</i> |
| 16 <i>Mycodiella</i> (= <i>Mycosphaerella</i>) <i>laricis-leptolepidis</i> | 62 <i>Xanthomonas arboricola</i> pv. <i>pruni</i> |
| 17 <i>Sphaerulina musiva</i> (<i>Davidiella populorum</i>) | 63 formerly <i>Ophiostoma ulmi</i> |
| 18 <i>Cronartium kamtschaticum</i> | 64 formerly <i>Cochliobolus carbonum</i> |
| 19 <i>Coniferiporia</i> (<i>Phellinus</i>) <i>weirii</i> | 65 formerly <i>Cochliobolus heterostrophus</i> |
| 20 <i>Phyllosticta solitaria</i> | 66 <i>Stagonosporopsis chrysanthemi</i> |
| 21 <i>Phymatotrichopsis omnivora</i> | 67 <i>Stenocarpella macrospora</i> |
| 22 <i>Lecanosticta acicola</i> | 68 <i>Stenocarpella maydis</i> |
| 23 <i>Tilletia indica</i> | 69 <i>Cryphonectria parasitica</i> |
| 24 <i>Arceuthobium</i> spp. (non-European) | 70 <i>Fusarium oxysporum</i> f.sp. <i>albedinis</i> |
| 25 formerly Blackberry dwarf | 71 <i>Glomerella gossypii</i> |
| 26 ‘ <i>Candidatus Phytoplasma ulmi</i> ’ (Elm phloem necrosis) | 72 formerly <i>Hypoxyton mammatum</i> |
| 27 Peach American mosaic virus* | 73 formerly <i>Phaeoisariopsis griseola</i> |
| 28 <i>American plum line pattern virus</i> (<i>Illavirus</i>) | 74 <i>Melampsora medusae</i> |
| 29 <i>Potato yellow dwarf virus nucleorhabdovirus</i> | 75 formerly <i>Mycosphaerella linicola</i> |
| 30 <i>Potato yellow vein virus</i> (<i>Crinivirus</i>) | 76 formerly <i>Ophiostoma roboris</i> |
| 31 <i>Raspberry leaf curl virus</i> (<i>Nepovirus</i>) | 77 <i>Phialophora cinerescens</i> |
| 32 <i>Acleris variana</i> | 78 formerly <i>Phoma exigua</i> var. <i>foveata</i> |
| 33 <i>Blitopertha orientalis</i> | 79 <i>Phytophthora fragariae</i> & <i>Phytophthora rubi</i> |
| 34 <i>Anthonomus grandis</i> | 80 <i>Puccinia horiana</i> |
| 35 <i>Conotrachelus nenuphar</i> | 81 formerly <i>Puccinia pelargonii-zonalis</i> |
| 36 <i>Grapholita</i> (<i>Cydia</i>) <i>prunivora</i> | 82 <i>Synchytrium endobioticum</i> |
| 37 <i>Diaphorina citri</i> | 83 formerly <i>Tilletia controversa</i> |
| 38 <i>Gonipterus scutellatus</i> | 84 formerly <i>Uromyces transversalis</i> |
| 39 formerly <i>Hylurgopinus rufipes</i> | 85 <i>Verticillium nonalfalfae</i> & <i>V. dahliae</i> (hop-infecting strains) |
| 40 <i>Popillia japonica</i> | 86 formerly Apple chat fruit |
| 41 <i>Rhagoletis pomonella</i> , <i>Euphranta canadensis</i> ,
<i>Euphranta japonica</i> | 87 ‘ <i>Candidatus Phytoplasma mali</i> ’ (Apple proliferation) |
| 42 <i>Spodoptera litura</i> | 88 formerly Barley stripe mosaic hordeivirus |
| 43 <i>Dendroctonus adjunctus</i> | 89 formerly Beet curly top virus |
| 44 <i>Pissodes nemorensis</i> | 90 Beet leaf curl virus |
| 45 <i>Toxoptera citricidus</i> | 91 formerly Cherry necrotic rusty mottle disease |
| 46 <i>Trioxa erytrae</i> | 92 <i>Chrysanthemum stunt viroid</i> (<i>Pospiviroid</i>) |
| | 93 <i>Citrus tristeza virus</i> (<i>Closterovirus</i>) |
| | 94 Grapevine flavescence dorée phytoplasma |
| | 95 ‘ <i>Candidatus Phytoplasma pyri</i> ’ (Pear decline) |
| | 96 <i>Plum pox virus</i> (<i>Potyvirus</i>) |

* *Peach mosaic virus* (*Trichovirus*) was referred to for some years as peach latent mosaic viroid. The two names have now been shown to concern different organisms. Peach latent mosaic viroid no longer appears in the lists.

