

Analytic Hierarchy Process

Prioritized Pest List

FY 2011

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Overview

The Analytic Hierarchy Process (AHP) Prioritized Pest List for 2011 is a ranked list of 58 pests that are expected to cause damage to agricultural and/or natural resources if introduced into the United States. The prioritized pest list includes arthropods, mollusks, pathogens, nematodes, and weeds.

The FY11 list is identical to the FY10 list. A number of pests were analyzed for the FY11 list, but the decision was made not to include them at this time.

Subject matter experts in biology and economics evaluated each pest against a weighted set of criteria addressing *environmental impact* and *economic impact*. By combining the extent to which a pest fulfilled the set of criteria (determined by subject matter experts) with the criteria weights (determined by decision makers representing the CAPS community), each pest received a score. The result is the AHP Prioritized Pest List for 2011.

Pest List Constraints

- To be included in the AHP Prioritized Pest List, a pest:
- Cannot be established in the conterminous United States (even if the distribution is limited)
 - Cannot be considered non-reportable by PPQ
 - Cannot be a program pest with funding for national survey

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For Additional Information

Please visit the pest prioritization website (<http://ceris.purdue.edu/caps/pestprioritization/Index.htm>) or contact Gary Cave (Gary.L.Cave@aphis.usda.gov; 919-855-7505).

