

MINISTÉRIO DA AGRICULTURA, PECUÁRIA E ABASTECIMENTO

SECRETARIA DE DEFESA AGROPECUÁRIA

INSTRUÇÃO NORMATIVA Nº 39, DE 1 DE OUTUBRO DE 2018

REVOGADO PELA PORTARIA SDA Nº 617, DE 11 DE JULHO DE 2022

VIDE PORTARIA SDA Nº 569, DE 6 DE MAIO DE 2022

VIDE PORTARIA SDA Nº 465, DE 1º DE DEZEMBRO DE 2021

VIDE PORTARIA Nº 360, DE 12 DE JULHO DE 2021

VIDE INSTRUÇÃO NORMATIVA Nº 132, DE 16 DE ABRIL DE 2021

ALTERADO PELA INSTRUÇÃO NORMATIVA Nº 85, DE 24 DE AGOSTO DE 2020

VIDE INSTRUÇÃO NORMATIVA Nº 29, DE 18 DE OUTUBRO DE 2019

VIDE INSTRUÇÃO NORMATIVA Nº 7, DE 2 DE MAIO DE 2019

O SECRETÁRIO DE DEFESA AGROPECUÁRIA, SUBSTITUTO, DO MINISTÉRIO DA AGRICULTURA, PECUÁRIA E ABASTECIMENTO, no uso das atribuições que lhe conferem os arts. 18 e 53 do Anexo I do Decreto n.º 8.852, de 20 de setembro de 2016, tendo em vista o disposto no Decreto n.º 24.114, de 12 de abril de 1934, no Decreto n.º 1.355, de 30 de dezembro de 1994, no Decreto n.º 5.759, de 17 de abril de 2006, na Instrução Normativa n.º 23, de 2 de agosto de 2004, na Instrução Normativa n.º 6, de 16 de maio de 2005, na Instrução Normativa n.º 45, de 29 de agosto de 2018 e o que consta do Processo n.º 21000.30910/2018-24, resolve:

Art. 1º Estabelecer, na forma do Anexo desta Instrução Normativa, a lista de Pragas Quarentenárias Ausentes (PQA) para o Brasil.

Parágrafo único. A divulgação da lista de que trata o caput e de suas atualizações será feita periodicamente, por meio digital, no portal institucional do MAPA - www.agricultura.gov.br.

Art. 2º Esta Instrução Normativa entra em vigor na data de sua publicação.

ANEXO

PRAGAS QUARENTENÁRIAS AUSENTES - PQA

ACARINA

Acarus siro

Aceria oleae

Aleuroglyphus beklemishevi

Amphitetranychus viennensis (*Tetranychus viennensis*)

Brevipalpus chilensis

Brevipalpus cuneatus

Brevipalpus lewisi

Calacarus citrifolii

Cenopalpus pulcher

Cheiracus sulcatus

Eotetranychus carpini

Eotetranychus lewisi

Epitrimerus pyri

Eutetranychus orientalis

Halotydeus destructor

Microtydeus hylinus

Oligonychus afrasiaticus

Oligonychus bicolor

Rhizoglyphus robini

Rhizoglyphus setosus

Steneotarsonemus panshini

Steneotarsonemus spinki

Tarsonemus cuttacki

Tenuipalpus punicae

Tetranychus kanzawai

Tetranychus mcdanieli

Tetranychus pacificus

Tetranychus truncatus

Tetranychus turkestanii

BLATTODEA

Microtermes spp.

Croptotermes spp.

COLEOPTERA

Acalymma vittatum

Aegorhinus phaleratus

Aegorhinus superciliosus

Agrilus sinuatus

Agriotes lineatus

Agriotes mancus

Alaus oculatus

Alcidodes sedi

Alphitobius laevigatus

Ampedus collaris

Amphicerus bimaculatus

Anoplophora spp.

Anthonomus spp. (exceto *A. grandis* e *A. tomentosus*)

Aromia bungii

Brachycerus spp.

Brontispa longissima

Bruchidius spp.

Bruchus spp.

