

Plants Resistant or Susceptible to *Armillaria mellea*, The Oak Root Fungus

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Armillaria mellea is a common disease producing fungus found in much of California . It commonly occurs naturally in roots of oaks but does not damage them unless they are weakened by other factors. When oaks are cut down, the fungus moves through the dead wood more rapidly than through living wood and can exist in old roots for many years. It also does this in roots of other infected trees. Infection takes place by roots of susceptible plants coming in contact with roots in which the fungus is active. Some plants are naturally susceptible to being invaded by the fungus. Many plants are resistant to the fungus and though the fungus may infect them, little damage occurs. Such plants, however, if they are weakened in any way may become susceptible and the fungus may kill them.

The plants listed here are divided into three groups. Those listed as resistant are rarely damaged by the fungus. Those listed as moderately resistant frequently become infected but rarely are killed by the fungus. Those listed as susceptible are severely infected and usually are killed by the fungus.

The fungus is variable in its ability to infect plants and to damage them. Thus in some areas where the fungus occurs, more plant species may be killed than in areas where other strains of the fungus occur.

The list is composed of two parts. In Part A, the plants were tested in two ways. Most were grown in an old orchard area known to be infested by the fungus at the University of California Deciduous Fruit Station in Santa Clara , California . Information about early procedures is not available. However, all plants tested since 1952 were planted in the infested soil. In addition, two six to eight inch pieces of woody branch material colonized by the fungus in the laboratory were put next to the root system at the time of planting. Isolates used in these pieces were selected for their ability to be highly virulent forms. Ten plants of each species were tested. Following planting, plants were monitored periodically and dead plants, particularly those with the oak root fungus were recorded. After ten years, all remaining plants were pulled and their root systems were rated as to the amount of infection found. In addition, some plants were tested in greenhouse experiments in which ten plants each were exposed up to one year to two strains of the fungus as listed above except this was done in unglazed ceramic pots. This project was supported by a grant from the Elvin J Slosson Fund and plants so tested are marked with a double asterisk**.

In the Fruits and Nuts section, many plants are included even though they may not be used in the production of crops. They are included here so that researchers may want to include them in their breeding experiments. If any of these plants have been known to be used as ornamental plants, they are included in that section.

Although when tested, pears have been found to be resistant, recently pears in Lake County are becoming infected. Research will determine the reasons for this. Also, the fungus in this area grows through the soil and can spread this way. This is the only known area where this occurs.

Plants listed with a double asterisk** were tested in pots in a research greenhouse. This research was funded by a grant from the Elvenia Slosson Fund.

Plants listed in Part B were not tested for resistance or susceptibility. Information presented is based on finding plants infected by the fungus, or finding plants that are not infected. Additional information was obtained from the *California Plant Disease Host Index*, published by the California Department of Food and Agriculture and the list of plant diseases published by the American Phytopathological Society, *Fungi on Plants and Plant Products in the United States*. Plants marked with an asterisk * are from information supplied by the staff of Quarryhill Botanical Garden, Glen Ellen.

Part A

RESISTANT PLANTS

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| <i>Abies concolor</i> | Colorado or White Fir |
| <i>Acacia longifolia</i> | Sydney Golden Wattle, Bush Acacia |
| <i>Acacia mearnsii</i> | Black Wattle |
| <i>Acacia verticillata</i> | Whorl-leaved or Star Acacia |
| <i>Acer cappadoicum</i> | Caucasian Maple |
| <i>Acer crataegifolium</i> | Hawthorne Maple |
| <i>Acer macrophyllum</i> | Big-leaf Maple, Oregon Maple |
| <i>Acer palmatum</i> | Japanese Maple |
| <i>Acer saccharum</i> | Sugar Maple |
| <i>Acer tataricum</i> | Tartarian Maple |
| <i>Acer tataricum ssp Ginnala</i> | Ginnala Maple, Amur Maple |
| <i>Ailanthus altissima</i> | Tree-of-heaven |
| <i>Ailanthus giraldii</i> | |
| <i>Angophora cordifolia</i> | Gum Myrtle, Smooth Bark Apple |
| <i>Arbutus menziesii</i> | Madrone |
| <i>Asimina triloba</i> | Papaw, Pawpaw |
| <i>Berberis polyantha</i> | |
| <i>Betula pumila</i> | Swamp Birch, American Dwarf Birch |
| <i>Brachychiton populneus</i> | Kurrajong Bottle Tree |
| <i>Broussonetia papyrifera</i> | Paper Mulberry |
| <i>Brugmansia suaveolens</i> | Angel's Trumpet |
| <i>Buxus sempervirens</i> | Common or English Box |
| <i>Buxus sempervirens var. arborescens</i> | Common Box (Tree Form) |
| <i>Callicarpa japonica</i> | Beauty-berry |
| <i>Calocedrus decurrens</i> | Incense Cedar |
| <i>Calycanthus occidentalis</i> | Western Spice Bush, CA Allspice |
| <i>Carpenteria californica</i> | Bush or Tree Anemone |
| <i>Catalpa bignonioides</i> | Common Catalpa, Indian Bean |
| <i>Catalpa hybrida</i> | Hybrid Catalpa |
| <i>Catalpa ovata</i> | Chinese Catalpa |
| <i>Celtis australis</i> | European or Mediterranean Hackberry |
| <i>Celtis occidentalis</i> | Hackberry |
| <i>Ceratonia siliqua</i> | Carob, St John's Bread, Algarroba |
| <i>Cercis occidentalis</i> | CA Redbud, Western Redbud |
| <i>Cercis siliquastrum</i> | Judas Tree, Love Tree |
| <i>Chaenomeles cathayensis</i> | Flowering Quince |
| <i>Chaenomeles japonica</i> | Japanese Flowering Quince |
| <i>Chamaecyparis lawsoniana</i> "Ellwoodii" | Ellwood Cypress |