Rank	Scientific Name	Common Name	Kingdom	Phylum	Class	Order	Family	Pest Source
1	<i>Agrilus biguttatus</i> (F.)	Oak splendor beetle	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	NAFC-ExFor Pest
1	<i>Platypus quercivorus</i> (Murayama)	Oak ambrosia beetle	Animalia	Arthropoda	Insecta	Coleoptera	Platypodidae	NAFC-ExFor Pest
2	<i>Cronartium flaccidum</i> (Alb. & Schwein.) G. Winter	Scots pine blister rust	Fungi	Basidiomycota	Urediniomycetes	Uredinales	Cronartiaceae	NPDRS
3	<i>Helicoverpa armigera</i> Hübner	Old World bollworm	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	OPIS A List
4	<i>Thaumetopoea processionea</i> (L.)	Oak processionary moth	Animalia	Arthropoda	Insecta	Lepidoptera	Notodontidae	EPICA
5	<i>Tomicus destruens</i> (Wollaston)	Pine shoot beetle	Animalia	Arthropoda	Insecta	Coleoptera	Scolytidae	NAFC-ExFor Pest
6	<i>Dendrolimus superans</i>	Siberian silk moth	Animalia	Arthropoda	Insecta	Lepidoptera	Lasiocampidae	Western Region 2004 Exotic Pest List/NAFC-ExFor Pest
7	<i>Spodoptera litura</i> (F.)	Cotton cutworm	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	EPPO A1 List
8	<i>Otiorynchus dieckmanii</i> Mangano	Wingless weevil	Animalia	Arthropoda	Insecta	Coleoptera	Curculionidae	NPAG
9	<i>Ceroplastes japonicus</i> Green	Japanese wax scale	Animalia	Arthropoda	Insecta	Hemiptera	Coccidae	OPIS A List
10	<i>Unaspis yanonensis</i> (Kuwana)	Arrowhead scale	Animalia	Arthropoda	Insecta	Hemiptera	Diaspididae	OPIS A List
11	<i>Phytophthora alni</i> Brasier & S. A. Kirk	Alder root rot	Chromista	Oomycota	Oomycetes	Pythiales	Pythiaceae	Western Region 2004 Exotic Pest List/NAFC-ExFor Pest
12	<i>Ralstonia solanacearum</i> race 3 biovar 2 (Smith)	Bacterial wilt	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Ralstoniaceae	OPIS A List
13	<i>Achatina fulica</i> (Bowditch)	Giant African snail	Animalia	Mollusca	Gastropoda	Stylommatophora	Achatinidae	OPIS A List
14	<i>Lymantria mathura</i> Moore	Pink gypsy moth	Animalia	Arthropoda	Insecta	Lepidoptera	Lymantriidae	Western Region 2004 Exotic Pest List/NAFC-ExFor Pest
15	<i>Leucophaea malifoliella</i> (Costa)	Pear leaf blister moth	Animalia	Arthropoda	Insecta	Lepidoptera	Lyonetidae	Western Region 2004 Exotic Pest List
16	<i>Ditylenchus angustus</i> (Butler)	Rice stem nematode	Animalia	Nematoda	Secernentea	Tylenchida	Anguinidae	Western Region 2004 Exotic Pest List
17	<i>Ceroplastes destructor</i> Newstead	Soft wax scale	Animalia	Arthropoda	Insecta	Hemiptera	Coccidae	OPIS A List
18	<i>Chilo suppressalis</i> Walker	Asiatic rice borer	Animalia	Arthropoda	Insecta	Lepidoptera	Pyralidae	Western Region 2004 Exotic Pest List
19	Veronicellidae spp.		Animalia	Mollusca	Gastropoda	Stylommatophora	Veronicellidae	Mollusk Team
20	<i>Dendrolimus pini</i> L.	Pine-tree lappet	Animalia	Arthropoda	Insecta	Lepidoptera	Lasiocampidae	NAFC-ExFor Pest
21	<i>Spodoptera littoralis</i> (Boisduval)	Egyptian cottonworm	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	OPIS A List
22	<i>Chalara fraxinea</i> T. Kowalski	Ash dieback	Fungi	Ascomycota	Ascomycetes	Incertae sedis	Incertae sedis	NPAG
23	<i>Monochamus sutor</i> (L.)	Small white-marmorated longhorned beetle	Animalia	Arthropoda	Insecta	Coleoptera	Cerambycidae	NAFC-ExFor Pest
24	<i>Planococcus minor</i> (Maskell)	Passionvine mealybug	Animalia	Arthropoda	Insecta	Hemiptera	Pseudococcidae	OPIS A List
25	<i>Tuta absoluta</i> (Meyrick)	Tomato leaf miner	Animalia	Arthropoda	Insecta	Lepidoptera	Gelechiidae	NPAG
26	<i>Nysius huttoni</i> White	New Zealand wheat bug	Animalia	Arthropoda	Insecta	Hemiptera	Lygaeidae	NPAG
27	<i>Candidatus</i> Phytoplasma australiense R.E. Davis et al.	Phytoplasma yellows	Bacteria	Firmicutes	Mollicutes	Acholeplasmatales	Acholeplasmataceae	NPAG
28	<i>Meloidogyne indica</i> Whitehead	Citrus root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
29	<i>Raffaelea quercivora</i> Kubono & Shin. Ito	Japanese oak wilt	Fungi	Ascomycota	Ascomycetes	Ophiostomatales	Ophiostomataceae	CAPS Oak Commodity Survey
30	<i>Monacha</i> spp.		Animalia	Mollusca	Gastropoda	Stylommatophora	Hygromiidae	Mollusk Team
31	<i>Oxyarenus hyalinipennis</i> (Costa)	Cotton seed bug	Animalia	Arthropoda	Insecta	Hemiptera	Lygaeidae	National CAPS Committee Pest Prioritization Subgroup
32	<i>Eudocima fullonia</i> (Clerck)	Fruit piercing moth	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	Western Region 2004 Exotic Pest List
33	<i>Thaumetobia leucotreta</i> (Meyrick)	False codling moth	Animalia	Arthropoda	Insecta	Lepidoptera	Tortricidae	OPIS A List
34	<i>Phytoplasma</i> AP-MLO	Apple proliferation	Bacteria	Firmicutes	Mollicutes	Acholeplasmatales	Acholeplasmataceae	EPPO A2 list
35	<i>Monochamus saltuarius</i> (Gebler)	Japanese pine sawyer	Animalia	Arthropoda	Insecta	Coleoptera	Cerambycidae	NAFC-ExFor Pest
36	<i>Mycosphaerella gibsonii</i> H. Evans	Needle blight of pine	Fungi	Ascomycota	Ascomycetes	Mycosphaerellales	Mycosphaerellaceae	EPPO A1 List
37	<i>Onopordum acaulon</i> L.	Horse thistle	Plantae	Magnoliophyta	Magnoliopsida	Asterales	Asteraceae	APHIS Weed Team
38	<i>Diabrotica speciosa</i> (Germar)	Cucurbit beetle	Animalia	Arthropoda	Insecta	Coleoptera	Chrysomelidae	EPPO A1 list
38	<i>Harpophora maydis</i> (Samra, Sabet & Hing.) W. Gams	Late wilt of corn	Fungi	Ascomycota	Ascomycetes	Incertae sedis	Incertae sedis	NPDRS
38	<i>Xanthomonas oryzae</i> (Ishiyama) Swings et al. & <i>X. oryzae</i> p	Bacterial leaf streak, bacterial blight	Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	OPIS A List
39	<i>Adoxophyes orana</i> (Fischer von Röslerstamm)	Summer fruit tortrix moth	Animalia	Arthropoda	Insecta	Lepidoptera	Tortricidae	Western Region 2004 Exotic Pest List
40	<i>Archips xylosteanus</i> (L.)	Variegated golden tortrix	Animalia	Arthropoda	Insecta	Lepidoptera	Tortricidae	National CAPS Committee Pest Prioritization Subgroup
41	<i>Meloidogyne fujianensis</i> Pan	Asian citrus root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
41	<i>Meloidogyne jianyangensis</i> Yang, Hu, Chen, & Zhu	Citrus root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List

AHP Prioritized Pest List for FY11 by Rank

41	<i>Meloidogyne mingnanica</i> Zhang	Citrus root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
42	<i>Meloidogyne paranaensis</i> Carneiro, Carneiro, Abrantes, Sar	Parana coffee root-knot nematode	Animalia	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae
43	<i>Meloidogyne citri</i> Zhang, Gao, & Weng	Asian citrus root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
44	<i>Candidatus</i> Phytoplasma prunorum Seemüller and Schneid	European stone fruit yellows	Bacteria	Firmicutes	Mollicutes	Acholeplasmatales	Acholeplasmataceae	QUADS
45	<i>Cernuella</i> spp.	Exotic species	Animalia	Mollusca	Gastropoda	Stylommatophora	Hygromiidae	OPIS A List
46	<i>Cochlicella</i> spp.	Exotic species	Animalia	Mollusca	Gastropoda	Stylommatophora	Hygromiidae	OPIS A List
47	<i>Meloidogyne artiellia</i> Franklin	British root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
48	<i>Heterodera latipons</i> Franklin	Mediterranean cereal cyst nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
49	<i>Meloidogyne donghaiensis</i> Zheng, Lin, & Zheng	Donghai root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
50	<i>Heterodera cajani</i> Koshi	Pigeonpea cyst nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
50	<i>Heterodera sacchari</i> Luc & Merny	Sugar cane cyst nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
51	<i>Meloidogyne fallax</i> Karssen	False Columbia root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
52	<i>Rhynchophorus ferrugineus</i> (Olivier)	Red palm weevil	Animalia	Arthropoda	Insecta	Coleoptera	Curculionidae	NPAG

Shading denotes a rank value shared by two or more pests; pests with the same rank received identical AHP Scores.