- 97 *Potato spindle tuber viroid* (Pospiviroid)
98 *Raspberry ringspot virus* (Nepovirus)
99 formerly Rose wilt
100 ‘*Candidatus Phytoplasma solani*’ (Stolbur)
101 *Strawberry vein banding virus* (Caulimovirus)
102 *Tomato ringspot virus* (Nepovirus)
103 *Aleurocanthus woglumi*
104 *Cacoecimorpha pronubana*
105 *Ceratitis capitata*
106 *Daktulosphaira vitifoliae*
107 formerly *Rhopalomyia chrysanthemi*
108 formerly *Epichoristodes acerbella*
109 formerly *Eriosoma lanigerum*
110 *Helicoverpa armigera*
111 formerly *Hyphantria cunea*
112 formerly *Ips amitinus*
113 *Leptinotarsa decemlineata*
114 formerly *Phoracantha semipunctata*
115 formerly *Phthorimaea operculella*
116 formerly *Pseudococcus comstocki*
117 *Comstockaspis perniciosus* (= *Quadraspidiotus perniciosus*)
118 formerly *Scolytus multistriatus*
119 formerly *Scolytus scolytus*
120 *Spodoptera littoralis*
121 *Trogoderma granarium*
122 *Aphelenchoides besseyi*
123 formerly *Ditylenchus destructor*
124 *Globodera pallida*
125 *Globodera rostochiensis*
126 *Radopholus similis* (not attacking citrus)
127 *Cherry rasp leaf virus* (Cheravirus)
128 ‘*Candidatus Phytoplasma americanum*’ (Potato purple-top wilt)
129 Strawberry latent C virus
130 formerly Strawberry witches' broom phytoplasma
131 *Liriomyza trifolii*
132 formerly *Agrobacterium rhizogenes*
133 *Xylophilus ampelinus*
134 *Xanthomonas arboricola* pv. *corylina*
135 *Xanthomonas fragariae*
136 *Ceratocystis platani*
137 formerly peach phony bacterium, now = no. 166
138 Peach rosette phytoplasma
139 Peach yellows phytoplasma
140 ‘*Candidatus Phytoplasma pruni*’ (Western X-disease)
141 *Stagonosporopsis andigena*
142 *Septoria malagutii*
143 *Premnotrypes latithorax*, *P. suturicallus* & *P. vorax*
144 *Nacobbus aberrans*
145 *Pseudomonas syringae* pv. *persicae*
146 formerly Apricot chlorotic leafroll phytoplasma
147 formerly *Black raspberry latent ilarvirus*
148 formerly *Cherry leaf roll nepovirus* (in *Rubus*)
149 formerly *Apple mosaic ilarvirus* (in *Rubus*)
150 *Xiphinema americanum sensu stricto*
151 ‘*Candidatus Liberibacter africanus*’ & ‘*Ca. L. asiaticus*’
152 *Nemorimyza maculosa*
153 *Monilinia fructicola*
154 *Opogona sacchari*
155 *Puccinia pittieriana*
156 formerly *Phytophthora infestans* mating type A2
157 *Xanthomonas vesicatoria*
158 *Bursaphelenchus xylophilus*
159 Coconut lethal yellowing phytoplasma (Palm lethal yellowing)
160 *Beet necrotic yellow vein virus* (Benyvirus)
161 *Radopholus similis* (attacking citrus, formerly *R. citrophilus*)
162 formerly *Parabemisia myricae*
163 *Carposina sasakii*
164 *Anthonomus signatus*
165 *Epitrix tuberis*
166 *Xylella fastidiosa*
167 *Heterodera glycines*
168 *Listronotus bonariensis*
169 formerly *Phialophora gregata*
170 formerly *Phytophthora megasperma* f.sp. *glycines*
171 formerly *Diaporthe phaseolorum*