Byturus tomentosus

Callidiellum rufipenne

Callosobruchus chinensis

Caryedon serratus

Chaectonema basalis

Chrysobothris mali

Conoderus vespertinus

Conotrachelus nenuphar

Cryptorhynchus lapathi

Dendroctonus spp.

Dexicrates robustus

Diabrotica balteata

Diabrotica barberi

Diabrotica undecimpunctata howardi

Diabrotica virgifera virgifera

Diocalandra frumenti

Diocalandra taitense

Epicaerus cognatus

Eutyrrhinus meditabundus

Haptoncus luteolus

Holotrichia serrata

Hylesinus oleiperda

Hylobius abietis

Hylobius pales

Hylotrupes bajulus

Ips spp.

Latheticus oryzae

Leptinotarsa decemlineata

Limonius californicus

Lissorhoptrus oryzophilus

Melanotus communis

Melolontha melolontha

Monochamus spp.

Monolepta australis

Nathrius brevipennis

Odoiporus longicollis

Oothea bennigseni

Oothea mutabilis

Orthorrhinus klugii

Oryctes rhinoceros

Osphilia tenuipes

O t i o r h y n c h u s
Otiorynchus cribricollis

Otiorynchus ligustici

Otiorynchus ovatus

O t i o r h y n c h u s
Otiorynchus rugosostriatus

O t i o r h y n c h u s
Otiorynchus sulcatus

Pagiocerus frontalis

Palorus ratzeburgi

Paropsisterna bimaculata

Paropsisterna m-fuscum

Phonapate frontalis

Phyllophaga spp.

Plocaederus ferrugineus

Popillia japonica

Premnotrypes spp.

Prostephanus truncatus

Rhabdoscelus obscurus

Rhizotrogus majalis

Rhynchophorus ferrugineus

Rhyparida caeruleipennis

Rhyparida clypeata

Rhyparida discopunctulata

Saperda spp.

armadillo

pseudonothus

singulari

Sinoxylon spp. (exceto *S. unidentatum*)

Sitophilus granarius

Smicronys sordidus

Smicronyx fulvus

Sphenophorus venatus

Stegobium paniceum

Tetropium fuscum

Thorictodes heydeni

Tomicus piniperda

Trachymela sloanei

Trachymela tincticollis

Trogoderma spp.

Tropinota squalida

Vesperus luridus

Vesperus xatarti

Xyleborus dispar

Xylopertha retusa

DIPTERA

Acanthiophilus helianthi

Anastrepha ludens

Anastrepha suspensa

Atherigona soccata

Bactrocera spp. (exceto *B. carambolae*)

Ceratitis spp. (exceto *C. capitata*)

Chromatomyia horticola

Contarinia pyrivora

Contarinia tritici

Dacus spp.

Delia spp. (exceto *D. platura*)

Eumerus strigatus

Liriomyza bryoniae

Mayetiola destructor

Neosilba batesi

Ophiomyia phaseoli

Orseolia oryzae

Orseolia oryzivora

Prodiplosis longifila

Rabdophaga saliciperda (*Helicomyia saliciperda*)

Rhagoletis spp. (exceto *R. adusta*, *R. blanchardi*, *R. ferruginea*, *R. macquarti*)

Sitodiplosis mosellana

Tipula paludosa

Toxotrypana curvicauda

HEMIPTERA

Aleurocanthus spp. (exceto *A. woglumi*)

Aleurodicus floccissimus (*Lecanoideus floccissimus*)

Anoplocnemis curvipes

Aonidiella citrina

Aphis punicae

Blissus insularis

Cacopsylla pyri

Ceresa alta

Ceroplastes destructor

Ceroplastes japonicus

Ceroplastes rubens

Ceroplastes rusci

Cicadulina mbila

Clavigralla shabadi

Clavigralla tomentosicollis

Crisicoccus matsumotoi

Dialeurodes citri

Diaspidiotus ostreaeformis

Diaspidiotus pyri

Diuraphis noxia

Dysaphis pyri

Dysdercus supersticiosus

Eucalyptolyma maideni

Eulecanium tiliae

Eurigaster integriceps

Helopeltis anacardii

Helopeltis antonii

Helopeltis bradyi

Helopeltis schoutedeni

Homalodisca vitripennis (*Homalodisca coagulata*)

