

**APHIS List of Regulated Hosts and Plants Proven or Associated with *Phytophthora ramorum***  
***ramorum***  
 (February 2010)

The most current version is posted at: [www.aphis.usda.gov/plant\\_health/plant\\_pest\\_info/pram/](http://www.aphis.usda.gov/plant_health/plant_pest_info/pram/)

**Proven Hosts Regulated for *Phytophthora ramorum***

<b>Scientific Name (45)</b>	<b>Common Name(s)</b>	<b>Notes</b>
<i>Acer macrophyllum</i>	Bigleaf maple	
<i>Acer pseudoplatanus</i> *	Planetree maple	
<i>Adiantum aleuticum</i>	Western maidenhair fern	
<i>Adiantum jordanii</i>	California maidenhair fern	
<i>Aesculus californica</i>	California buckeye	
<i>Aesculus hippocastanum</i> *	Horse chestnut	
<i>Arbutus menziesii</i>	Madrone	
<i>Arctostaphylos manzanita</i>	Manzanita	
<i>Calluna vulgaris</i>	Scotch heather	
<i>Camellia spp.</i>	Camellia - all species, hybrids and cultivars	
<i>Castanea sativa</i>	Sweet chestnut	
<i>Fagus sylvatica</i> *	European beech	
<i>Frangula californica</i> (≡ <i>Rhamnus californica</i> )	California coffeeberry	
<i>Frangula purshiana</i> (≡ <i>Rhamnus purshiana</i> )	Cascara	
<i>Fraxinus excelsior</i>	European ash	
<i>Griselinia littoralis</i>	Griselinia	
<i>Hamamelis virginiana</i>	Witch hazel	
<i>Heteromeles arbutifolia</i>	Toyon	
<i>Kalmia spp.</i>	Mountain laurel - all species, hybrids and cultivars	
<i>Lithocarpus densiflorus</i> *	Tanoak	
<i>Lonicera hispidula</i>	California honeysuckle	
<i>Laurus nobilis</i>	Bay laurel	
<i>Magnolia doltsopa</i> = <i>Michelia doltsopa</i>	Michelia	
<i>Maianthemum racemosum</i> (≡ <i>Smilacina racemosa</i> )	False Solomon's seal	
<i>Parrotia persica</i>	Persian ironwood	

<i>Photinia fraseri</i>	Red tip photinia	
<i>Pieris spp.</i>	Andromeda, Pieris - all species, hybrids and cultivars	
<i>Pseudotsuga menziesii</i> var. <i>menziesii</i>	Douglas fir	Also includes all other varieties and cultivars of nursery grown <i>P. menziesii</i>
<i>Quercus agrifolia</i> *	Coast live oak	
<i>Quercus cerris</i> *	European turkey oak	
<i>Quercus chrysolepis</i> *	Canyon live oak	
<i>Quercus falcata</i> *	Southern red oak	
<i>Quercus ilex</i>	Holm oak	
<i>Quercus kelloggii</i> *	California black oak	
<i>Quercus parvula</i> var. <i>shrevei</i> *	Shreve's oak	Also includes all other varieties and cultivars of nursery grown <i>Q. parvula</i>
<i>Rhododendron spp.</i>	Rhododendron (including azalea) – all species, hybrids and cultivars	
<i>Rosa gymnocarpa</i>	Wood rose	
<i>Salix caprea</i>	Goat willow	
<i>Sequoia sempervirens</i>	Coast redwood	
<i>Syringa vulgaris</i>	Lilac	
<i>Taxus baccata</i>	European yew	
<i>Trientalis latifolia</i>	Western starflower	
<i>Umbellularia californica</i>	California bay laurel, pepperwood, Oregon myrtle	
<i>Vaccinium ovatum</i>	Evergreen huckleberry	
<i>Viburnum spp.</i>	Viburnum – all species, hybrids and cultivars	

### Plants Associated with *Phytophthora ramorum*

(These are regulated only as nursery stock)