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| <i>Chamaerops humilis</i> | Fan Palm |
| <i>Chionanthus retusa</i> | Chinese Fringe Tree |
| <i>Clerodendron bungei</i> | Kashmir Bouquet, Glory Flower |
| <i>Cornus mas</i> | Cornelian Cherry, Sorbet |
| <i>Corynabutilon vitifolium</i> | Flowering Maple |
| <i>Correa "Victory Bells"</i> | |
| <i>Cotinus coggygria</i> | Smoke Tree |
| <i>Cryptomeria japonica</i> | Japanese Cryptomeria or Cedar |
| <i>Cupaniopsis anacardioides</i> | Carrotwood, Tuckeroo |
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| <i>Cupressocyparis X leylandii</i> | Leyland Cypress |
| <i>Cupressus arizonica var. glabra</i> | Smooth Arizona Cypress |
| <i>Diospyros glaucifolia</i> | |
| <i>Elaeagnus angustifolia</i> | Oleaster, Russian Olive, Silver Berry |
| <i>Erica arborea</i> | Tree Heath |
| <i>Eucalyptus camaldulensis</i> | River Red Gum |
| <i>Eucalyptus cinerea</i> | Dollar-leaf Eucalyptus, Mealy Stringbark |
| <i>Eucalyptus grandis</i> | Rose Gum |
| <i>Eucalptus mannifera ssp Maculosa</i> | Brittle Gum |
| <i>Eucalyptus melliodora</i> | Yellow Box |
| <i>Eucalyptus risdonii</i> | Risdon Peppermint |
| <i>Eucomia ulmoides</i> | Gutta-percha Tree |
| <i>Euonymus europeus</i> | Common Spindle Tree |
| <i>Exochorda korolkowii</i> | |
| <i>Exochorda racemosa</i> | Pearlbush |
| <i>Fabiana imbricate</i> | Fabiana |
| <i>Fraxinus angustifolia</i> | |
| <i>Fraxinus ornus</i> | Flowering Ash, Manna Ash |
| <i>Fraxinus uhdei</i> | Shamel Ash, Evergreen Ash |
| <i>Fraxinus velutina var. glabra "Modesto"</i> | Modesto Ash |
| <i>Garrya elliptica</i> | Silk Tassel |
| <i>Geijera parviflora</i> | Australian Willow, Wilga |
| <i>Ginkgo biloba</i> | Maidenhair Tree |
| <i>Gleditsia tricanthos inermis "Shademaster"</i> | Shademaster Locust |
| <i>Grewia biloba</i> | |
| <i>Gymnocladus dioica</i> | Kentucky Coffee Tree |
| <i>Hibiscus syriacus</i> | Rose-of-Sharon, Shrub Althea |
| <i>Hypericum patulum</i> | St. Johnswort |
| <i>Ilex aquifolium</i> | English Holly, Common Holly |
| <i>Ilex x aquipernyi</i> | |
| <i>Ilex cassine</i> | Dahoon |
| <i>Ilex cornuta</i> | Chinese Holly, Horned Holly |

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| <i>Ilex opaca</i> | American Holly |
| <i>Ilex verticillata</i> | Black Alder, Winterberry |
| <i>Jacaranda mimosifolia</i> | Jacaranda |
| <i>Koelreuteria paniculata</i> | Golden Rain Tree, Pride of India |
| <i>Lagerstroemia x amabilis</i> | Crepe Myrtle |
| <i>Ligustrum quinhoui</i> | |
| <i>Ligustrum tschonskii</i> | |
| <i>Liquidambar orientalis</i> | Oriental Sweet Gum |
| <i>Liquidambar styraciflua</i> | American Sweet Gum, Liquidambar |
| <i>Liriodendron tulipifera</i> | Tulip Tree, Yellow or Tulip Poplar |
| <i>Lonicera nitida</i> | Box Honeysuckle |
| <i>Lyonia mariana</i> | Stagger Bush |
| <i>Maackia amurensis</i> | |
| <i>Maclura pomifera</i> | Osage Orange |
| <i>Magnolia grandiflora</i> | Southern Magnolia |
| <i>Magnolia salicifolia</i> | Anise magnolia, Willow-leaf Magnolia |
| <i>Mahonia aquifolium</i> | Holly Mahonia, Oregon Grape |
| <i>Mahonia nevinii</i> | Nevin Mahonia |
| <i>Malus florentina</i> | |
| <i>Malus floribunda</i> | Japanese Flowering Crab |
| <i>Malus ioensis</i> | Prairie Crabapple |
| <i>Maytenus boaria</i> | Mayten Tree |
| <i>Melaleuca styphelioides</i> | Prickly Paperbark |
| <i>Melia azedarach</i> | Persian lilac, Bead Tree |
| <i>Metasequoia glyptostroboides</i> | Dawn Redwood |
| <i>Myrica pensylvanica</i> | Bayberry, Candleberry |
| <i>Nandina domestica</i> | Sacred Bamboo, Heavenly Bamboo |
| <i>Paulownia fortunei</i> | |
| <i>Persea indica</i> | Indian Avocado |
| <i>Phellodendron amurensis</i> | Amur Cork Tree |
| <i>Phellodendron chinense</i> | Chinese Cork Tree |
| <i>Philadelphus coronaries</i> | Mock Orange |
| <i>Phlomis fruticosa</i> | Jerusalem Sage |
| <i>Photinia davidsoniae</i> | |
| <i>Photinia x fraseri</i> | |
| <i>Pinus canariensis</i> | Canary Island Pine |
| <i>Pinus halepensis</i> | Aleppo Pine |
| <i>Pinus monticola</i> | Western White Pine |
| <i>Pinus nigra ssp. Larico</i> | Corsican Pine |
| <i>Pinus patula</i> | Mexican pine, Jelecote Pine |
| <i>Pinus radiata</i> | Monterey Pine |
| <i>Pinus sylvestris</i> | Scots Pine, Scotch Pine |
| <i>Pinus torreyana</i> | Torrey Pine |
| <i>Pistacia chinensis</i> | Chinese Pistache, Chinese Pistachio |
| <i>Pittosporum crassifolium</i> | Caro, Karo, Evergreen Pittosporum |