Homoecerus pallens

Icerya aegyptiaca

Icerya seychellarum

Lepidosaphes chinensis

Leptocoris rufomarginata

Leptocoris tagalica

Mercetaspis halli

Metcalfa pruinosa

Nipaecoccus viridis

Parlatoria pseudaspidotus

Perkinsiella saccharicida

Philaenus spumarius

Piezodorus lituratus

Planchonia stentae

Planococcoides njalensis

Planococcus kraunhiae

Planococcus lilacinus

Pollinia pollini

Prosapia bicincta

Pseudococcus calceolariae

Pseudothraupis devastans

Pseudothraupis wayi

Rastrococcus invadens

Riptortus dentipes

Scaphoideus titanus

Siphoninus phillyreae

Stephanitis

Stephanitis

Targionia vitis

Thysanofiorinia nephelii (*Fiorinia nephelii*)

Unaspis yanonensis

HYMENOPTERA

Ametastegia glabrata

Cephus cinctus

Cephus pygmaeus

Hoplocampa brevis

Megastigmus spp. (Exceto *M. transvaalensis* e *M. brasiliensis*)

Nematus desantisi

Neodiprion spp.

rhododendri
takeyai

Ophelimus eucalypti

Selitrichodes globulus

Systole albipennis

Tremex spp.

LEPIDOPTERA

Acrobasis pyrivorella

Adoxophyes orana

Agrius convolvuli

Agrotis lineatus

Agrotis segetum

Amsacta lactinea

Amyelois transitella

Anarsia lineatella

Apomyelois ceratoniae (*Ectomyelois ceratoniae*)

Archips spp.

Argyrogramma signata

Argyrotaenia pulchellana

Batrachedra amydraula

Cacoecimorpha pronubana

Cadra calidella

Cadra figulilella

(*Ephestia*

calidella)

Carposina sasakii (*Carposina niponensis*)

Cephonodes hylas

Chilecomadia moorei

Chilecomadia valdiviana

Chilo partellus

Chilo supressalis

Choristoneura spp.

Conogethes punctiferalis
Conopomorpha cramerella
Copitarsia consueta
Copitarsia naenoides
Copitarsia turbata
Cossus cossus
Cryptophlebia ombrodelta
Cydia spp. (exceto *C. araucariae*)
Deilephila elpenor
Dendrolimus spectabilis
Dendrolimus superans
Diaphania indica
Dioryctria zimmermani
Dyspessa ulula
Earias biplaga
Eldana saccharina
Ephestia elutella
Epichoristodes acerbella
Epiphyas postvittana
Eपुरaea luteola
Erionota thrax
Eudocima fullonia (*Othreis fullona*)
Eupoecilla ambiguella
Euzophera bigella
Gortyna xanthenes
Grapholita dimorpha
Grapholita funebrana
Hedya dimidioalba
Hippotion celerio

Hyphantria cunea

Ichneumenoptera chrysophanes

Keiferia lycopersicella

Lampides boeticus

Leucinodes orbonalis

Leucoptera malifoliella

Leucoptera meyricki

Lobesia botrana

Lymantria dispar

Lymantria monacha

Malacosoma spp.

Mythima separata

Mythimna loreyi

Nacoleia octasema

Orgyia postica

Ostrinia furcanalis

Ostrinia nubilalis

Pandemis heparana

Paranthrene tabaniformis

Parasa lepida

Pectinophora scutigera

Pediasia trisecta

Peribatodes rhomboidaria

Platynota stultana

Prays citri

Proeulia auraria

Proeulia chrysopteris

Rhyacionia spp.