172 formerly *Anarsia lineatella*
173 formerly *Grapholita molesta*
174 *Ditylenchus dipsaci*
175 *Thrips palmi*
176 formerly *Unaspis yanonensis*
177 *Frankliniella occidentalis*
178 *Bemisia tabaci*
179 *Ophiostoma wageneri*
180 formerly *Xanthomonas axonopodis* pv. *dieffenbachiae* (deleted and replaced by *X. phaseoli* pv. *dieffenbachiae*)
181 *Cacyreus marshalli*
182 *Tomato yellow leaf curl virus* (Begomovirus) and related viruses
183 *Xanthomonas translucens* pv. *translucens*
184 *Acrobasis pirivorella* (= *Numonia pyrivorella*)
185 *Aculops fuchsiae*
186 *Aleurocanthus spiniferus*
187 *Anoplophora chinensis*
188 *Anoplophora malasiaca* (now considered as a synonym of *A. chinensis*)
189 *Anthonomus bisignifer*
190 *Ciborinia camelliae*
191 Citrus tatter leaf virus (*Capillovirus*)
192 *Coconut cadang-cadang viroid* (Cocadviroid)
193 *Grapholita* (*Cydia*) *inopinata*
194 *Phyllosticta citricarpa*
195 *Helicoverpa zea*

- 196 *Spodoptera eridania*
197 *Spodoptera frugiperda*
198 *Blueberry leaf mottle virus (Nepovirus)*
199 *Diabrotica virgifera virgifera* & *Diabrotica virgifera zea*
200 *Anastrepha suspensa*
201 *Anisogramma anomala*
202 *Anthonomus eugenii*
203 *Zeugodacus (Bactrocera) cucumis*
204 *Bean golden mosaic virus (Begomovirus)*
205 *Choristoneura conflictana*
206 *Choristoneura fumiferana*
207 *Choristoneura freemani* (= *C. occidentalis* Freeman)
208 *Choristoneura rosaceana*
209 *Grapholita (Cydia) packardii*
210 *Diabrotica barberi*
211 *Diaporthe vaccinii*
212 *Lettuce infectious yellows virus (Crinivirus)*
213 *Malacosoma disstria*
214 *Margarodes prieskaensis*
215 *Margarodes vitis*
216 *Margarodes vredendalensis*
217 *Oligonychus perditus*
218 *Orgyia pseudotsugata*
219 *Peach rosette mosaic virus (Nepovirus)*
220 *Potato yellowing virus*
221 *Scirtothrips aurantii*
222 *Scirtothrips citri*
223 *Scirtothrips dorsalis*
224 *Squash leaf curl virus (Begomovirus)*
225 *Tomato mottle virus (Begomovirus)* (and other American Geminiviridae of capsicum and tomato)
226 *Unaspis citri*
227 *Meloidogyne chitwoodi*
228 *Tobacco ringspot virus (Nepovirus)*
229 *Anastrepha fraterculus*
230 *Anastrepha ludens*
231 *Anastrepha obliqua*
232 *Zeugodacus (Bactrocera) cucurbitae*
233 *Bactrocera dorsalis*
234 *Bactrocera minax*
235 *Bactrocera tryoni*
236 *Bactrocera tsuneonis*
237 *Ceratitis rosa*
238 *Dacus ciliatus*
239 *Rhagoletis cingulata*
240 formerly *Rhagoletis completa*
241 *Rhagoletis fausta*
242 *Rhagoletis indifferens*
243 *Rhagoletis mendax*
244 *Andean potato latent virus (Tymovirus)*
245 *Andean potato mottle virus (Comovirus)*
246 *Potato black ringspot virus (Nepovirus)*
247 *Potato virus T*
248 *Cronartium coleosporioides*
249 *Cronartium comandrae*
250 *Cronartium comptoniae*
251 *Cronartium himalayense*
252 *Cronartium quercuum*
