



plants tolerant of black walnut trees

Black Walnut trees produce a chemical called juglone, which can be toxic to a wide variety of plants. Juglone damage to sensitive plants appears as wilting, yellowing or browning of leaves, stunted or slowed growth and eventually death in some cases. The most concentrated toxicity occurs within the root zone of the tree, which can extend well beyond the branch tips on large, mature trees. Highly sensitive plants may still exhibit toxicity symptoms well beyond the branching.

Keep in mind that even juglone-tolerant plants may still exhibit some signs of stress when planted under Black Walnuts (and other mature trees as well). New plantings may show signs of moisture stress as they try to compete with the tree's established roots for reduced water resources. Since it is often much drier under a tree canopy, these plants often need twice as much hydration for them to survive than if they were in the open without root competition. Shaded conditions under the tree canopy can also induce stress. This will correct itself during the next growing season when newly formed leaves will conform to the new, lower light conditions.

Some plants exhibit a high tolerance to the chemical, while others have a very low success rate when grown directly under or near Black Walnuts. Plants in the following lists are considered to be either tolerant or not tolerant. The tolerance is not known of all plants, so for those not listed, try planting a small number of plants and observe them for signs of damage for at least a full growing season before planting additional quantities.

TOLERANT PLANTS

FRUITS & VEGETABLES

Bean, Snap ☀️
Beet ☀️
Carrot ☀️
Cherry ☀️
Corn, Sweet ☀️
Currant ☀️🌿
Melon ☀️
Onion ☀️
Plum ☀️
Pawpaw ☀️
Squash ☀️

VINES

Clematis (several varieties) ☀️🌿
Dutchman's Pipe ☀️🌿
Honeysuckle ☀️🌿
Virginia Creeper ☀️🌿☀️
Wisteria ☀️

SHRUBS & EVERGREENS

Arborvitae ☀️🌿
Althea ☀️🌿
Barberry ☀️
Burning Bush ☀️
Currant ☀️🌿☀️
Elder ☀️🌿
Forsythia ☀️
Hemlock ☀️
Honeysuckle ☀️🌿

Hydrangea, Annabelle ☀️🌿
Hypericum ☀️🌿
Juniper ☀️
Kerria 🌿☀️
Mockorange ☀️🌿
Ninebark ☀️
Plum, Cistena ☀️
Viburnum, Koreanspice ☀️🌿
Viburnum, Arrowwood ☀️🌿

TREES

Amelanchier ☀️🌿
Birch, River ☀️
Black Gum ☀️🌿
Catalpa ☀️
Dogwood 🌿
Fringetree ☀️🌿
Honeylocust ☀️
Linden ☀️
Maple, Japanese ☀️🌿
Maple, Red ☀️

Maple, Sugar ☀️
Mulberry ☀️🌿
Oak ☀️
Pear, Flowering ☀️
Planetree ☀️
Redbud ☀️🌿
Sweetgum ☀️
Tuliptree ☀️
Willow ☀️🌿
Wisteria ☀️

TOLERANT PLANTS

SUN PERENNIALS

Anemone ☀️🌿
Aster ☀️
Bee Balm ☀️🌿
Bellflower ☀️🌿
Coneflower ☀️
Daisy, Shasta ☀️
Daylily ☀️🌿
Evening Primrose ☀️🌿
Geranium ☀️🌿
Goldenrod ☀️
Grass (select varieties) ☀️
Hollyhock ☀️
Iris, Siberian ☀️
Joe Pye ☀️🌿
Lamb's Ear ☀️
Leopard's Bane ☀️🌿
Lobelia ☀️🌿
Obedient Plant ☀️🌿
Phlox, Garden ☀️🌿
Rudbeckia ☀️🌿
Sedum ☀️
Sunflower ☀️
Veronica ☀️🌿
Yarrow ☀️
Yucca ☀️

ANNUALS

Begonia ☀️🌿☀️
Geranium ☀️🌿
Impatiens ☀️🌿☀️
Marigold ☀️
Morning Glory ☀️
Pansy ☀️🌿
Zinnia ☀️

GRASS SEED

Bluegrass, Kentucky ☀️
Tall Fescue ☀️

SHADE PERENNIALS

Astilbe 🌿
Barrenwort 🌿☀️
Bleeding Heart ☀️🌿
Coral Bells ☀️🌿
Fern 🌿☀️
Helleborus 🌿☀️
Hosta (several varieties) 🌿☀️
Jacob's Ladder ☀️🌿
Pulmonaria 🌿☀️
Solomon's Seal 🌿☀️
Spiderwort ☀️🌿
Viola ☀️🌿

GROUNDCOVER

Ajuga ☀️🌿
Ginger 🌿☀️
Liriope ☀️🌿☀️
Myrtle ☀️🌿☀️
Pachysandra 🌿☀️
Phlox, Creeping ☀️
Sedum ☀️
Sweet Woodruff 🌿☀️

BULBS

Crocus ☀️🌿☀️
Daffodil ☀️🌿
Grape Hyacinth ☀️🌿☀️
Hyacinth ☀️🌿
Tulip ☀️🌿☀️

☀️ **SUN** – These plants need at least 8 hours of direct sunlight.

🌿 **PARTIAL SHADE** – These plants need a minimum of 4 hours of direct sunlight and maximum of 8 hours. Avoid hot afternoon sunlight.

☀️🌿 **SHADE** – These plants need less than 4 hours of direct sunlight. Avoid hot afternoon sunlight.

☀️🌿☀️ **SUN-SHADE** – These plants can be grown in any light situation.

PLANTS NOT TOLERANT OF BLACK WALNUT

TREES

Apple
Birch, Paper
Crab
Larch
Linden
Magnolia, Saucer
Pine
Spruce

VEGETABLES

Asparagus
Cabbage
Eggplant
Pepper
Potato
Tomato

SHRUBS & EVERGREENS

Aronia, Red
Azalea
Blueberry
Cotoneaster
Holly, Winterberry
Hydrangea (several varieties)
Lilac

Pine
Potentilla
Privet
Rhododendron
Rose
Spruce
Viburnum (several varieties)
Yew

PERENNIALS

Baptisia
Columbine
Lily, Asiatic & Oriental
Lily of the Valley
Peony
Rhubarb

ANNUALS

Nicotiana
Petunia

BULBS

Crocus, Autumn