Rank	Scientific Name	Common Name	Kingdom	Phylum	Class	Order	Family	Pest Source
Insecta								
1	<i>Agrilus biguttatus</i> (F.)	Oak splendor beetle	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	NAFC-ExFor Pest
1	<i>Platypus quercivorus</i> (Murayama)	Oak ambrosia beetle	Animalia	Arthropoda	Insecta	Coleoptera	Platypodidae	NAFC-ExFor Pest
3	<i>Helicoverpa armigera</i> Hübner	Old World bollworm	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	OPIS A List
4	<i>Thaumetopoea processionea</i> (L.)	Oak processionary moth	Animalia	Arthropoda	Insecta	Lepidoptera	Notodontidae	EPICA
5	<i>Tomicus destruens</i> (Wollaston)	Pine shoot beetle	Animalia	Arthropoda	Insecta	Coleoptera	Scolytidae	NAFC-ExFor Pest
6	<i>Dendrolimus superans</i>	Siberian silk moth	Animalia	Arthropoda	Insecta	Lepidoptera	Lasiocampidae	Western Region 2004 Exotic Pest List/NAFC-ExFor Pest
7	<i>Spodoptera litura</i> (F.)	Cotton cutworm	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	EPPO A1 List
8	<i>Otiorynchus dieckmanii</i> Mangano	Wingless weevil	Animalia	Arthropoda	Insecta	Coleoptera	Curculionidae	NPAG
9	<i>Ceroplastes japonicus</i> Green	Japanese wax scale	Animalia	Arthropoda	Insecta	Hemiptera	Coccidae	OPIS A List
10	<i>Unaspis yanonensis</i> (Kuwana)	Arrowhead scale	Animalia	Arthropoda	Insecta	Hemiptera	Diaspididae	OPIS A List
14	<i>Lymantria mathura</i> Moore	Pink gypsy moth	Animalia	Arthropoda	Insecta	Lepidoptera	Lymantriidae	Western Region 2004 Exotic Pest List/NAFC-ExFor Pest
15	<i>Leucoptra malifoliella</i> (Costa)	Pear leaf blister moth	Animalia	Arthropoda	Insecta	Lepidoptera	Lyonetidae	Western Region 2004 Exotic Pest List
17	<i>Ceroplastes destructor</i> Newstead	Soft wax scale	Animalia	Arthropoda	Insecta	Hemiptera	Coccidae	OPIS A List
18	<i>Chilo suppressalis</i> Walker	Asiatic rice borer	Animalia	Arthropoda	Insecta	Lepidoptera	Pyralidae	Western Region 2004 Exotic Pest List
20	<i>Dendrolimus pini</i> L.	Pine-tree lappet	Animalia	Arthropoda	Insecta	Lepidoptera	Lasiocampidae	NAFC-ExFor Pest
21	<i>Spodoptera littoralis</i> (Boisduval)	Egyptian cottonworm	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	OPIS A List
23	<i>Monochamus sutor</i> (L.)	Small white-marmorated longhorned beetle	Animalia	Arthropoda	Insecta	Coleoptera	Cerambycidae	NAFC-ExFor Pest
24	<i>Planococcus minor</i> (Maskell)	Passionvine mealybug	Animalia	Arthropoda	Insecta	Hemiptera	Pseudococcidae	OPIS A List
25	<i>Tuta absoluta</i> (Meyrick)	Tomato leaf miner	Animalia	Arthropoda	Insecta	Lepidoptera	Gelechiidae	NPAG
26	<i>Nysius huttoni</i> White	New Zealand wheat bug	Animalia	Arthropoda	Insecta	Hemiptera	Lygaeidae	NPAG
31	<i>Oxyarenus hyalinipennis</i> (Costa)	Cotton seed bug	Animalia	Arthropoda	Insecta	Hemiptera	Lygaeidae	National CAPS Committee Pest Prioritization Subgroup
32	<i>Eudocima fullonia</i> (Clerck)	Fruit piercing moth	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	Western Region 2004 Exotic Pest List
33	<i>Thaumatotibia leucotreta</i> (Meyrick)	False codling moth	Animalia	Arthropoda	Insecta	Lepidoptera	Tortricidae	OPIS A List
35	<i>Monochamus saltuarius</i> (Gebler)	Japanese pine sawyer	Animalia	Arthropoda	Insecta	Coleoptera	Cerambycidae	NAFC-ExFor Pest
38	<i>Diabrotica speciosa</i> (Germar)	Cucurbit beetle	Animalia	Arthropoda	Insecta	Coleoptera	Chrysomelidae	EPPO A1 list
39	<i>Adoxophyes orana</i> (Fischer von Röslerstamm)	Summer fruit tortrix moth	Animalia	Arthropoda	Insecta	Lepidoptera	Tortricidae	Western Region 2004 Exotic Pest List
40	<i>Archips xylosteanus</i> (L.)	Variegated golden tortrix	Animalia	Arthropoda	Insecta	Lepidoptera	Tortricidae	National CAPS Committee Pest Prioritization Subgroup
52	<i>Rhynchophorus ferrugineus</i> (Olivier)	Red palm weevil	Animalia	Arthropoda	Insecta	Coleoptera	Curculionidae	NPAG

