

Dealing with Black Walnut

Toxicity

The roots of the Black Walnut (Juglans nigra) and Butternut (Juglans cinerea) produce a substance known as juglone. If other plants are planted within the root zone of these trees, they may be weakened or killed within a few months by the juglone..

The toxic zone from a mature tree occurs within a 50'-80' radius from the trunk. The area impacted extends outward each year as a tree matures. Young trees two to eight feet tall can have a root diameter twice the height of the tree.

What about leaves, mulch, and wood chips?

Walnut leaves can be composted because the toxin breaks down when exposed to air, water, and bacteria. The toxic effect can be degraded in two to four weeks. In soil, breakdown may take up to two months. Sawdust mulch, fresh sawdust, or wood chips are not suggested for plants sensitive to juglone. However, composting of bark for a minimum of six months provides a safe mulch even for plants sensitive to juglone.

Perennials & Bulbs

(cultivars of some species may do poorly)

BOTANICAL NAME	COMMON NAME

Ajuga reptans Bugleweed
Alcea rosea Hollyhock
Anemone Windflower
Adiabathan Laking the P

Arisaema triphyllum Jack-in-the-Pulpit Asarum europeaeum European Ginger

Aster Astilbe Astilbe Lady Fern
Campanula latifolia Bellflower
Chrysanthemum Mum
Crocus Crocus

Dicentra

Dryopteris

Eupatorium

Galium odoratum

Salanthus nivalis

Bleeding Heart

Wood Ferns

Joe-Pye Weed

Sweet Woodruff

Snow Drop

Geranium sanguineum Bloody Crane's-bill Helianthus Perennial Sunflower

Hemerocallis Daylily Heuchera Coralbell Hosta Hosta
Iris sibirica Siberian Iris
Lobelia Cardinal Flower
Monarda Beebalm
Muscari Grape Hyacinth

Narcissus Daffodil

Oenothera Evening Primrose
Osmunda cinnamomea Cinnamon Fern
Phlox paniculata Garden phlox
Polemonium reptans Jacob's Ladder

Pulmonaria Lungwort

Rudbeckia Black-eyed Susan

Sanguinaria canadensis Bloodroot Scilla sibirica Siberian Squill

Sedum Stone-crop Stachys byzantina Lamb's Ear

Tradescantia virginica Spiderwort
Trillium Wood Lily
Veronica Speedwell

Viola Speedw Viola Violets



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Shrubs

BOTANICAL NAME

Berberis thunbergii Euonymus alatus Forsythia intermedia

Hamamelis

Hibiscus syriacus

Hydrangea arborescens

Hypericum Juniperus

Philadelphus

Physocarpus opulifolius

Ribes alpinum
Thuja occidentalis

Viburnum carlesii Viburnum dentatum

Yucca filimentosa

COMMON NAME

Barberry Burning Bush

Forsythia
Witch-Hazel
Rose of Sharon

Annabelle Hydrangea

St. John's Wort

Juniper

Mock Orange

Ninebark

Alpine Currant Arborvitae

Koreansnice Vihu

Koreanspice Viburnum Arrowwood Viburnum

Yucca

Trees

BOTANICAL NAME

Acer palmatum
Acer rubrum

Acer saccharum Amelanchier

Betula nigra

Carpinus caroliniana

Cercis canadensis

Chionanthus virginicus

Cornus alternifolia Gleditsia triacanthos

Liriodendron tulipifera

Morus alba

Quercus rubra

Salix Tsuga **COMMON NAME**

Japanese Maple

Red Maple Sugar Maple

Serviceberry Serviceberry

River Birch

American Hornbeam

Redbud

Fringetree

Pagoda Dogwood

Honeylocust Tulip Tree Mulberry

Red Oak Willow

Hemlock

These lists are by no means comprehensive, nor guaranteed. Much of the information was informally acquired. Some parts of this brochure were adapted from the Ohio State University Extension Fact sheet HYG-1148-93.