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| <i>Pittosporum eugenoides</i> | Terata, Lemonwood |
| <i>Pittosporum heterophyllum</i> | |
| <i>Pittosporum phillyreoides</i> | Narrow-leaved or Weeping Pittosporum |
| <i>Pittosporum rhombifolium</i> | Queensland Pittosporum |
| <i>Pittosporum tenuifolium</i> | Tawhiwhi |
| <i>Pittosporum undulatum</i> | Victorian Box, Orange Berry Pittosporum |
| <i>Pittosporum viridiflorum</i> | Cape Pittosporum |
| <i>Prunus caroliniana</i> | American Cherry Laurel |
| <i>Prunus ilicifolia</i> | Holly-leaf Cherry, California Cherry |
| <i>Prunus lyonii</i> | Catalina Cherry |
| <i>Prunus virginiana</i> | Choke Cherry |
| <i>Pseudocydonia sinensis</i> | Chinese Quince |
| <i>Psidium littorale</i> var. <i>longipes</i> | Strawberry or Purple Strawberry Guava |
| <i>Quercus ilex</i> | Holly Oak, Holm Oak, Truffle Oak |
| <i>Quercus lobata</i> | Valley Oak, California White Oak |
| <i>Quercus phillyraeoides</i> | |
| <i>Quillaja saponaria</i> | Soapbark Tree, Quillay, Soap Bush |
| <i>Rhus aromatica</i> | Fragrant Sumac, Lemon Sumac |
| <i>Rhus copallina</i> | Shining Sumac, Dwarf Sumac |
| <i>Sambucus canadensis</i> | American or Sweet Elder |
| <i>Sapium sebiferum</i> | Chinese or Vegetable Tallow Tree |
| <i>Sequoia sempervirens</i> | Coast Redwood, CA Redwood |
| <i>Shepherdia argentea</i> | Buffalo Berry, Silverberry |
| <i>Sophora japonica</i> | Japanese Pagoda Tree |
| <i>Styrax japonicum</i> | Japanese Snowball |
| <i>Symphoricarpos</i> sp. | Snowberry |
| <i>Syngonium paniculatum</i> | Australian Bush Cherry |
| <i>Taxodium distichum</i> | Bald Cypress, Swamp Cypress |
| <i>Ternstroemia sylvatica</i> | Mexican Ternstroemia |
| <i>Tilia tomentosa</i> | Silver Linden, Silver Lime |
| <i>Tristania conferta</i> | Brisbane Box |
| <i>Ulmus</i> x " <i>Sapporo Gold</i> " | |
| <i>Ulmus parvifolia</i> | Chinese Elm |
| <i>Vitex agnus-castus</i> | Blue Chaste Tree, Chaste Tree |
| <i>Wisteria sinensis</i> | |