Mollusca

13	<i>Achatina fulica</i> (Bowditch)	Giant African snail	Animalia	Mollusca	Gastropoda	Stylommatophora	Achatinidae	OPIS A List
19	Veronicellidae spp.		Animalia	Mollusca	Gastropoda	Stylommatophora	Veronicellidae	Mollusk Team
30	<i>Monacha</i> spp.		Animalia	Mollusca	Gastropoda	Stylommatophora	Hygromiidae	Mollusk Team
45	<i>Ceruella</i> spp.	Exotic species	Animalia	Mollusca	Gastropoda	Stylommatophora	Hygromiidae	OPIS A List
46	<i>Cochlicella</i> spp.	Exotic species	Animalia	Mollusca	Gastropoda	Stylommatophora	Hygromiidae	OPIS A List

Bacteria/Chromista/Fungi

12	<i>Ralstonia solanacearum</i> race 3 biovar 2 (Smith)	Bacterial wilt	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Ralstoniaceae	OPIS A List
38	<i>Xanthomonas oryzae</i> (Ishiyama) Swings et al. & <i>X. oryzae</i> pv. <i>oryzicola</i> (Fang et al.)	Bacterial leaf streak, bacterial blight	Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	OPIS A List
27	<i>Candidatus</i> Phytoplasma australiense R.E. Davis et al.	Phytoplasma yellows	Bacteria	Firmicutes	Mollicutes	Acholeplasmatales	Acholeplasmataceae	NPAG
34	<i>Phytoplasma</i> AP-MLO	Apple proliferation	Bacteria	Firmicutes	Mollicutes	Acholeplasmatales	Acholeplasmataceae	EPPO A2 list
44	<i>Candidatus</i> Phytoplasma prunorum Seemüller and Schneider	European stone fruit yellows	Bacteria	Firmicutes	Mollicutes	Acholeplasmatales	Acholeplasmataceae	QUADS
11	<i>Phytophthora alni</i> Brasier & S. A. Kirk	Alder root rot	Chromista	Oomycota	Oomycetes	Pythiales	Pythiaceae	Western Region 2004 Exotic Pest List/NAFC-ExFor Pest
22	<i>Chalara fraxinea</i> T. Kowalski	Ash dieback	Fungi	Ascomycota	Ascomycetes	Incertae sedis	Incertae sedis	NPAG
29	<i>Raffaella quercivora</i> Kubono & Shin. Ito	Japanese oak wilt	Fungi	Ascomycota	Ascomycetes	Ophiostomatales	Ophiostomataceae	CAPS Oak Commodity Survey
36	<i>Mycosphaerella gibsonii</i> H. Evans	Needle blight of pine	Fungi	Ascomycota	Ascomycetes	Mycosphaerellales	Mycosphaerellaceae	EPPO A1 List
38	<i>Harpophora maydis</i> (Samra, Sabet & Hing.) W. Gams	Late wilt of corn	Fungi	Ascomycota	Ascomycetes	Incertae sedis	Incertae sedis	NPDRS
2	<i>Cronartium flaccidum</i> (Alb. & Schwein.) G. Winter	Scots pine blister rust	Fungi	Basidiomycota	Urediniomycetes	Uredinales	Cronartiaceae	NPDRS

Nematoda

16	<i>Ditylenchus angustus</i> (Butler)	Rice stem nematode	Animalia	Nematoda	Secernentea	Tylenchida	Anguinidae	Western Region 2004 Exotic Pest List
28	<i>Meloidogyne indica</i> Whitehead	Citrus root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
41	<i>Meloidogyne fujianensis</i> Pan	Asian citrus root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
41	<i>Meloidogyne jianyangensis</i> Yang, Hu, Chen, & Zhu	Citrus root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
41	<i>Meloidogyne mingnanica</i> Zhang	Citrus root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
42	<i>Meloidogyne paranaensis</i> Carneiro, Carneiro, Abrantes, Santos, & Almeida	Parana coffee root-knot nematode	Animalia	Nematoda	Nematoda	Secernentea	Tylenchida	Heteroderidae
43	<i>Meloidogyne citri</i> Zhang, Gao, & Weng	Asian citrus root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
47	<i>Meloidogyne artiellia</i> Franklin	British root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
48	<i>Heterodera latipons</i> Franklin	Mediterranean cereal cyst nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
49	<i>Meloidogyne donghaiensis</i> Zheng, Lin, & Zheng	Donghai root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
50	<i>Heterodera cajani</i> Koshi	Pigeonpea cyst nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
50	<i>Heterodera sacchari</i> Luc & Merny	Sugar cane cyst nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List
51	<i>Meloidogyne fallax</i> Karssen	False Columbia root-knot nematode	Animalia	Nematoda	Secernentea	Tylenchida	Heteroderidae	OPIS A List

Plantae

37	<i>Onopordum acaulon</i> L.	Horse thistle	Plantae	Magnoliophyta	Magnoliopsida	Asterales	Asteraceae	APHIS Weed Team
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Impact to CAPS Program

Impact to CAPS Program

Pests were prioritized separately based on feasibility of survey and identification. The results from that analysis are shown here. Survey and identification, considered separately, included an estimation of cost and availability of efficient methods. Survey and identification of pests ranked high on this list can be accomplished using efficient methods without incurring above average expenses.

