



PLANTS RESISTANT OR SUSCEPTIBLE TO VERTICILLIUM WILT



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PLANTS RESISTANT OR SUSCEPTIBLE TO VERTICILLIUM WILT*

TREES—Susceptible

Botanical Name	Common Name
<i>Acer</i> species	Maple
<i>Acer negundo</i>	Box elder
<i>Ailanthus altissima</i>	Tree-of-heaven
<i>Carya illinoensis</i>	Pecan
<i>Catalpa</i> species	Catalpa
<i>Ceratonia siliqua</i>	Carob
<i>Cercis canadensis</i>	Redbud
<i>Cinnamomum camphora</i>	Camphor tree
<i>Cladrastis lutea</i>	Yellow wood
<i>Cupaniopsis anacardioides</i>	Carrotwood
<i>Diospyros</i> species	Persimmon
<i>Elaeagnus angustifolia</i>	Oleaster, Russian olive
<i>Ficus benjamina</i>	Weeping fig
<i>Ficus retusa</i>	Indian laurel
<i>Fraxinus</i> species	Ash
<i>Koelreuteria paniculata</i>	Golden rain tree
<i>Liriodendron tulipifera</i>	Tulip tree
<i>Magnolia grandiflora</i>	Southern magnolia
<i>Nyssa sylvatica</i>	Black gum, pepperidge
<i>Olea europaea</i>	Olive
<i>Persea americana</i>	Avocado
<i>Pistacia chinensis</i>	Chinese pistache
<i>Pistacia vera</i>	Pistache
<i>Prunus</i> species	Almond, apricot, cherry, peach, plum, prune
<i>Robinia pseudoacacia</i>	Black locust
<i>Schinus molle</i>	California pepper tree
<i>Schinus terebinthifolius</i>	Brazilian pepper tree
<i>Ulmus</i> species	Elm

* Caused by the microsclerotial form of *Verticillium* species, known as *Verticillium dahliae* Kleb. or *Verticillium albo-atrum*, Reinke and Berth.

GROUND COVERS, SHRUBS, AND VINES-Susceptible

Botanical Name	Common Name
<i>Berberis (Mahonia)species</i>	Barberry
<i>Campsis radicans</i>	Trumpet creeper
<i>Capsicum species</i>	Pepper
<i>Carpobrotus edulis</i>	Ice plant
<i>Cistus ladanifer</i>	Spotted rock rose
<i>Cistuspalhinhai</i>	Rock rose
<i>Cistus x purpureus</i>	Orchid-spot rock rose
<i>Cotinus coggygria</i>	Smoke tree
<i>Dodonaea viscosa</i>	Hopseed bush
<i>Erica species</i>	Heather
<i>Fremontodendron species</i>	Flannel bush
<i>Fuchsia species</i>	Fuchsia
<i>Hebe bollonsii</i>	Hebe
<i>Hebe x carnea 'Carnea'</i>	Hebe
<i>Hebe lewisii</i>	Hebe
<i>Jasminum magnificum</i>	Angel wing jasmine
<i>Jasminum mesnyi</i>	Primrose jasm ine
<i>Lampranthus spectabilis</i>	Ice plant
<i>Ligustrum species</i>	Privet
<i>Nandina domestica</i>	Sacred bamboo
<i>Parthenium argentatum</i>	Guayule
<i>Raphiolepis indica</i>	Indian hawthorn
<i>Raphiolepis umbellata</i>	Yeddo hawthorn
<i>Rhus integrifolia</i>	Lemonade berry
<i>Rhus species</i>	Sumac
<i>Ribes species</i>	Currant, gooseberry
<i>Rosa species</i>	Rose
<i>Rosmarinus officinalis L.</i>	Rosemary
<i>Rubus allegheniensis</i>	Taylor blackberry
<i>Rubus idaeus</i>	Red raspberry
<i>Rubus occidentalis</i>	Black raspberry
<i>Rubus parviflorus</i>	Thimbleberry
<i>Rubus species</i>	Dewberry
<i>Rubus ursinus</i> ¹	Blackberry, brambles
<i>Sambucus species</i>	Elderberry
<i>Syringa vulgaris</i>	Lilac
<i>Viburnum species</i>	Viburnum, wayfaring-tree, others

¹ Susceptible cultivars are Boysen, Nectar, and Young. Resistant cultivars of bushberries are Cory's Thornless, Himalaya, Logan, Mammouth, and Ollalie.