Part A

MODERATELY RESISTANT PLANTS

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| <i>Abelia grandiflora</i> | Glossy Abelia, White Abelia |
| <i>Abutilon pictum</i> | Flowering Maple |
| <i>Acer negundo</i> ssp. <i>Californicum</i> | Box Elder |
| <i>Acer tegmentosum</i> | |
| <i>Albizia julibrissin</i> | Silk Tree |
| <i>Amorpha fruticosa</i> | False Indigo, Indigo Bush |
| <i>Amorpha fruticosa</i> var. <i>nana</i> | Bastard Indigo |
| <i>Berberis darwinii</i> | Darwin Barberry |
| <i>Berberis thunbergii</i> | Japanese Barberry |
| <i>Berberis wilsoniae</i> | Wilson Barberry |
| <i>Cephalanthus occidentalis</i> | Buttonbush, Buttonwillow, Honey Bells |
| <i>Cestrum elegans</i> | |
| <i>Chamaecyparis lawsoniana</i> | Lawson Cypress, Port Orford Cedar |
| <i>Chamaecytisus purpureus</i> | Purple Broom |
| <i>Chimonanthus praecox</i> | Wintersweet |
| <i>Cladrastis lutea</i> | Kentucky or American Yellowwood |
| <i>Crataegus phaenopyrum</i> | Washington Thorn |
| <i>Crotalaria agatiflora</i> | |
| <i>Dais cotinifolia</i> | Canary-Bird Bush, Pompon Tree |
| <i>Elaeagnus commutate</i> | Silverberry |
| <i>Eucalyptus polyanthemos</i> | Redbox Gum, Silver Dollar Gum |
| <i>Eucalyptus pulchella</i> | White Peppermint |
| <i>Euonymus japonica</i> | Evergreen or Japanese Euonymus |
| <i>Grevillea robusta</i> | Silk Oak |
| <i>Grewia similes</i> | |
| <i>Hebe x andersonii</i> | Anderson Speedwell |
| <i>Hebe speciosa</i> | Showy or Imperial Speedwell |
| <i>Hovenia dulcis</i> | Japanese or Chinese Raisin Tree |
| <i>Lochroma cyanea</i> | Purple Tobacco |
| <i>Koelreuteria paniculata</i> | Golden Rain Tree, Pride of India |
| <i>Lagerstroemia indica</i> | Crape Myrtle |
| <i>Ligustrum japonicum</i> | Japanese Privet, Wax-leaf Privet |
| <i>Myrtus communis</i> | Myrtle |
| <i>Nerium oleander</i> | Oleander |
| <i>Paulownia fargesii</i> | |
| <i>Photinia bearverdiana</i> | |
| <i>Picea abies</i> | Norway Spruce |
| <i>Pinus brutea</i> ssp. <i>Eldarica</i> | Eldarica Pine |

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| <i>Pinus jeffreyi</i> | Jeffrey Pine |
| <i>Pinus nigra</i> | Austrian Pine |
| <i>Pittosporum tobira</i> | Japanese Pittosporum, Tobira |
| <i>Prunus grayana</i> | Japanese Bird Cherry |
| <i>Prunus subhirtella</i> | Rosebud Cherry, Spring Cherry |
| <i>Pseudotsuga menziesii</i> | Douglas Fir |
| <i>Pyracantha coccinea</i> | Scarlet Firethorn |
| <i>Pyracantha coccinea</i> ‘Lalandei’ | Lalande Pyracantha |
| <i>Pyracantha coccinea</i> “Wyattii” | |
| <i>Pyracantha crenatoserrata</i> | |
| <i>Pyracantha crenulata</i> var. <i>kansuensis</i> | Kansu Firethorn |
| <i>Pyracantha</i> x “Forest Hills” | |
| <i>Pyracantha</i> x “Morettii” | |
| <i>Quercus chrysolepis</i> | Canyon Oak, Golden Cup Oak |
| <i>Rosmarinus officinalis</i> | Rosemary |
| <i>Sequoiadendron giganteum</i> | Giant Redwood |
| <i>Spiraea prunifolia</i> | Bridal Wreath, Shoe-button Spiraea |
| <i>Wisteria macrostachys</i> | Wisteria |
| <i>Zelkova serrata</i> | Japanese Zelkova |

Part A

SUSCEPTIBLE

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| <i>Abutilon</i> | |
| <i>Abutilon megapotamicum</i> | |
| <i>Abutilon vitifolium</i> | Trailing Abutilon |
| <i>Acacia floribunda</i> | Sydney Acacia, Sydney Wattle |
| <i>Acer capillipes</i> | |
| <i>Acer caudatifolium</i> | |
| <i>Acer fulvescens</i> var. <i>pentalobatum</i> | |
| <i>Albizzia lophantha</i> | Plum Albizz |
| <i>Arbutus unedo</i> | Strawberry Tree |
| <i>Azara microphylla</i> | Box Leaf Azara |
| <i>Betula pendula</i> | European White Birch, Silver Birch |
| <i>Buddleja davidii</i> var. <i>magnifica</i> | Butterfly Bush, Summer Lilac |
| <i>Buddleja forestii</i> | Oxeye Butterfly Bush |
| <i>Buddleja globosa</i> | Orange Ball Tree |
| <i>Caesalpinia gilliesii</i> | Bird of Paradise Bush |
| <i>Callistemon viminalis</i> | Weeping Bottle Brush |
| <i>Carpinus betulus</i> | European Hornbeam, Common Hornbeam |
| <i>Caryopteris x clandonensis</i> | Blue Mist, Bluebeard |
| <i>Casuarina verticillata</i> | She Oak, Beefwood, Horsetail Tree |
| <i>Ceanothus arboreus</i> | Catalina Mountain Lilac |
| <i>Ceanothus thyrsiflorus</i> | Blue Blossom, Blue Brush |
| <i>Cercidiphyllum japonicum</i> | |
| <i>Cotoneaster harrovianus</i> | Harrow Cotoneaster |
| <i>Cotoneaster horizontalis</i> | Rock Cotoneaster |
| <i>Cotoneaster lacteus</i> | Clusterberry or Parney Cotoneaster |
| <i>Cotoneaster microphyllus</i> | Rockspray Cotoneaster |
| <i>Cotoneaster pannosus</i> | Silver Leaf Cotoneaster |
| <i>Cotoneaster salicifolius</i> var. <i>floccosus</i> | Hardy Willowleaf Cotoneaster |
| <i>Deutzia scabra</i> | Fuzzy Deutzia |
| <i>Dodonea viscosa</i> | Native Hops |
| <i>Erica carnea</i> | Winter Heath, Mediterranean Heather |
| <i>Erica intertesta</i> | |
| <i>Erythrina crista-galli</i> | Cockspur Coral Tree, Coral Tree |
| <i>Escallonia bifida</i> | White Escallonia |
| <i>Escallonia x franciscana</i> | Rose or Slippery-elm Escallonia |
| <i>Escallonia pulverulenta</i> | |
| <i>Escallonia rubra</i> var. <i>macrantha</i> | Red Escallonia |
| <i>Eucalyptus baueriana</i> | Blue Box |