253 *Gymnosporangium clavipes*
254 *Gymnosporangium globosum*
255 *Gymnosporangium juniperi-virginianae*
256 formerly *Gymnosporangium shiraianum*
257 *Gymnosporangium yamadae*
258 *Pissodes strobi*
259 *Pissodes terminalis*
260 *Xiphinema bricolense*
261 *Xiphinema californicum*
262 *Xiphinema rivesi*
263 *Dendroctonus brevicornis*
264 *Dendroctonus frontalis*
265 *Dendroctonus ponderosae*
266 *Dendroctonus pseudotsugae*
267 *Dendroctonus rufipennis*
268 *Dryocoetes confusus*
269 *Gnathotrichus sulcatus*
270 *Ips calligraphus*
271 *Ips confusus*
272 *Ips grandicollis*
273 *Ips lecontei*
274 *Ips pini*
275 *Ips plastographus*
276 *Malacosoma americanum*
277 *Alternaria mali*
278 *Citrus blight disease*
279 *Satsuma dwarf virus (Sadwavirus)*
280 *Atropellis piniphila*
281 *Acleris gloverana*
282 *Liriomyza sativae*
283 *Liriomyza huidobrensis*
284 *Citrus leprosis virus*
285 *Citrus yellow mosaic virus (Badnavirus)*
286 *Sternochetus mangiferae*
287 *Plenodomus tracheiphilus*
288 *Eutetranychus orientalis*
289 *Lopholeucaspis japonica*
290 *Tomato spotted wilt orthotospovirus*
291 *Impatiens necrotic spot orthotospovirus*
292 *Diabrotica undecimpunctata*
293 *Naupactus leucoloma*
294 *Watermelon silver mottle orthotospovirus*
295 *Meloidogyne fallax*
296 *Anoplophora glabripennis*
297 *Heteronychus arator*
298 *Pseudocercospora angolensis*
299 *Epitrix cucumeris*
300 *Ripersiella hibisci*
301 *Gonipterus gibberus*
302 *Bactrocera zonata*
303 *Diabrotica speciosa*

- 304 *Pheletes (Limonium) californicus*
305 *Melanotus communis*
306 *Fusarium circinatum*
307 *Trirachys sartus* (= *Aeolesthes sarta*)
308 *Dendrolimus sibiricus*
309 *Scolytus morawitzi*
310 *Tecia solanivora*
311 *Tetropium gracilicorne*
312 *Xylotrechus altaicus*
313 Chrysanthemum stem necrosis orthotospovirus
314 *Maconellicoccus hirsutus*
315 *Stegophora ulmea*
316 Cucumber vein yellowing virus (*Ipomovirus*)
317 *Dryocosmus kuriphilus*
318 *Garella* (= *Erschoviella*) *musculana*
319 *Lepidosaphes ussuriensis*
320 *Malacosoma parallela*
321 *Tuta absoluta*
322 *Agrilus planipennis*
323 Tomato chlorosis virus (*Crinivirus*)
324 Cucurbit yellow stunting disorder virus (*Crinivirus*)
325 *Ips subelongatus*
326 *Ips hauseri*
327 *Sirex ermak*
328 *Turanoclytus* (= *Xylotrechus*) *namanganensis*
329 *Ophiognomonia clavignenti-juglandacearum*
330 *Dendrolimus superans*
331 *Lymantria mathura*
332 *Rhynchophorus palmarum*
333 *Strobilomyia viaria*
334 *Hydrocotyle ranunculoides*
335 formerly *Lysichiton americanus*
336 *Homalodisca vitripennis*
337 *Phytophthora lateralis*
338 *Paysandisia archon*
339 *Rhynchophorus ferrugineus*
340 *Crassula helmsii*
341 *Pueraria montana* var. *lobata*
342 *Solanum elaeagnifolium*
343 *Trichoferus campestris*
344 *Megaplatypus mutatus*
345 *Fusarium foetens*
346 *Puccinia hemerocallidis*