VEGETABLE AND FIELD CROPS—Susceptible

Botanical Name	Common Name
<i>Arachis hypogaea</i>	Peanut
<i>Armoracia lapathifolia</i>	Horseradish
<i>Brassica napobrassica</i>	Rutabaga
<i>Brassica oleracea</i> var. <i>capitata</i>	Cabbage
<i>Brassica oleracea</i> var. <i>gemmifera</i>	Brussels sprouts
<i>Capsicum</i> species	Pepper
<i>Carthamus tinctorius</i>	Safflower
<i>Cannabis sativa</i>	Hemp
<i>Citrullus vulgaris</i> ²	Watermelon, citron
<i>Cucumis melo</i> ²	Cantaloupe, honey dew, muskmelon, Persian melon
<i>Cucumis sativus</i>	Cucumber
<i>Cucurbita pepo</i>	Pumpkin
<i>Fragaria chiloensis</i> var. <i>ananassa</i> ³	Strawberry
<i>Gossypium</i> species	Cotton
<i>Hibiscus esculentus</i>	Okra
<i>Lycopersicon esculentum</i> ⁴	Tomato
<i>Mentha</i> species	Mint
<i>Raphanus sativus</i>	Radish
<i>Rheum rhaponticum</i>	Rhubarb
<i>Ricinus communis</i>	Castor bean
<i>Solanum melongena</i>	Eggplant
<i>Solanum tuberosum</i>	Potato
<i>Spinacia oleracea</i>	Spinach
<i>Tetragonia expansa</i>	New Zealand spinach
<i>Tragopogon porrifolius</i>	Salsify
<i>Vigna sesquipedalis</i>	Yard-long bean
<i>Vigna sinensis</i>	Cowpea

² Watermelon, cantaloupe, and honey dew become infected, but are tolerant. Persian, casaba, and crenshaw are very susceptible.

³ Resistant cultivars of strawberry are Blakemore, Catskill, Sierra, Siletz, Surecrop, Vermilion, and Wiltguard.

⁴ The VF number varieties of tomatoes are resistant to both *Verticillium* wilt and *Fusarium* wilt.

HERBACEOUS ORNAMENTALS—Susceptible

Botanical Name	Common Name
<i>Abutilon</i> species	Abutilon
<i>Antirrhinum majus</i>	Snapdragon
<i>Aralia cordata</i>	Udo
<i>Aralia racemosa</i>	American spikenard
<i>Aster</i> species	Aster
<i>Atropa belladonna</i>	Belladonna
<i>Calceolaria</i> species	Slipperwort
<i>Callirhoe papaver</i>	Poppy-mallow
<i>Callistephus chinensis</i>	China aster
<i>Campanula</i> species	Bellflower
<i>Celosia argentea</i> var. <i>crispata</i>	Cockscomb
<i>Centaurea imperialis</i>	Sweet sultan
<i>Chrysanthemum frutescens</i>	Marguerite
<i>Chrysanthemum indicum</i>	Italian chrysanthemum
<i>Chrysanthemum maximum</i>	Shasta daisy
<i>Chrysanthemum morifolium</i> ⁵	Chrysanthemum
<i>Clarkia elegans</i>	Clarkia
<i>Coreopsis lanceolata</i>	Tickseed
<i>Dahlia variabilis</i>	Dahlia
<i>Delphinium ajacis</i>	Rocket larkspur
<i>Digitalis purpurea</i>	Foxglove
<i>Dimorphotheca sinuata</i>	Cape marigold
<i>Eschscholzia californica</i>	California poppy
<i>Gerbera jamesonii</i>	Transvaal daisy
<i>Helichrysum bracteatum</i>	Strawflower
<i>Heliotropium arborescens</i>	Heliotrope
<i>Impatiens balsamina</i>	Garden balsam
<i>Lathyrus odoratus</i>	Sweet pea
<i>Liatris</i> species	Gayfeather
<i>Lobelia erinus</i>	Lobelia
<i>Matthiola incana</i>	Stock
<i>Paeonia</i> species	Peony
<i>Papaver orientale</i>	Oriental poppy
<i>Pelargonium x domesticum</i>	Pelargonium
<i>Pelargonium x hortorum</i>	Geranium
<i>Petunia hybrida</i>	Petunia
<i>Phlox</i> species	Phlox
<i>Physalis alkekengi</i>	Alkekengi, Chinese lantern plant
<i>Polemonium</i> species	Polemonium
<i>Pyrola</i> species	Pyrola
<i>Reseda odorata</i>	Mignonette