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| <i>Eucalyptus citriodora</i> | Lemon-scented Gum |
| <i>Eucalyptus gracilis</i> | Yorrell, White Mallee |
| <i>Eucalyptus grossa</i> | Coarse-flowered Mallee |
| <i>Eucalyptus maculata</i> | Spotted Gum |
| <i>Eucalyptus pauciflora</i> | Cabbage Gum, Snow or Ghost Gum |
| <i>Eucalyptus pulverulenta</i> | Silver Dollar Tree, Silver-leaved Gum |
| <i>Eucalyptus rudis</i> | Desert Gum, Moitch Eucalyptus |
| <i>Eucalyptus sideroxylon</i> | Pink Iron Bark, Red Iron Bark |
| <i>Eucalyptus tereticormis</i> | Forest Red Gum |
| <i>Euonymus japonicus</i> "Aureo-marginata" | Golden Euonymus |
| <i>Euphorbia pulcherrima</i> | Poinsettia, Christmas Flower |
| <i>Fagus sylvatica</i> | European Beech, Common Beech |
| <i>Felecia fruticosa</i> | |
| <i>Fontanesia phillyreoides</i> ssp. <i>fortunei</i> | |
| <i>Fraxinus holotricha</i> | Kimberly Blue Ash |
| <i>Fremontodendron mexicanum</i> | Southern or Mexican Fremontia |
| <i>Genista x spachiana</i> | Eastern Broom |
| <i>Gordonia lasianthus</i> | Loblolly Bay |
| <i>Hakea laurina</i> | Sea Urchin Tree, Pincushion Hakea |
| <i>Hakea oleifolia</i> | |
| <i>Hebe odora</i> | Boxleaf Veronica |
| <i>Heteromeles arbutifolia</i> | Toyon, Christmas Berry |
| <i>Hydrangea quercifolia</i> | Oakleaf Hydrangea |
| <i>Hypericum beanii</i> | Henry St. Johnswort, Goldflower |
| <i>Hypericum prolificum</i> | Shrubby St. Johnswort, Broombrush |
| <i>Kennedia</i> sp. | Coral Tree |
| <i>Kerria japonica</i> | Japanese Rose Kerria, Globe Flower |
| <i>Laburnum angyroides</i> | Golden Chain Tree |
| <i>Laburnum x watereri</i> "Vossii" | Long Cluster Golden Chain Tree |
| <i>Leptospermum laevigatus</i> | Australian Tea Tree |
| <i>Leptospermum scoparium</i> | New Zealand Tea Tree, Manuka |
| <i>Ligustrum vulgare</i> "Aureum" | Yellowleaf European Privet |
| <i>Lithocarpus densiflorus</i> | Tan Bark Oak |
| <i>Malus x eleya</i> | Eley Crab Apple |
| <i>Malus floribunda</i> | Japanese Flowering Crabapple |
| <i>Malus hupehensis</i> | Tea Crab Apple |
| <i>Malus sargentii</i> | Sargent Crab Apple |
| <i>Malus toringoides</i> | Cutleaf Crab Apple |
| <i>Melaleuca decora</i> | |
| <i>Melaleuca hypericifolia</i> | Dotted Melaleuca |
| <i>Melaleuca leucadendra</i> | Cajeput Tree, Punk Tree |
| <i>Melaleuca linarifolia</i> | Flax-leaf Paperbark |
| <i>Melaleuca radula</i> | |

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| <i>Melaleuca styphelioides</i> | Prickly Paperbark |
| <i>Myrtus communis</i> "Variegata" | Variegated Myrtle |
| <i>Paulownia tomentosa</i> | Royal Paulownia, Empress Tree |
| <i>Paulownia tomentosa</i> "Lilacina" | |
| <i>Picea pungens</i> | Colorado Blue Spruce |
| <i>Pinus brutia</i> | Brutia Pine |
| <i>Pinus monophylla</i> | One-needled Pinyon Pine |
| <i>Pinus nigra</i> | Black Pine, Austrian Pine |
| <i>Prunus laurocerasus</i> | Cherry Laurel, English Laurel |
| <i>Prunus triloba</i> | Flowering Almond |
| <i>Pyracantha angustifolia</i> | Narrowleaf Firethorn |
| <i>Pyracantha crenato-serrata</i> | Yunan Firethorn |
| <i>Pyracantha crenulata</i> | Nepal Firethorn, Nepalese White Thorn |
| <i>Pyracantha koidzumii</i> | Formosa Firethorn |
| <i>Pyracantha rogersiana</i> | Rogers Firethorn |
| <i>Quercus dumosa</i> | CA Scrub Oak |
| <i>Quercus virginiana</i> | Southern Live Oak |
| <i>Rhododendron cv Blue Diamond</i> | Blue Diamond Azalea |
| <i>Rhus ovata</i> | Sugarbush, Sugar Sumac |
| <i>Rhus trilobata</i> | Squawbush, Skunkbush |
| <i>Schinus chichita var. rhoifolius</i> | Aroeira Blanca |
| <i>Schinus lentiscifolius</i> | Coroba |
| <i>Schinus longifolius</i> | Molle |
| <i>Schinus polygamus</i> | Pepper Tree |
| <i>Schinus terebinthifolius</i> | Brazilian Pepper Tree |
| <i>Senna multiglandulosa</i> | Senna, Woolly Senna |
| <i>Sesbania punicea</i> | Glory Pea, Scarlet Wisteria Tree |
| <i>Severina buxifolia</i> | Chinese Box Orange |
| <i>Sutherlandia frutescens</i> | Balloon Pea, Duck Plant |
| <i>Syringa vulgaris</i> | Lilac |
| <i>Tecoma stans</i> | Yellow Bells, Yellow Elder |
| <i>Thuja plicata</i> | Giant Arborvitae, Western Red Cedar |
| <i>Ulex europaeus</i> | Furze, Irish or Common Gorze |
| <i>Viburnum tinus</i> | Laurustinus |
| <i>Weigela florida</i> | Weigela |
| <i>Wistaria frutescens</i> | American Wisteria |
| <i>Xylosma congestum</i> | |