Rank	Scientific Name	Common Name	Taxonomic Group
1	<i>Achatina fulica</i>	Giant African snail	Mollusk
1	<i>Dendrolimus superans</i>	Siberian silk moth	Arthropod
1	<i>Onopordum acaulon</i>	Horse thistle	Plant
1	<i>Tomicus destruens</i>	Pine shoot beetle	Arthropod
1	<i>Tuta absoluta</i>	Tomato leaf miner	Arthropod
2	<i>Dendrolimus pini</i>	Pine-tree lappet	Arthropod
3	<i>Diabrotica speciosa</i>	Cucurbit beetle	Arthropod
3	<i>Eudocima fullonia</i>	Fruit piercing moth	Arthropod
4	<i>Cronartium flaccidum</i>	Scots pine blister rust	Fungus
4	<i>Heterodera latipons</i>	Mediterranean cereal cyst nematode	Nematode
4	<i>Leucoptera malifoliella</i>	Pear leaf blister moth	Arthropod
4	<i>Spodoptera littoralis</i>	Egyptian cottonworm	Arthropod
4	<i>Thaumetopoea proccessionea</i>	Oak processionary moth	Arthropod
5	<i>Monochamus saltuarius</i>	Japanese pine sawyer	Arthropod
5	<i>Monochamus sutor</i>	Small white-marmorated longhorned beetle	Arthropod
5	<i>Platypus quercivorus</i>	Oak ambrosia beetle	Arthropod
5	<i>Raffaelea quercivora</i>	Japanese oak wilt	Fungus
6	<i>Helicoverpa armigera</i>	Old World bollworm	Arthropod
7	<i>Ceroplastes destructor</i>	Soft wax scale	Arthropod
7	<i>Harpophora maydis</i>	Late wilt of corn	Fungus
7	<i>Lymantria mathura</i>	Pink gypsy moth	Arthropod
7	<i>Mycosphaerella gibsonii</i>	Needle blight of pine	Fungus
8	<i>Thaumatotibia leucotreta</i>	False codling moth	Arthropod
9	<i>Oxycarenus hyalinipennis</i>	Cotton seed bug	Arthropod
10	<i>Adoxophyes orana</i>	Summer fruit tortrix moth	Arthropod
10	<i>Archips xylosteanus</i>	Variegated golden tortrix	Arthropod
10	<i>Rhynchophorus ferrugineus</i>	Red palm weevil	Arthropod
10	<i>Spodoptera litura</i>	Cotton cutworm	Arthropod
11	<i>Otiorhynchus dieckmanii</i>	Wingless weevil	Arthropod
12	<i>Agrilus biguttatus</i>	Oak splendor beetle	Arthropod
13	<i>Phytoplasma</i> AP-MLO	Apple proliferation	Phytoplasma
14	<i>Cernuella</i> spp.	Exotic species	Mollusk
14	<i>Ceroplastes japonicus</i>	Japanese wax scale	Arthropod
14	<i>Chalara fraxinea</i>	Ash dieback	Fungus
14	<i>Cochlicella</i> spp.	Exotic species	Mollusk
14	<i>Ditylenchus angustus</i>	Rice stem nematode	Nematode
14	<i>Heterodera cajani</i>	Pigeonpea cyst nematode	Nematode
14	<i>Heterodera sacchari</i>	Sugar cane cyst nematode	Nematode
14	<i>Meloidogyne citri</i>	Asian citrus root-knot nematode	Nematode
14	<i>Meloidogyne donghaiensis</i>	Donghai root-knot nematode	Nematode

Impact to CAPS Program

Rank	Scientific Name	Common Name	Taxonomic Group
14	<i>Meloidogyne fujianensis</i>	Asian citrus root-knot nematode	Nematode
14	<i>Meloidogyne mingnanica</i>	Citrus root-knot nematode	Nematode
14	<i>Meloidogyne paranaensis</i>	Parana coffee root-knot nematode	Nematode
14	<i>Monacha</i> spp.		Mollusk
15	Veronicellidae spp.		Mollusk
16	<i>Candidatus</i> Phytoplasma prunorum	European stone fruit yellows	Phytoplasma
17	<i>Candidatus</i> Phytoplasma australiense	Phytoplasma yellows	Phytoplasma
17	<i>Chilo suppressalis</i>	Asiatic rice borer	Arthropod
17	<i>Xanthomonas oryzae</i>	Bacterial leaf streak, bacterial blight	Bacterium
18	<i>Meloidogyne artiellia</i>	British root-knot nematode	Nematode
18	<i>Meloidogyne fallax</i>	False Columbia root-knot nematode	Nematode
18	<i>Meloidogyne indica</i>	Citrus root-knot nematode	Nematode
18	<i>Meloidogyne jianyangensis</i>	Citrus root-knot nematode	Nematode
18	<i>Nysius huttoni</i>	New Zealand wheat bug	Arthropod
18	<i>Phytophthora alni</i>	Alder root rot	Fungus
18	<i>Planococcus minor</i>	Passionvine mealybug	Arthropod
18	<i>Ralstonia solanacearum</i> race 3 biovar 2	Bacterial wilt	Bacterium
18	<i>Unaspis yanonensis</i>	Arrowhead scale	Arthropod