Scirpophaga incertulas

Sesamia inferens

Sparganothis pilleriana

Spilonota albicana

Spilonota ocellana

Spodoptera albula

Spodoptera exigua

Spodoptera littoralis

Spodoptera litura

Thaumetopoea pityocampa

Thaumatotibia leucotreta (*Cryptophlebia leucotreta*)

Thrips nigropilosus

THYSANOPTERA

Vitaceae polistiformis

Xestia c-nigrum

Zeuzera pyrina

ORTHOPTERA

Atractomorpha psittacina

Gryllotalpa gryllotalpa

Schistocerca gregaria

PSOCOPTERA

Liposcelis paeta

THYSANOPTERA

Dichromothrips corbetti

Drepanothrips reuteri

Frankliniella bispinosa

Frankliniella intonsa
Haplothrips aculeatus
Limothrips cerealium
Limothrips denticornis
Pezothrips kellyanus
Scirtothrips aurantii
Scirtothrips dorsalis
Scirtothrips inermis
Scirtothrips mangiferae
Thrips hawaiiensis

FUNGI E OOMYCOTA

Albugo macrospora
Albugo tragopogonis
Alternaria gaisen
Alternaria gossypina
Alternaria linicola
Alternaria triticina
Alternaria vitis
Apiosporina morbosa
Armillaria luteobubalina
Armillaria ostoyae
Arthuriomyces peckianus
Ascochyta sorghi
Atelocauda digitata
Balansia clavula
Balansia oryzae-sativae (*Ephelis oryzae*)
Boeremia foveata (*Phoma exiguavar.foveata*)

Botryosphaeria berengeriana f.sp. pyricola

Botrytis elliptica

Botrytis fabae

Botrytis tulipae

Calonectria

Ceratobasidium cereale (*Rhizoctonia cerealis*)

Cercospora insulana

Chondrostereum purpureum

Chrysomyxa

Cilioplea fulgurata (*Teichospora fulgurata*)

Cladosporium cladosporioides f.sp. pisicola (*Cladosporium pisicola*)

Cladosporium gossypicola

Cladosporium variabile

Colletotrichum echinocloa

Colletotrichum higginsianum

Colletotrichum impatientis

Colletotrichum kahawae

Colletotrichum linicola

Coniella diplodiella

Coniothyrium glycines (*Pyrenochaeta glycines*; *Dactuliochaeta glycines*)

Coniothyrium hellebori

Cryptosporiopsis sp.

Cronartium spp.

Curvularia australiensis (*Bipolaris australiensis*)

Curvularia uncinata

Curvularia verruculosa

Cylindrosporium phalaenopsidis

Desarmillaria tabescens (*Armillaria tabescens*)

Diaporthe tanakae

Dichotomophthoropsis safeeulaensis

colhouinii

rhododendri

Didymella zae-maydis (*Mycosphaerella zae-maydis*)

Discosia maculicola

Discula pyri (*Phacidiopycnis pyri*)

Drepanopeziza populi-albae (*Marssonina castagnei*)

Drepanopeziza populorum (*Marssonina populi*)

Drepanopeziza punctiformis (*Marssonina brunnea*)

Endocronartium harknessii

Epichloe coenophiala (*Neotyphodium coenophialum*)

Fusarium camptoceras

Fusarium circinatum (*Gibberella circinata*)

Fusarium crookwellense

Fusarium oxysporum f.sp.*asparagi*

Fusarium oxysporum f.sp.*carthami*

Fusarium oxysporum f.sp.*cubense* raça 4 tropical (R4T) (Grupo de Compatibilidade vegetativa: 01213/16)

Fusarium oxysporum f.sp.*lagenariae*

Fusarium oxysporum f.sp.*lilii*

Fusarium oxysporum f.sp.*ranunculi*

Fusarium oxysporum f.sp.*spinaciae*

Fusarium paspali

Fusarium redolens

Fusarium roseum (*Gibberella pulicaris*)

Fusarium xylarioides (*Gibberella xylarioides*)

Gibellulopsis nigrescens (*Verticillium nigrescens*)

Globisporangium paroecandrum (*Pythium paroecandrum*)

Globisporangium sylvaticum (*Pythium sylvaticum*)