Part A
RESISTANT FRUITS AND NUTS

| | |
|--|-----------------------------------|
| <i>Carya illinoensis</i> | Pecan |
| <i>Castanea dentata</i> | American Chestnut |
| <i>Castanea sativa</i> | Spanish Chestnut |
| <i>Diospyros kaki</i> | Japanese Persimmon |
| <i>Diospyros lotus</i> | Date-plum Persimmon |
| <i>Diospyros virginiana</i> | American Persimmon, Possum Wood |
| <i>Ficus carica</i> "Kadota" | Kadota Fig |
| <i>Ficus carica</i> "Mission" | Mission Fig |
| <i>Juglans hindsii</i> | California Black Walnut |
| <i>Malus bacatta</i> var. <i>mandshurica</i> | Siberian Crab |
| <i>Malus coronaria</i> | |
| <i>Malus glaucescens</i> | |
| <i>Malus orientalis</i> | Paradise Apple |
| <i>Malus pumila</i> | |
| <i>Malus rockii</i> | |
| <i>Malus sylvestris</i> | French Crab Apple |
| <i>Persea americana</i> | Avocado |
| <i>Pistacia integerrima</i> | |
| <i>Prunus cerasifera</i> | Myrobalan Plum 29-C71 |
| <i>Prunus cerasifera</i> | Mariana Plum 2624 |
| <i>Prunus x domestica</i> ssp. <i>institia</i> | St. Julien Plum |
| <i>Prunus grayana</i> | Japanese Bird Cherry |
| <i>Prunus humilis</i> | Humble Bush Cherry |
| <i>Prunus persica</i> "Indian Peach" | Indian Peach |
| <i>Prunus pubigera</i> | |
| <i>Prunus salicina</i> | |
| <i>Prunus salicina</i> "Methley" | Methley Plum |
| <i>Prunus salicifolia</i> | Black Cherry, Mexican Bird Cherry |
| <i>Prunus tenella</i> | Dwarf Russian Almond |
| <i>Prunus virginiana</i> | Choke Cherry |
| <i>Pyrus betulifolia</i> | Birchleaf Pear |
| <i>Pyrus calleryana</i> | Callery Pear |
| <i>Pyrus communis</i> | French Pear, Common Pear |
| <i>Pyrus communis</i> "Bartlett" | Bartlett Pear (rooted cuttings) |
| <i>Pyrus communis</i> | Hybrid Old Home x Farmingdale |
| <i>Pyrus elaeagrifolia</i> | |
| <i>Pyrus regelii</i> | |
| <i>Pyrus tadschikistarica</i> | |
| <i>Rubus ulmifolia</i> <i>inermis</i> | Mertens Thornless Blackberry |
| <i>Rubus ursinus</i> "Loganobaccus" | Loganberry |
| <i>Rubus ursinus</i> "Ollalie" | Ollalieberry |

Part A

MODERATELY RESISTANT FRUITS AND NUTS

| | |
|-------------------------|-------------------------------------|
| <i>Cydonia oblonga</i> | Quince |
| <i>Malus prunifolia</i> | Pear-leaf Crabapple |
| <i>Prunus sp.</i> | Black Damask Plum |
| <i>Prunus avium</i> | Mazzard Sweet Cherry |
| <i>Prunus mexicana</i> | Big Tree Plum |
| <i>Prunus mume</i> | Japanese Apricot |
| <i>Prunus salicina</i> | Japanese Plum |
| <i>Pyrus communis</i> | Cultivar Old Home (rooted cuttings) |
| <i>Pyrus communis</i> | Winter Nelis |
| | |

Additions to list (from Bob's handwritten notes) that I did not find on the Slosson 3rd year report

Susceptible

Persicaria microphylla "Red Dragon"