FY11 Commodity Matrix

Scientific Name	Common Name	Geographical Regions																												Pest Commodity Total								
		North America	South America	Europe	Africa	Asia	Oceania	Antarctica	Arctic	Subarctic	Temperate	Subtropical	Tropical	Equatorial	Mountain	Coastal	Urban	Rural	Wildland	Marine	Terrestrial	Aquatic	Subsaharan	Sahel	Desert	Mountain	Coastal	Urban	Rural		Wildland	Marine	Terrestrial	Aquatic				
Achatina fulica	Giant African snail	■																																21				
Adoxophyes orana	Summer fruit tortrix moth			■																▲														11				
Agrilus biguttatus	Oak splendor beetle																																■	▲	2			
Archips xylosteanus	Variegated golden tortrix																																■	■	7			
Candidatus Phytoplasma australiense	Phytoplasma yellows																																■	■	8			
Candidatus Phytoplasma prunorum	European stone fruit yellows																																■	■	5			
Cernuella spp.																																	■	■	■	10		
Ceroplastes destructor	Soft wax scale																																■	■	5			
Ceroplastes japonicus	Japanese wax scale																																■	■	7			
Chalara fraxinea	Ash dieback																																	■	1			
Chilo suppressalis	Asiatic rice borer																																		6			
Cochlicella spp.																																	■	■	■	6		
Cronartium flaccidum	Scots pine blister rust																																	▲	1			
Dendrolimus pini	Pine-tree lappet																																	▲	■	2		
Dendrolimus superans	Siberian silk moth																																	▲	▲	■	■	4
Diabrotica speciosa	Cucurbit beetle	■	■	▲	■	■	■	■	■	■	■	■	▲	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	26		
Ditylenchus angustus	Rice stem nematode																																			1		
Eudocima fullonia	Fruit piercing moth																																		■	■	11	
Harpophora maydis	Late wilt of corn																																	■		1		
Helicoverpa armigera	Old World bollworm	■		▲		■	■	▲	■	■	■	■	▲	▲	▲	▲	■	■	■	▲		■		■	▲	▲	▲	▲	▲	▲	▲	▲	■	■	■	27		
Heterodera cajani	Pigeonpea cyst nematode																																			1		
Heterodera latipons	Mediterranean cereal cyst nematode			■		▲					■					▲											▲									5		
Heterodera sacchari	Sugar cane cyst nematode																																	■		3		
Leucoptera malifoliella	Pear leaf blister moth																																		■	■	5	
Lymantria mathura	Pink gypsy moth																																		■	▲	6	
Meloidogyne artiellia	British root-knot nematode		■			■	■																													8		
Meloidogyne citri	Asian citrus root-knot nematode							■																												2		
Meloidogyne donghaiensis	Donghai root-knot nematode							■																												1		
Meloidogyne fallax	False Columbia root-knot nematode			■	■							▲	■																							9		
Meloidogyne fujianensis	Asian citrus root-knot nematode							■																												1		
Meloidogyne indica	Citrus root-knot nematode							■																												1		
Meloidogyne jianyangensis	Citrus root-knot nematode							■																												1		
Meloidogyne mingnanica	Citrus root-knot nematode							■																												1		
Meloidogyne paranaensis	Parana coffee root-knot nematode																																			3		
Monacha spp.																																				0		

FY11 Commodity Matrix

[illegible]

Legend: ▲ = Primary host
■ = Other host

*Key to Forest Product Categories:	Other Softwood Trees (Genera: <i>Abies</i> , <i>Casuarina</i> , <i>Cupressus</i> , <i>Juniperus</i> , <i>Larix</i> , <i>Picea</i> , <i>Pseudotsuga</i> , <i>Tsuga</i>)
	Soft Hardwood Trees (Genera: <i>Acacia</i> , <i>Albizia</i> , <i>Alnus</i> , <i>Asimina</i> , <i>Castanea</i> , <i>Catalpa</i> , <i>Celtis</i> , <i>Elaeagnus</i> , <i>Fraxinus</i> , <i>Liquidambar</i> , <i>Magnolia</i> , <i>Melaleuca</i> , <i>Persea</i> , <i>Platanus</i> , <i>Populus</i> , <i>Paulownia</i> , <i>Sabal</i> , <i>Salix</i> , <i>Tamarix</i> , <i>Tilia</i> , <i>Ulmus</i>)
	Hardwood Trees (Genera: <i>Acer</i> , <i>Aleurites</i> , <i>Amelanchier</i> , <i>Betula</i> , <i>Carpinus</i> , <i>Carya</i> , <i>Castanopsis</i> , <i>Cornus</i> , <i>Crataegus</i> , <i>Diospyros</i> , <i>Eucalyptus</i> , <i>Fagus</i> , <i>Ilex</i> , <i>Juglans</i> , <i>Lithocarpus</i> , <i>Malus</i> , <i>Melia</i> , <i>Morus</i> , <i>Prunus</i> , <i>Quercus</i> , <i>Sapium</i> , <i>Sorbus</i> , <i>Vaccinium</i>)