⁵ Many chrysanthemum cultivars are resistant to *Verticillium* wilt. Request a list of these resistant cultivars from your local University of California Cooperative Extension office.

HERBACEOUS ORNAMENTALS-Susceptible (continued)

<i>Rudbeckia serotinia</i>	Black-eyed susan
<i>Salpiglossis sinuata</i>	Painted tongue
<i>Salvia farinacea</i>	Mealy-cup sage
<i>Salvia haematodes</i>	Sage
<i>Salvia azurea</i> var. <i>grandiflora</i>	Blue sage
<i>Schizanthus pinnatus</i>	Butterfly flower
<i>Senecio cruentus</i>	Florists' cineraria
<i>Veridium</i> species	Namaqualand daisy

WEEDS⁶ -Susceptible

Botanical Name	Common Name
<i>Amaranthus retroflexus</i>	Rough pigweed
<i>Chrysanthemum leucanthemum</i>	Oxeye daisy
<i>Monarda fistulosa</i>	Wild bergamot
<i>Panax quinquefolius</i>	American ginseng
<i>Senecio vulgaris</i>	Groundsel
<i>Sisymbrium irio</i>	London rocket
<i>Solanum carolinense</i>	Carolina horsenettle
<i>Solanum elaeagnifolium</i>	White horsenettle
<i>Solanum nigrum</i>	Black nightshade
<i>Solanum sarachoides</i>	Hairy nightshade
<i>Taraxacum officinale</i>	Dandelion

FAMILIES-Resistant or Immune

Botanical Name	Common Name
Cactaceae	Cactus family
Graminae	Cereal grains, corn, grasses, milo, sorghum, others
Gymnospermae	Gymnosperms (cypress, fir, ginkgo, larch, juniper, pine, sequoia, spruce, others)
Monocotyledoneae	Monocots (bamboo, banana, gladiolus, grasses, iris, lily, onion, orchids, palms, others)
Polypodiaceae	Fern family (ferns)

⁶ Most weeds do not show symptoms.

TREES AND SHRUBS-Resistant or Immune

Botanical Name	Common Name
<i>Arctostaphylos</i> species	Manzanita
<i>Betula</i> species	Birch
<i>Buxus</i> species	Box
<i>Carpinus</i> species	Hornbeam
<i>Ceanothus</i> species	Ceanothus
<i>Cercidiphyllum japonicum</i>	Katsura tree
<i>Cistus corbariensis</i>	White rock rose
<i>Cistus salvifolius</i>	Sage-leaf rock rose
<i>Cistus tauricus</i>	Rock rose
<i>Citrus</i> species	Orange, lemon, grapefruit, others
<i>Cornus</i> species	Dogwood
<i>Crataegus</i> species	Hawthorn
<i>Eucalyptus</i> species	Eucalyptus
<i>Fagus</i> species	Beech
<i>Ficus carica</i>	Fig
<i>Gleditsia</i> species	Locust
<i>Gleditsia triacanthos</i>	Honey locust
<i>Hebe anonda</i>	Hebe
<i>Hebe x franciscana</i>	Hebe
<i>Hebe x menziesii</i>	Hebe
<i>Hebe salicifolia</i>	Hebe
<i>Ilex</i> species	Holly
<i>Juglans</i> species	Walnut
<i>Liquidambar styraciflua</i>	Liquidambar, sweet gum
<i>Malus</i> species ⁷	Apple, flowering crabapples
<i>Morus</i> species	Mulberry
<i>Nerium oleander</i>	Oleander
<i>Platanus racemosa</i>	Western sycamore
<i>Platanus</i> species	Plane tree
<i>Pyracantha</i> species	Pyracantha, firethorn
<i>Pyrus</i> species ⁷	Pear
<i>Quercus</i> species	Oak
<i>Salix</i> species	Willow
<i>Sorbus aucuparia</i>	European mountain ash
<i>Umbellularia californica</i>	California laurel
<i>Tilia</i> species	Linden