Scientific Name (82)	Common Name, Date & Source of Report	Notes
<i>Abies concolor</i>	White fir – Oct 05 (1)	
<i>Abies grandis</i>	Grand fir – June 03 (1)	
<i>Abies magnifica</i>	Red fir – Jan 06 (7)	
<i>Acer circinatum</i>	Vine maple – Feb 06 (5)	
<i>Acer davidii</i>	Striped bark maple – Jan 06 (9)	
<i>Acer laevigatum</i>	Evergreen Maple – Aug 05 (3)	
<i>Arbutus unedo</i>	Strawberry tree – Dec 02 (7)	
<i>Arctostaphylos columbiana</i>	Manzanita – Feb 06 (5)	
<i>Arctostaphylos uva-ursi</i>	Kinnikinnick, bearberry – Jan 07 (10)	
<i>Ardisia japonica</i>	Ardisia – Jan 06 (9)	
<i>Berberis diversifolia</i> = <i>Mahonia aquifolium</i>	Oregon grape – Aug 07 (9)	
<i>Calycanthus occidentalis</i>	Spicebush – May 05 (5)	
<i>Castanopsis orthacantha</i>	Castanopsis - Aug 06 (3)	
<i>Ceanothus thyrsiflorus</i>	Blueblossom – April 06 (5)	
<i>Cercis chinensis</i>	Chinese redbud – April 08 (9)	
<i>Choisya ternate</i>	Mexican orange – Jan 09 (3)	New report from United Kingdom
<i>Cinnamomum camphora</i>	Camphor tree – May 06 (3)	
<i>Clintonia andrewsiana</i>	Andrew's clintonia bead lily – May 04 (5)	
<i>Cornus kousa</i>	Kousa dogwood Sept 08 (9)	New report from Canada
<i>Cornus kousa x Cornus capitata</i>	Cornus Norman Haddon – Aug 06 (3)	
<i>Corylopsis spicata</i>	Spike witch hazel – Nov 07 (9)	
<i>Corylus cornuta</i>	California hazelnut – Dec 02 (5)	
<i>Daphniphyllum glaucescens</i>	Feb 09 (9)	New report from Canada
<i>Distylium myricoides</i>	Myrtle-leaved Distylium – Jul 06 (9)	
<i>Drimys winteri</i>	Winter's bark – July 04 (3)	
<i>Dryopteris arguta</i>	California wood fern – May 04 (5)	

<i>Eucalyptus haemastoma</i>	Scribbly gum – Aug 06 (3)	
<i>Euonymus kiautschovicus</i>	Spreading euonymus – Jan 06 (9)	
<i>Fraxinus latifolia</i>	Oregon ash – Aug 05 (5)	
<i>Garrya elliptica</i>	Silk tassel tree , coast silktassel – Aug 07 (3)	
<i>Gaultheria shallon</i>	Salal, Oregon wintergreen – Jan 06 (9)	
<i>Hamamelis x intermedia</i> ( <i>H. mollis</i> & <i>H. japonica</i> )	Hybrid witchhazel – Jan 06 (9)	
<i>Hamamelis mollis</i>	Chinese witchhazel – Jan 05 (3)	
<i>Ilex aquifolium</i>	European Holly – Apr 09 (3)	New report from United Kingdom
<i>Ilex purpurea</i>	Oriental holly – Jul 06 (9)	
<i>Leucothoe axillaris</i>	Fetterbush, dog hobble – Jan 06 (9)	
<i>Leucothoe fontanesiana</i>	Drooping leucothoe - Oct 03 (3)	
<i>Lithocarpus glaber</i>	Japanese oak Apr 09 (3)	New report from United Kingdom
<i>Loropetalum chinense</i>	Loropetalum – Jul 06 (9)	
<i>Magnolia cavaleri</i>	Michelia – Apr 09 (9)	New report from Canada
<i>Magnolia denudata x salicifolia</i>	Magnolia – Feb 08 (3)	
<i>Magnolia ernestii</i> = <i>Michelia wilsonii</i>	Michelia – Jan 06 (9)	
<i>Magnolia foveolata</i>	Michelia – Apr 09 (9)	New report from Canada
<i>Magnolia figo</i>	Banana shrub – April 08 (1)	
<i>Magnolia grandiflora</i>	Southern magnolia – Jan 06 (9)	
<i>Magnolia kobus</i>	Kobus magnolia – Feb 08 (9)	
<i>Magnolia liliiflora</i> = <i>Magnolia quinquepeta</i>	Purple magnolia – Feb 08 (3)	
<i>Magnolia x loebneri</i>	Loebner magnolia – Jan 05 (3)	
<i>Magnolia maudiae</i> = <i>Michelia maudiae</i>	Michelia – Jan 06 (9)	
<i>Magnolia salicifolia</i> = <i>Magnolia proctoriana</i>	Anise magnolia – Feb 08 (3)	
<i>Magnolia x soulangeana</i>	Saucer magnolia – Jan 05 (3)	
<i>Magnolia stellata</i>	Star magnolia – Jan 05 (3)	
<i>Magnolia x thompsoniana</i>	Magnolia – Feb 08 (3)	