Salvia leucantha

Salvia conferlifolia

Resistant

Pandorea jasminoides

Part A

SUSCEPTIBLE FRUITS AND NUTS

| | |
|--|------------------------------------|
| <i>Actinidia deliciosa</i> | Kiwi |
| <i>Castanea mollissima</i> | Chinese Chestnut |
| <i>Malus orthocarpa</i> | |
| <i>Malus pallinsiana</i> | |
| <i>Malus prunifolia</i> | Plum-leaved or Chinese Apple |
| <i>Pistacia atlantica</i> | Mt. Atlas Mastic Tree |
| <i>Pistacia mutica</i> | |
| <i>Pistacia vera</i> | Pistachio |
| <i>Prunus alleghaniensis</i> | Alleghany Plum |
| <i>Prunus armeniaca</i> | Apricot |
| <i>Prunus armeniaca var. sibirica</i> | Siberian Apricot |
| <i>Prunus bucharica</i> | |
| <i>Prunus cerasifera var. divaricata</i> | Red-leaved Cherry Plum |
| <i>Prunus cerasoides</i> | |
| <i>Prunus curdica</i> | |
| <i>Prunus x dasycarpa</i> | Purple or Black Apricot |
| <i>Prunus davidiana</i> | David's Peach |
| <i>Prunus domestica "Clyman"</i> | Clyman Plum |
| <i>Prunus domestica "Diamond"</i> | Diamond Plum |
| <i>Prunus domestica "French Prune"</i> | French Prune |
| <i>Prunus dulcis</i> | |
| <i>Prunus fenzliana</i> | |
| <i>Prunus fenzliana x Prunus Americana</i> | |
| <i>Prunus gracilis</i> | Oklahoma Plum Prairie Cherry |
| <i>Prunus hortulana</i> | Hortulana Plum |
| <i>Prunus kansuensis</i> | Kansu Plum |
| <i>Prunus mahaleb</i> | Perfumed Cherry, St. Lucien Cherry |
| <i>Prunus munsoniana</i> | Wild Goose Plum |
| <i>Prunus nigra</i> | Canadian Plum |
| <i>Prunus pedunculata</i> | |

| | |
|--|---------------------------------------|
| <i>Prunus petunnikowii</i> | |
| <i>Prunus persica</i> | Peach |
| <i>Prunus serrulata</i> | Japanese or Oriental Flowering Cherry |
| <i>Prunus spinosa</i> | Sloe, Blackthorn |
| <i>Prunus tomentosa</i> | Downy, Nanking, Manchu or Bush Cherry |
| <i>Prunus virginiana</i> var. <i>demissa</i> | Chokecherry, Western Chokecherry |
| <i>Pterpcarya stenoptera</i> | Chinese Wingnut |
| <i>Vitis</i> sp. | Grape |

Part B - PLANTS NOT TESTED

RESISTANT

| | |
|--|--------------------------|
| <i>Acer</i> sp. (except <i>A. negundo</i> var. <i>californica</i>) | |
| <i>A. capillipes</i> , <i>A. cauditifolium</i> | |
| <i>Aesculus x carnea</i> | |
| <i>Agonis</i> sp. | Willow Myrtle |
| <i>Arctostaphylos</i> sp. | Manzanita |
| <i>Araucaria</i> sp. (except <i>A. cunninghamii</i>) | |
| <i>Arctostaphylos</i> sp. | Manzanita |
| <i>Bambusa</i> sp. | Bamboo |
| <i>Calluna</i> sp. | Heather |
| <i>Cornus</i> sp. (except <i>C. florida</i> and <i>C. capitata</i>) | Dogwood |
| <i>Euryops pectinatus</i> | |
| <i>Hedera canariensis</i> | Algerian Ivy |
| <i>Hedera helix</i> | English Ivy |
| <i>Helianthemum</i> sp. | Sun Rose |
| <i>Magnolia</i> sp. | Magnolia |
| <i>Morus</i> sp. | Mulberry |
| <i>Philadelphus</i> sp. | Mock Orange |
| <i>Phyllostachys</i> sp. | Bamboo |
| <i>Platanus</i> sp. | Plane Tree, Sycamore |
| <i>Raphiolepis indica</i> | Indian Hawthorn |
| <i>Raphiolepis umbellata</i> | Yeddo Hawthorn |
| <i>Robinia</i> sp. | Locust |
| <i>Sarcocca</i> sp. | Sweet Box |
| <i>Sassafras albidum</i> | Sassafras |
| <i>Tamarix</i> sp. | Tamarisk |
| <i>Tibouchina urvelleana</i> | Pleroma, Princess Flower |
| <i>Vaccinium</i> sp. | Huckleberry |

Part B – PLANTS NOT TESTED

MODERATELY RESISTANT

| | |
|---|------------------------------------|
| * <i>Alnus sp.</i> | Alder |
| * <i>Aralia chinensis</i> | Fern-leaf Aralia, Chinese Aralia |
| * <i>Betula platyphylla var. japonica</i> | Japanese White Birch |
| * <i>Betula szechuanica</i> | |
| * <i>Buddleja japonica</i> | |
| * <i>Buddleja officinalis</i> | |
| * <i>Caryopteris incana</i> | Bluebeard, Blue Spiraea |
| * <i>Cephalotaxus harringtonia</i> | Cow's Tail Pine, Japanese Plum Yew |
| * <i>Chamaecyparis obtusa</i> | Hinoki Cypress |
| * <i>Cornus capitata</i> | Bentham's Cornus |
| * <i>Cornus chinensis</i> | |
| * <i>Corylopsis sinensis var. calvenscens</i> | Winter Hazel |
| * <i>Cryptomeria japonica</i> | Japanese Cedar or Redwood |
| * <i>Desmodium elegans</i> | Sugarwood |
| * <i>Deutzia glomeruliflora</i> | |
| * <i>Hydrangea aspera</i> | |
| * <i>Hypericum patulum</i> | |
| * <i>Idesia polycarpa</i> | |
| * <i>Indigofera hebeptala</i> | |
| * <i>Indigofera heterantha</i> | |
| <i>Indigofera sp.</i> | |
| * <i>Junierus formosana</i> | Taiwan Juniper |
| * <i>Leptodermis potaninii</i> | |
| * <i>Ligustrum delavayanum</i> | |
| * <i>Lindera erythrocarpa</i> | |
| * <i>Lonicera morrowii</i> | |
| * <i>Lonicera syringantha</i> | |
| * <i>Malus sieboldii</i> | Toringo Crabapple |
| * <i>Malus yunnanensis</i> | |
| * <i>Osmanthus delavayi</i> | Delavay Osmanthus |
| * <i>Philadelphus schrenkii</i> | |
| * <i>Pterocarya rhoifolia</i> | |