⁷ Apple, pear, and quince are susceptible to the European strains of *Verticillium albo-atrum*.

VEGETABLE AND FIELD CROPS—Resistant or Immune

Botanical Name	Common Name
<i>Apium graveolens</i>	Celery
<i>Asparagus officinalis</i>	Asparagus
<i>Daucus carota</i>	Carrot
<i>Ipomoea batatas</i>	Sweet potato
<i>Lactuca</i> species	Lettuce
<i>Medicago sativa</i> ⁸	Alfalfa
<i>Phaseolus</i> species	Bean
<i>Pisum sativum</i>	Pea

HERBACEOUS ORNAMENTALS—Resistant or Immune

Botanical Name	Common Name
<i>Ageratum</i> species	Ageratum
<i>Althaea rosea</i>	Hollyhock
<i>Alyssum</i> species	Alyssum
<i>Anemone</i> species	Anemone
<i>Aquilegia</i> species	Columbine
<i>Begonia semperflorens</i>	Fibrous begonia
<i>Begonia tuberhybrida</i>	Tuberous begonia
<i>Bellis perennis</i>	English daisy
<i>Browallia</i> species	Browallia
<i>Calendula officinalis</i>	Calendula, pot marigold
<i>Cheiranthus cheiri</i>	Wallflower
<i>Cleome</i> species	Cleome
<i>Dianthus caryophyllus</i>	Carnation
<i>Dianthus</i> species	Pinks, sweet william
<i>Gaillardia</i> species	Gaillardia
<i>Geum</i> species	Geum
<i>Gypsophila paniculata</i>	Baby's breath
<i>Helianthemum nummularium</i>	Sun rose
<i>Helianthus</i> species	Sunflower
<i>Helleborus niger</i>	Christmas rose
<i>Heuchera sanguinea</i>	Coral bells
<i>Iberis</i> species	Candytuft
<i>Impatiens sultani</i>	Impatiens
<i>Lantana</i> species	Lantana
<i>Lunaria annua</i>	Honesty, silver dollar

⁸ Alfalfa is susceptible to the European strains of *Verticillium albo-atrum*.

HERBACEOUS ORNAMENTALS—Resistant or Immune (continued)

<i>Mimulus</i> species	Monkey flower
<i>Nemesia strumosa</i>	Nemesia
<i>Nemophila menziesii</i>	Baby-blue-eyes
<i>Nierembergia frutescens</i>	Cup flower
<i>Oenothera</i> species	Evening primrose
<i>Penstemon</i> species	Penstemon
<i>Platycodon grandiflorum</i>	Balloon flower
<i>Portulaca grandiflora</i>	Moss rose
<i>Potentilla</i> species	Potentilla
<i>Primula</i> species	Primrose
<i>Ranunculus asiaticus</i>	Persian buttercup
<i>Saintpaulia ionantha</i>	African violet
<i>Scabiosa atropurpurea</i>	Scabiosa, sweet scabious
<i>Torenia fournieri</i>	Wishbone plant
<i>Tropaeolum majus</i>	Nasturtium
<i>Verbena hybrida</i>	Verbena
<i>Vinca minor</i>	Periwinkle
<i>Viola</i> species	Pansy, viola, violet
<i>Zinnia</i> species	Zinnia

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