<i>(M. tripetala and M. virginiana)</i>		
<i>Manglietia insignis</i>	Red lotus tree – Aug 06 (9)	
<i>Nerium oleander</i>	Oleander – June 06 (1)	
<i>Nothofagus obliqua</i>	Roble beech – Dec 04 (3)	
<i>Osmanthus decorus</i> (≡ <i>Phillyrea decora</i> ; ≡ <i>P. vilmoriniana</i> )	Osmanthus – Jan 06 (9)	
<i>Osmanthus delavayi</i>	Delavay Osmanthus, Delavay tea olive – Jan 07 (10)	
<i>Osmanthus fragrans</i>	Sweet olive – June 06 (1)	
<i>Osmanthus heterophyllus</i>	Holly olive – June 06 (1)	
<i>Osmorhiza berteroi</i>	Sweet Cicely – Aug 05 (5)	
<i>Parakmeria lotungensis</i>	Eastern joy lotus tree – Jul 06 (9)	
<i>Physocarpus opulifolius</i>	Ninebark – Oct 07 (9)	
<i>Pittosporum undulatum</i>	Victorian box – Dec 02 (6)	
<i>Prunus lusitanica</i>	Portuguese laurel cherry – Jan 06 (9)	
<i>Prunus laurocerasus</i>	English laurel, cherry laurel – Jan 07 (10)	
<i>Pyracantha koidzumii</i>	Formosa firethorn – Apr 04 (9)	
<i>Quercus acuta</i>	Japanese evergreen oak – May 06 (3)	
<i>Quercus petraea</i>	Sessile oak – Aug 05 (3)	
<i>Quercus rubra</i>	Northern red oak – Nov 03 (8)	
<i>Ribes laurifolium</i>	Bayleaf currant Jan 09 (3)	New report from United Kingdom
<i>Rosa</i> (specific cultivars) Royal Bonica (tagged: “MEImodac”) Pink Meidiland (tagged: “MEIpoque”) Pink Sevillana (tagged: “MEIgeroka”)	Hybrid roses – Jan 06 (9)	
<i>Rosa rugosa</i>	Rugosa rose – Jan 06 (9)	
<i>Rubus spectabilis</i>	Salmonberry – Dec 02 (4)	
<i>Schima wallichii</i>	Chinese guger tree, needlewood – Nov 06 (3)	

<i>Taxus brevifolia</i>	Pacific yew – May 03 (5)	
<i>Taxus x media</i>	Yew – June 05 (8)	
<i>Torreya californica</i>	California nutmeg – Aug 05 (5)	
<i>Toxicodendron diversilobum</i>	Poison oak – Dec 02 (4)	
<i>Vancouveria planipetala</i>	Redwood ivy – Aug05 (5)	
<i>Vaccinium myrtilus</i>	Bilberry - Feb 09 (3)	New report from United Kingdom
<i>Vaccinium vitis-idaea</i>	Cowberry, Lingon berry, Mountain cranberry - Apr 09 (3)	New report from United Kingdom

**(From parentheses numbers above) – Sources of reports of detections and identifications**

- <sup>1</sup> California Department of Food and Agriculture, Sacramento, CA
- <sup>2</sup> Oregon Department of Agriculture. Salem, OR
- <sup>3</sup> Department for Environment, Food and Rural Affairs, UK; (April 2009)  
Food and Environment Research Agency (FERA)
- <sup>4</sup> Everett Hanson, Oregon State University, Corvallis, OR
- <sup>5</sup> David Rizzo, University of California, Davis, CA
- <sup>6</sup> Matteo Garbelotto, University of California, Berkeley, CA
- <sup>7</sup> Gary Chastagner, Washington State University, Puyallup, WA
- <sup>8</sup> Plant Protection Service, Wageningen, Netherlands
- <sup>9</sup> Canadian Food Inspection Agency, Ottawa, Ontario, Canada
- <sup>10</sup> Washington State Department of Agriculture, Olympia, WA

\* Unmanufactured wood and wood products, including firewood, logs, and lumber of species listed above and marked with an asterisk (\*) are regulated. See 7 CFR 301.92

## **Rationale for Lists:**

### **Host Plants Regulated for *Phytophthora ramorum*:**

Naturally infected associated plants are deemed host plants regulated for *P. ramorum* upon completion, documentation, review, and acceptance of traditional Koch's postulates. Details on regulated plants and articles can be found via links to "Phytophthora ramorum 7 CFR 301.92" and "Recent Modifications to Phytophthora ramorum Regulations" at:

[http://www.aphis.usda.gov/plant\\_health/plant\\_pest\\_info/pram/index.shtml](http://www.aphis.usda.gov/plant_health/plant_pest_info/pram/index.shtml)

The plants listed in the original Interim Rule dated 14 February 2002 were adapted from a review and evaluation of lists of regulated plants from other regulatory agencies.

### **Plants Associated with *Phytophthora ramorum*:**

Plants associated with *P. ramorum* are naturally infected plants from which *P. ramorum* has been cultured and/or detected using PCR (Polymerase Chain Reaction). Traditional Koch's postulates have not yet been completed nor documented and reviewed for each of these associated plants. These reports must be documented and reviewed by PPQ before they will be listed.

### **Regulation at the genus level:**

Plants included in either of the above lists may be regulated at the genus level. This will ensure appropriate and effective inspection in quarantine areas, regulated nurseries, and regulated articles to mitigate the spread of *P. ramorum*. Examples of this include when the number of individual species, hybrids, or cultivars listed or to be listed are determined to hinder appropriate and effective inspection or regulation; or when sufficient numbers of member species of a genus are known susceptible to the disease causing organism, all members of that genus have a demonstrable risk of spreading that disease. Thus, to prevent the spread of disease, all members of that genus will be treated the same in our regulation.

### **Nomenclature:**

We intend to have this list consistent with the listing in the Agricultural Research Service (ARS), Germplasm Resources Information Network (GRIN) database.

<http://www.ars-grin.gov/npgs/aboutgrin.html>

### Agency Contact:

Prakash K. Hebbar  
National Program Manager  
301-734-5717