Gloeotinia granigena

Glomerella manihotis

Guignardia baccae

Guignardia fulvida
Gymnosporangium spp.
Haplobasidium musae
Helicobasidium longisporum (*Helicobasidium mompa*)
Helicoceras spp.
Hemileia coffeicola
Hendersonia oryzae
Heterobasidium annosum
Hymenoscyphus scutula
Hymenula cerealis (*Cephalosporium gramineum*)
Kabatiella lini (*Polyspora lini*)
Lecanosticta acicola (*Mycosphaerella dearnessii*)
Leptographium procerum
Leptosphaeria libanotis
Marasmius palmivorus
Marssonina occidentalis
Melampsora sp.
Metasphaeria aulica
Monilinia fructigena
Monilinia vaccinii-corymbosi
Moniliophthora roreri
Monosporascus eutypoides
Mycocentrospora acerina
Mycosphaerella gibsonii
Mycosphaerella rabiei (*Didymella rabiei*)
Nectria cinnabarina
Neofabraea vagabunda (*Neofabraea alba*)
Neonectria obtusispora (*Cylindrocarpon obtusisporum*)
Neottiosporina paspali (*Stagonospora paspali*)

Oospora oryzetorum

Periconia circinata

Peronosclerospora sacchari

Peronospora farinosa

Peronospora impatientis

Peronospora viciae

Phaeosphaerella paspali

Phomopsis impatientis

Phomopsis orchidophila

Phyllosticta solitaria

Phymatotrichopsis omnivora

Phytophthora

Phytophthora erythroseptica (*Phytophthora erythroseptica* var. *erythroseptica*)

cambivora

Phytophthora fragariae

Phytophthora megasperma

Phytophthora ramorum

Phytophthora syringae

Plasmopara constantinescui (*Bremiella sphaerosperma*)

Plasmopara obducens

Plenodomus tracheiphilus (*Phoma tracheiphila*)

Podosphaera aphanis

Podosphaera balsaminae

Podosphaera fusca (*Sphaerotheca fusca*)

Polyscytalum pustulans (*Oospora pustulans*)

Protomyces macrosporus

Pseudopeziza tracheiphila (*Pseudopeziza tracheiphila*)

Puccinia argentata (*Puccinia impatientis*)

Puccinia carthami

Puccinia erianthi

Puccinia komarovii

Puccinia rubigo-vera f.sp.*impatientis*

Pyrenophora graminea

Pythium tracheiphilum

Ramularia collo-cygni

Rhizoctonia theobromae (*Oncobasidium theobromae*)

Sclerospora graminicola

Septoria citri

Septoria noli-tangere

Sphaerulina phalaenopsidis

Sporisorium sacchari (*Sphacelotheca sacchari*)

Stagonospora sacchari

Stagonosporopsis andigena (*Phoma andigena*)

Synchytrium endobioticum

Synchytrium impatiens

Taphrina populina

Thecaphora solani (*Angiosorus solani*)

Tilletia indica

Tilletia laevis

Trematosphaeria pertusa

Urocystis agropyri

Valsa nivea

Venturia populina

NEMATODA

Anguina agrostis

Anguina pacificae

Anguina tritici

Aphelenchoides blastophthorus

Belonolaimus longicaudatus

Bursaphelenchus mucronatus

Bursaphelenchus xylophilus

Criconema mutabile

Ditylenchus africanus

Ditylenchus angustus

Ditylenchus destructor

Ditylenchus dipsaci (todas as raças, exceto as do alho)

Ditylenchus emus

Ditylenchus equalis

Ditylenchus fotedari

Globodera pallida

Globodera rostochiensis

Heterodera avenae

Heterodera cajani

Heterodera ciceri

Heterodera goettingiana

Heterodera mediterranea

Heterodera oryzae

Heterodera oryzicola

Heterodera sacchari

Heterodera schachtii

Heterodera trifolii

Heterodera zeae

Longidorus attenuatus

Longidorus elongatus

Meloidogyne chitwoodi

Meloidogyne fallax

Nacobbus aberrans

Nacobbus dorsalis

Paratylenchus

Pratylenchus fallax

Pratylenchus goodeyi

Pratylenchus pratensis

Pratylenchus scribneri

Pratylenchus thornei

Punctodera chalconensis

Punctodera punctata (*Heterodera punctata*)