Commodities in Decreasing Order of Value:** Corn (*Zea* spp.), Soybeans (*Glycine* spp.), Wheat (*Triticum* spp.), Cotton (*Gossypium* spp.), Tomatoes (*Lycopersicon* spp.), Grapes (*Vitis* spp.), Potatoes (*Solanum* spp.), Apples (*Malus* spp.), Citrus (*Citrus* spp.), Peanuts (*Arachis* spp.), Lettuce (*Lactuca* spp.), Rice (*Oryza* spp.), Sorghum (*Sorghum* spp.), Barley (*Hordeum* spp.), Strawberries (*Fragaria* spp.), Almonds (*Prunus dulcis*), Onions (*Allium* spp.), Peaches (*Prunus persica*), Carrots (*Daucus carota*), Cucumbers (*Cucumis* spp.), Beans (*Phaseolus* spp.), Sunflower (*Helianthus* spp.), Pears (*Pyrus* spp.), Celery (*Apium graveolens*), Broccoli (*Brassica oleracea*), Cantaloups (*Cucumis* spp.), Oats (*Avena* spp.), Asparagus (*Asparagus* spp.). **Not included in the ranking by value:** Pine (*Pinus* spp.), Other Softwood trees, Soft Hardwood trees, Hardwood Trees.

** NASS. 2008. Agricultural Prices 2007 Summary. Agricultural Statistics Board, National Agricultural Statistics Service, United States Department of Agriculture.

FY11 Commodity Matrix by Host Plant Family

	Family	Apiaceae	Asteraceae	Brassicaceae	Cucurbitaceae	Fabaceae	Liliaceae	Malvaceae	Poaceae	Rosaceae	Rutaceae	Solanaceae	Vitaceae	Pinaceae																						
Scientific Name	Common Name	Apium graveolens (Celery)	Daucus carota (Carrot)	Helianthus spp. (Sunflower)	Lactuca spp. (Lettuce)	Brassica oleracea (Broccoli)	Cucumis spp. (Cantaloupe)	Cucumis spp. (Cucumber)	Arachis spp. (Peanut)	Glycine spp. (Soybean)	Phaseolus spp. (Beans)	Allium spp. (Onion)	Asparagus spp. (Asparagus)	Gossypium spp. (Cotton)	Avena spp. (Oats)	Hordeum spp. (Barley)	Oryza spp. (Rice)	Sorghum spp. (Sorghum)	Triticum spp. (Wheat)	Zea spp. (Corn)	Fragaria spp. (Strawberry)	Malus spp. (Apple)	Prunus dulcis (Almond)	Prunus persica (Peach)	Pyrus spp. (Pear)	Citrus spp. (Citrus)	Solanum lycopersicum (Tomato)	Solanum tuberosum (Potato)	Vitis spp. (Grape)	Pinus spp. (Pine)	Other Softwood Trees*	Soft Hardwood Trees*	Hardwood Trees*	Pest Commodity Total		
Achatina fulica	Giant African snail		■	■	■	▲	▲	▲	▲	■	■	■		■			■	■		■		■				■	■	■	■			■	■	21		
Adoxophyes orana	Summer fruit tortrix moth								■	■				■			■				■	▲		▲	▲	■				■			■	■	11	
Agrilus biguttatus	Oak splendor beetle																																■	▲	2	
Archips xylosteanus	Variegated golden tortrix																					■		■	■	■						■		■	7	
Candidatus Phytoplasma australiense	Phytoplasma yellows						■	■			■										▲			■						▲				■	8	
Candidatus Phytoplasma prunorum	European stone fruit yellows																						■	■	▲									■	5	
Cermuella spp.				■							■	■					■									■					■	■	■	■	10	
Ceroplastes destructor	Soft wax scale																					■				■	▲							■	5	
Ceroplastes japonicus	Japanese wax scale																					■		■	■	▲				■				■	7	
Chalara fraxinea	Ash dieback																																	■	1	
Chilo suppressalis	Asiatic rice borer					■											▲	▲	■	▲							■								6	
Cochlicella spp.			■													■			■													■	■	■	6	
Cronartium flaccidum	Scots pine blister rust																														▲				1	
Dendrolimus pini	Pine-tree lappet																														▲	■			2	
Dendrolimus superans	Siberian silk moth																														▲	▲	■	■	4	
Diabrotica speciosa	Cucurbit beetle	■	■	■	■	■	■	■	▲	▲	■	■	■	■	■		■	■	▲	▲	■	■		■		■	■	▲	■					■	26	
Diitylenchus angustus	Rice stem nematode																▲						■	■		■	■	▲	▲				■	1		
Eudocima fullonia	Fruit piercing moth						■	■														■	■		■	■	▲	▲		■				■	11	
Harpophora maydis	Late wilt of corn																			■														■	1	
Helicoverpa armigera	Old World bollworm		■	▲	■	■	■	■	▲	▲	▲	■		▲	■	▲	■	▲	▲	▲	■	■		■		▲	▲	▲		▲	■	■	■	■	27	
Heterodera cajani	Pigeonpea cyst nematode										▲																								1	
Heterodera latipons	Mediterranean cereal cyst nematode		■					■							▲	▲			▲																5	
Heterodera sacchari	Sugar cane cyst nematode																▲	■		■															3	
Leucoptera malifoliella	Pear leaf blister moth																				▲		■	▲									■	■	5	
Lymantria mathura	Pink gypsy moth																					■			■						■	■	▲	▲	6	
Meloidogyne artiellia	British root-knot nematode	■				■					■				■	■		■	■								■								8	
Meloidogyne citri	Asian citrus root-knot nematode																									■	■								2	
Meloidogyne donghaiensis	Donghai root-knot nematode																									■									1	
Meloidogyne fallax	False Columbia root-knot nematode		▲		■				■		■		■							■	■							■	▲						9	
Meloidogyne fujianensis	Asian citrus root-knot nematode																									■									1	
Meloidogyne indica	Citrus root-knot nematode																									■									1	
Meloidogyne jianyangensis	Citrus root-knot nematode																									■									1	
Meloidogyne mingnanica	Citrus root-knot nematode																										■								1	
Meloidogyne paranaensis	Parana coffee root-knot nematode									■								■									■								3	
Monacha spp.																																				0
Monochamus saltuarius	Japanese pine sawyer																														▲	▲			2	
Monochamus sutor	Small white-marmorated longhorned beetle																														▲	▲		■	3	
Mycosphaerella gibsonii	Needle blight of pine																														▲				1	
Nysius huttoni	New Zealand wheat bug			■	■	■									■	■			■		■														8	
Onopordum acaulon	Horse thistle																																			0

