



## BLACK WALNUT TOXICITY

Black walnut trees contain a chemical, juglone, that inhibits the growth and survival of surrounding plants. Juglone is concentrated mostly in the Flowers, nuts, and roots. As the tree's roots can extend 2-3 times the diameter of the tree's canopy, the affected area can be large.

### Symptoms of severely affected plants

- Stunted growth
- Rapid yellowing and wilting that cannot be reversed with adequate water

### Determine if you have a black walnut tree

If you think the problems you're having with your plants match the symptoms of plants suffering from juglone toxicity, determine if you have a black walnut tree.

Black walnut trees have dark bark, long, compound leaves, and when they are mature they produce walnuts surrounded by a thick casing that is a bit bigger than a baseball and green in color. This will turn black and decompose, leaving only the round walnut behind.

If you're still not sure, you can check out the Arbor Day Foundation's "What Tree is That?" online tree identification field guide at <https://www.arborday.org/trees/whattree/> or you can call or come in with pictures and samples to speak with one of our certified arborists.

### What to do if you have a black walnut tree

The sensitivity of your plants to the walnut tree will depend on the type of plant it is and on your soil type. Poorly draining soil will intensify the toxicity. As removal of the tree will not solve the issue of the toxic root system for several years, plant as far from the tree as possible. If this is not an option:

- Plant beyond the canopy line of your black walnut.
  - Build raised beds with a barrier at the bottom (e.g. weed barrier or screening) to prevent walnut roots from growing in
  - Remember to clear away leaves and nut husks when necessary, as these are also toxic
  - DO NOT compost with black walnut woodchips, bark, nuts, hulls, or leaves if you have sensitive plants
- ★ The most reliable option is to plant species that are black walnut tolerant

### Black Walnut Tolerant

Chuck Hafner's Farmers Market & Garden Center – 315 458-2231 7265 Buckley Road, North Syracuse, NY 13212  
[www.chuckhafner.com](http://www.chuckhafner.com)

**Trees**

*Acer palmatum* Japanese maple  
*Acer rubrum* red maple  
*Acer saccharum* sugar maple  
*Betula nigra* river birch  
*Crataegus* hawthorn  
*Cercis canadensis* eastern redbud  
*Gleditsia triacanthos* honeylocust  
*Liriodendron tulipifera* yellow poplar  
*Magnolia stellata* star magnolia  
*Nyssa sylvatica* black gum  
*Prunus* cherry, plum, etc.  
*Pyrus* pear  
*Quercus rubra* red oak  
*Salix* willow  
*Thuja* arborvitae  
*Tsuga canadensis* Canadian hemlock

**Shrubs**

*Amelanchier* serviceberry  
*Buxus* boxwood  
*Daphne* daphne  
*Forsythia* forsythia  
*Hamamelis virginiana* witch hazel  
*Hibiscus syriacus* rose of Sharon  
*Hydrangea arborescens* smooth hydrangea  
*Hypericum prolificum* shrubby St. John's wort  
*Juniperus* juniper  
*Philadelphus* mockorange  
*Physocarpus opulifolius* ninebark  
*Rhododendron deciduous* azalea  
*Ribes* currants  
*Syringa* lilac  
*Viburnum* viburnum  
*Weigela* weigela  
*Yucca* yucca

**Vines**

*Lonicera sempervirens* trumpet honeysuckle  
*Parthenocissus quinquefolia* Virginia creeper

**Ferns**

*Athyrium filix-femina* lady fern  
*Dryopteris* wood fern  
*Osmunda cinnamomea* cinnamon fern  
*Polystichum acrostichoides* Christmas fern  
*Matteuccia struthiopteris* ostrich fern

**Bulbs**

*Narcissus* daffodils  
*Crocus* crocus  
*Muscari botryoides* grape hyacinth

**Fruit**

*Prunus* cherry  
*Ribes* raspberry/blackberry  
*Rubus* currant  
*Sambucus* elderberry

**Perennials**

yarrow

*Achillia* bugleweed  
*Ajuga reptans* hollyhock  
*Alcea rosea* Canada anemone  
*Anemone* Jack-in-the-pulpit  
*Arisaema triphyllum* goat's beard  
*Aruncus dioicus* wild ginger  
*Asarum canadense* milkweed  
*Asclepias* aster  
*Aster* false spirea  
*Astilbe* false indigo  
*Baptisia* brunnera  
*Brunnera macrophylla* mum  
*Chrysanthemum* bleeding heart  
*Dicentra* foxglove  
*Digitalis* cone flower  
*Echinacea pupurea* sweet woodruff  
*Galium odoratum* sneezeweed  
*Helenium autumnale* daylily  
*Hemerocallis* American coralbells  
*Heuchera americana* Hosta  
*Hosta* iris  
*Iris* Shasta daisy  
*Leucanthemum x superbum* cardinal flower  
*Lobelia cardinalis* bee balm  
*Monarda* sundrops  
*Oenothera fruticose* peony  
*Paeonia* summer phlox  
*Phlox paniculata* obedient plant  
*Physostegia virginiana* Mayapple  
*Podophyllum peltatum* Jacob's ladder  
*Polemonium reptans* great Solomon's seal  
*Polygonatum commutatum* lungwort  
*Pulmonaria* black-eyed Susan  
*Rudbeckia* blue-eyed grass  
*Sisyrinchium angustifolium* spiderwort  
*Tradescantia virginiana* trillium  
*Trillium* speedwell  
*Veronica* violet  
*Viola*

**Annuals**

*Begonia* begonia  
*Zinnia* zinnia

**Vegetables**

Beans  
 Carrot  
 Corn  
 Onion  
 Squash and melons

❖ This is a list of suggestions, not a complete compilation