Rotylenchulus macrodoratus

Rotylenchulus parvus

Subanguina radicecola

Trichodorus viruliferus

Tylenchorhynchus

Xiphinema diversicaudatum

Xiphinema italiae

Xiphinema rivesi

Xiphinema vuittenezi

Zygotylenchus guevarai

hamatos

BACTERIA

Apple chat fruit phytoplasma

Brenneria salicis (*Erwinia salicis*)

Burkholderia glumae

Candidatus Phytoplasma

Candidatus Liberibacter africanus

Candidatus Liberibacter solanacearum

Candidatus Phytoplasma palmae (Palm lethal yellowing phytoplasma)

Candidatus Phytoplasma mali (Apple proliferation phytoplasma)

asteris

[16SrI-C]

Candidatus Phytoplasma pruni (Peach X-disease phytoplasma)

Candidatus Phytoplasma pyri (Pear decline phytoplasma)

Candidatus Phytoplasma

solani

[16SrXII-A]

Clavibacter michiganensis subsp.*insidiosus*

Clavibacter michiganensis subsp.*sepedonicus*

Clavibacter michiganensis subsp.*nebraskensis*

Dickeya sp.

Erwinia amylovora

Erwinia rhapontici (*Pectobacterium rhapontici*)

Grapevine flavescence dorée phytoplasma

Grapevine yellows phytoplasma

Pantoea cypripedii (*Pectobacterium cypripedii*)

Pantoea stewartii subsp.*stewartii*(*Erwinia stewartii*;*Pantoea stewartii*)

Peach rosette phytoplasma

Peach yellows phytoplasma

Pseudomonas syringae pv.*aptata*

Pseudomonas syringae pv.*atropaciens*

Pseudomonas syringae pv.*atropurpurea*

Pseudomonas syringae pv.*primulae*

Pseudomonas syringae pv.*tagetis*

Rhodococcus fascians

Spiroplasma citri

Xanthomonas axonopodis pv.*khayae*

Xanthomonas campestris pv.*aberrans*

Xanthomonas cassavae (*Xanthomonas campestris*pv.*cassavae*)

Xanthomonas fuscans subsp.*aurantifoli*igrupo B (*Xanthomonas axonopodis*pv.*aurantifoli*iraça B)

Xanthomonas oryzae pv.*oryzae*

Xanthomonas oryzae pv.*oryzicola*

Xanthomonas populi

Xanthomonas translucens pv.*graminis*

Xanthomonas vasicola pv.*musacearum*

Xylella fastidiosa subsp.*fastidiosa*

Xylophilus ampelinus

VÍRUS E VIRÓIDES

African cassava mosaic virus (ACMV)

African oil palm ringspot virus (AOPRV)

Andean potato latent virus (APLV)

Arabis mosaic virus (ArMV)

Arracacha virus A (AVA)

Arracacha virus B (AVB)

Artichoke Italian latent virus (AILV)

Artichoke latent virus (ArLV)(ranunculus latent virus)

Artichoke mottled crinkle virus (AMCV)

Artichoke yellow ringspot virus (AYRSV)

Asparagus virus 2 (AV2)

Banana bract mosaic virus (BBrMV)

Banana bunchy top virus (BBTV)

Barley stripe mosaic virus (BSMV)

B e l l p e p p e r
Beet curly top virus (BCTV)

Beet pseudoyellows virus (BPYV)

Blueberry leaf mottle virus (BLMoV)

Blueberry mosaic associated virus (BIMaV)

Blueberry red ringspot virus (BRRV)

Blueberry scorch virus (BIScV)

Blueberry shock virus (BIShV)