FY11 Commodity Matrix by Host Plant Family

[illegible]

Legend:

- ▲ = Primary host
- = Other host

*Key to Forest Product Categories:	Other Softwood Trees (Genera: <i>Abies</i> , <i>Casuarina</i> , <i>Cupressus</i> , <i>Juniperus</i> , <i>Larix</i> , <i>Picea</i> , <i>Pseudotsuga</i> , <i>Tsuga</i>)
	Soft Hardwood Trees (Genera: <i>Acacia</i> , <i>Albizia</i> , <i>Alnus</i> , <i>Asimina</i> , <i>Castanea</i> , <i>Catalpa</i> , <i>Celtis</i> , <i>Elaeagnus</i> , <i>Fraxinus</i> , <i>Liquidambar</i> , <i>Magnolia</i> , <i>Melaleuca</i> , <i>Persea</i> , <i>Platanus</i> , <i>Populus</i> , <i>Paulownia</i> , <i>Sabal</i> , <i>Salix</i> , <i>Tamarix</i> , <i>Tilia</i> , <i>Ulmus</i>)
	Hardwood Trees (Genera: <i>Acer</i> , <i>Aleurites</i> , <i>Amelanchier</i> , <i>Betula</i> , <i>Carpinus</i> , <i>Carya</i> , <i>Castanopsis</i> , <i>Cornus</i> , <i>Crataegus</i> , <i>Diospyros</i> , <i>Eucalyptus</i> , <i>Fagus</i> , <i>Ilex</i> , <i>Juglans</i> , <i>Lithocarpus</i> , <i>Malus</i> , <i>Melia</i> , <i>Morus</i> , <i>Prunus</i> , <i>Quercus</i> , <i>Sapium</i> , <i>Sorbus</i> , <i>Vaccinium</i>)

Commodities in Decreasing Order of Value:** Corn (*Zea* spp.), Soybeans (*Glycine* spp.), Wheat (*Triticum* spp.), Cotton (*Gossypium* spp.), Tomatoes (*Lycopersicon* spp.), Grapes (*Vitis* spp.), Potatoes (*Solanum* spp.), Apples (*Malus* spp.), Citrus (*Citrus* spp.), Peanuts (*Arachis* spp.), Lettuce (*Lactuca* spp.), Rice (*Oryza* spp.), Sorghum (*Sorghum* spp.), Barley (*Hordeum* spp.), Strawberries (*Fragaria* spp.), Almonds (*Prunus dulcis*), Onions (*Allium* spp.), Peaches (*Prunus persica*), Carrots (*Daucus carota*), Cucumbers (*Cucumis* spp.), Beans (*Phaseolus* spp.), Sunflower (*Helianthus* spp.), Pears (*Pyrus* spp.), Celery (*Apium graveolens*), Broccoli (*Brassica oleracea*), Cantaloups (*Cucumis* spp.), Oats (*Avena* spp.), Asparagus (*Asparagus* spp.). **Not included in the ranking by value:** Pine (*Pinus* spp.). Other

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FY11 AHP Model Criteria

Strategic Objective:	
ENVIRONMENTAL IMPACT	Human health Health of native flora and fauna Health of livestock and pets Health of plants with aesthetic value
ECONOMIC IMPACT	Foreign trade Production costs and domestic trade Public costs
IMPACT TO CAPS PROGRAM*	Survey feasibility Identification feasibility

*This set of criteria was not used to create AHP Prioritized Pest List. Pests were ranked separately using these criteria (see worksheet *Impact to CAPS Program*), and this information is intended to highlight needs for research and methods development and to be used in combination with the AHP PPL to select high priority targets that are not excessively difficult or expensive to survey and identify.