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|--|---------------------------------------|
| * <i>Pyracantha atalantioides</i> | |
| * <i>Pyrus pyrifolia</i> | Sand Pear |
| * <i>Rhus chinensis</i> | Chinese Gall, Nutgall |
| * <i>Sciadopitys verticillata</i> | Umbrella Pine, Japanese Umbrella Pine |
| * <i>Spiraea henryi</i> | |
| * <i>Stachyurus praecox</i> | |
| * <i>Syringa reticulata</i> | Japanese Tree Lilac |
| * <i>Syringa yunnanensis</i> | |
| * <i>Tsuga dumosa</i> | Himalayan Hemlock |
| * <i>Tsuga forestii</i> | |
| * <i>Viburnum cinnamomifolium</i> | Cinnamon Viburnum |
| * <i>Viburnum cylindricum</i> | |
| * <i>Viburnum foetidum</i> var. <i>ceanothoides</i> | |
| * <i>Weigela decora</i> | |
| * <i>Weigela hortensis</i> | |

Part B - PLANTS NOT TESTED

SUSCEPTIBLE

| | |
|--|-------------------------------------|
| <i>Acer negundo</i> ssp. <i>Californicum</i> | CA Box Elder |
| <i>Begonia tuberhybrida</i> | Tuberous Begonia |
| <i>Camellia</i> sp. | Camellia |
| * <i>Carpinus japonica</i> | Japanese Hornbeam |
| <i>Cedrus deodora</i> | Deodar Cedar |
| <i>Cedrus libani</i> | Cedar of Lebanon |
| <i>Cedrus libani</i> ssp. <i>atlantica</i> | Atlas Cedar |
| <i>Citrus</i> sp. | Citrus |
| <i>Cotoneaster gracilis</i> | Jade Tree, Jade Plant |
| <i>Cotoneaster moupinensis</i> | Mourning or Chinese Weeping Cypress |
| <i>Crassula ovata</i> | |
| <i>Cupressus funebris</i> | |
| <i>Cyclamen</i> sp. | Cyclamen |
| <i>Dahlia hortensis</i> | Dahlia |
| <i>Erica</i> sp. (except <i>E. arborea</i>) | |
| <i>Eriobotrya japonica</i> | Loquat |
| * <i>Eurya emarginata</i> | |
| * <i>Eurya japonica</i> | |
| <i>Fragaria x ananassa</i> | Strawberry |
| <i>Fuchsia</i> sp. | Fuchsia |
| <i>Gardenia jasminoides</i> | Gardenia |
| <i>Hebe buxifolia</i> | Hebe |

| | |
|--|--------------------------|
| <i>Hibiscus sp.</i> | Hibiscus |
| <i>Hippiastrum vitatum</i> | Amaryllis |
| * <i>Hydrangea heteromalla</i> | |
| <i>Hydrangea macrophylla</i> | Hydrangea |
| * <i>Hydrangea paniculata</i> | |
| <i>Impatiens sodenii</i> | |
| <i>Iris germanica</i> | Flag, Bearded Iris |
| <i>Juglans regia</i> | Persian Walnut |
| <i>Juniperus sp.</i> | Prostrate Junipers |
| <i>Laurus nobilis</i> | Sweet Bay |
| <i>Ligustrum sp. (except L. tschonskii and L. japonicum)</i> | Privet |
| <i>Musa x paradisiacal</i> | Banana |
| <i>Nyssa sp.</i> | Tupelo |
| <i>Olea europea</i> | Olive |
| <i>Opuntia stricta var. dilleni</i> | Prickly Pear Cactus |
| <i>Paeonia lactiflora</i> | Peony |
| <i>Pelargonium sp.</i> | Geranium |
| <i>Quercus kelloggii</i> | California Black Oak |
| <i>Rhamnus californicus</i> | Coffeeberry |
| * <i>Rhamnus crenatus</i> | |
| * <i>Rhamnus japonicus</i> | |
| <i>Rhododendron sp.</i> | Rhododendron, Azalea |
| <i>Rosa sp.</i> | Rose |
| <i>Rubus sp. (except Merten Thornless, loganberry, ollalieberry)</i> | |
| <i>Salix pendulina</i> | Wisconsin Weeping Willow |
| * <i>Schima wallichii</i> | |
| <i>Schinus molle</i> | California Pepper Tree |
| <i>Syagrus rommanzoffiana</i> | Queen Palm |
| <i>Trachelospermum jasminoides</i> | Star Jasmine |
| <i>Zantedeschia sp.</i> | Calla |
| | |