347 Blueberry scorch virus (*Carlavirus*)
348 Tomato infectious chlorosis virus (*Crinivirus*)
349 *Tetranychus evansi*
350 *Xanthomonas axonopodis* pv. *poinsettiicola*
351 *Pontederia* (= *Eichhornia*) *crassipes*
352 *Polygonum perfoliatum*
353 *Xanthomonas euvesicatoria* pv. *allii*
354 *Heracleum persicum*
355 *Heracleum sosnowskyi*
356 *Metamasius hemipterus*
357 *Bactrocera invadens* (deleted, now a synonym of *B. dorsalis*)
358 *Epitrix subcrinita*
359 *Saperda candida*
360 *Epitrix papa*
361 *Meloidogyne enterolobii*
362 *Agrilus anxius*
363 *Drosophila suzukii*
364 *Ludwigia peploides* & *L. grandiflora*
365 'Candidatus *Liberibacter solanacearum*' (Solanaceae haplotypes)
366 *Bactericera cockerelli*
367 *Keiferia lycopersicella*
368 *Leucinodes orbonalis*
369 Pepino mosaic virus (*Potexvirus*)
370 *Pseudomonas syringae* pv. *actinidiae*
371 *Apriona germari*
372 *Apriona rugicollis*
373 *Apriona cinerea*
374 *Oemona hirta*
375 *Phytophthora kernoviae*
376 *Phytophthora ramorum*
377 *Thaumatotibia leucotreta*
378 *Baccharis halimifolia*
379 *Acidovorax citrulli*
380 *Aromia bungii*
381 *Neoleucinodes elegantalis*
382 *Polygraphus proximus*
383 *Parthenium hysterophorus*
384 Andean potato mild mosaic virus (*Tymovirus*)
385 *Leucinodes africensis*
386 *Leucinodes pseudorbonalis*
387 *Leucinodes rimavallis*
388 *Geosmithia morbida* & *Pityophthorus juglandis*
389 *Heterobasidion irregulare*
390 *Xanthomonas euvesicatoria* pv. *euvesicatoria*
391 *Xanthomonas cynarae* pv. *gardneri*
392 *Xanthomonas euvesicatoria* pv. *perforans*
393 *Alternanthera philoxeroides*
394 *Microstegium vimineum*
395 *Myriophyllum heterophyllum*
396 *Lycorma delicatula*
397 *Xanthomonas citri* subsp. *aurantifolii*
398 *Euwallacea fornicatus sensu lato* & *Fusarium euwallaceae*
399 'Candidatus *Phytoplasma phoenicium*'
400 *Ralstonia syzygii*
401 *Ralstonia pseudosolanacearum*
402 *Thekopsora minima*
403 Citrus bark cracking viroid (*Cocadviroid*)
404 *Bactrocera latifrons*
405 *Ceratothripoides brunneus*
406 *Ceratothripoides claratris*
407 *Prodiplosis longifila*
408 *Platynota stultana*

- 409 *Meloidogyne mali*
- 410 *Cardiospermum grandiflorum*
- 411 *Gymnocoronis spilanthoides*
- 412 *Pistia stratiotes*
- 413 *Salvinia molesta*
- 414 *Massicus raddei*
- 415 *Rose rosette emaravirus*
- 416 *Phyllocoptes fructiphilus* (vector of *Rose rosette emaravirus*)
- 417 *Xanthomonas phaseoli* pv. *dieffenbachiae*
- 418 *Pomacea canaliculata*
- 419 *Pomacea maculata*
- 420 *Ambrosia confertiflora*
- 421 *Andropogon virginicus*
- 422 *Cortaderia jubata*
- 423 *Ehrharta calycina*
- 424 *Hakea sericea*
- 425 *Humulus scandens*
- 426 *Lespedeza cuneata*
- 427 *Lygodium japonicum*
- 428 *Prosopis juliflora*
- 429 *Triadica sebifera*
- 430 *Agrilus bilineatus*
- 431 *Agrilus fleischeri*
- 432 *Ambrosia trifida*