Blueberry shoestring virus (BSSV)

m o t t l e

v i r u s

Broad bean wilt virus (BBWV)
Cacao swollen shoot virus (CSSV)
Capsicum chlorosis virus (CaCV)
Celery latent virus (CeLV)
Chicory yellow mottle virus (ChYMV)
Citrus impietratura agent
Citrus leaf rugose virus (CiLRV)
Citrus variegation virus (CVV)
Clover yellow vein virus (CIYVV)
Coconut cadang-cadang viroid (CCCVD)
Coleus blumei viroid 5 (CbVd-5)
Cucumber green mottle mosaic virus (CGMMV)
Fiji disease virus (FDV)
Impatiens necrotic spot virus (MNSV)
Lily virus X (LVX)
Pea early-browning virus (PEBV)
Peach rosette mosaic virus (PRMV)
Peanut stunt virus (PSV)
Pepino mosaic virus (PepMV)
Perlargonium zonate spot virus (PZSV)
Phalaenopsis chlorotic spot virus (PhCSV)
Plum pox virus (PPV)
Poplar mosaic virus (PopMV)
Potato mop-top virus (PMTV)
Potato spindle tuber viroid (PSTVd)
Potato virus A (PVA)
Potato virus T (PVT)
Potato yellowing virus (PYV)
Potyvirus sp.

Ranunculus leaf distortion virus (RanLDV)

Ranunculus mild mosaic virus (RanMMV)

Ranunculus mosaic virus (RanMV)

Ranunculus white mottle virus (RWMV)

Raspberry ringspot virus (RpRSV)

Red clover vein mosaic virus (RCVMV)

Spinach latent virus (SpLV)

St. Augustine grass decline virus strain / Panicum mosaic virus (PMV)(*St. Augustine decline virus- SAD*)

Strawberry latent ringspot virus (SLRSV)

Tobacco rattle virus (TRV)

Tobacco ringspot virus (TRSV)

Tomato black ring virus (TBRV)

Tomato bushy stunt virus (TBSV)

Tomato ringspot virus (ToRSV)

Tulip breaking virus (TBV)

PLANTAS INFESTANTES E PARASITAS

Alopecurus myosuroides

Amaranthus albus

Amaranthus blitoides

Amaranthus graecizans

Apera spica-venti

Arceuthobium spp.

Arctotheca calendula

Asphodelus tenuifolius

Bonnaya antipoda (*Lindernia antipoda*)

Bonnaya ciliata (*Lindernia ciliata*)

Brassica tournefortii

Bromus rigidus
Carduus acanthoides
Carduus pycnocephalus
Centaurea diffusa
Chondrilla juncea
Cirsium arvense
Cleome viscosa
Crassocephalum crepidioides
Cuscuta australis
Cuscuta campestris
Cuscuta epithimum
Cuscuta europaea
Cuscuta reflexa
Descurainia pinnata
Descurainia sophia
Elymus repens (*Agropyron repens*)
Euphorbia esula
Euphorbia helioscopia
Fumaria bastardii
Fumaria densiflora
Fumaria muralis
Galeopsis speciosa
Heliotropium europaeum
Hibiscus trionum
Hirschfeldia incana
Hordeum murinum subsp. *leporinum* (*Hordeum leporium*)
Imperata cylindrica
Kochia scoparia
Lepidium draba (*Cardaria draba*)

Leptochloa chinensis

Lindernia procumbens

Lolium rigidum

Ludwigia adscendens

Melochia corchorifolia

Monochoria vaginalis

Myagrurn perfoliatum

Orobanche spp.

Persicaria barbata (*Polygonum barbatum*)

Persicaria nepalensis (*Polygonum nepalense*)

Persicaria
Phalaris paradoxa

p e n s y l v a n i c a

Pilosella officinarum (*Hieracium pilosella*)

Rhaponticum repens (*Acroptilon repens*)

Rumex hypogaeus (*Emex australis*)

Salsola kali (*Salsola tragus*)

Senecio vulgaris

Setaria pumila

Sisymbrium loeselii

Sisymbrium orientale

Solanum rostratum

Sonchus arvensis

Sphenoclea zeylanica

Stachytarpheta jamaicensis

Striga spp.

Taeniatherum caput-medusae

Urochloa glumaris (*Brachiaria paspaloides*)

Vulpia ciliata

JORGE CAETANO JUNIOR

REVOLUÇÃO