

## BLACK WALNUT TREE SOLUTIONS

At first, the black walnut tree seems like a dream tree: fast-growing, handsome leaves, attractive green fruit that encases tasty nuts, and it casts enough shade to escape under during hot summer days. Then you try to plant some perennials under it for color, and within a month, many blooms are struggling. What's going on?

### ROOT PROBLEMS

What's going on is that a substance within black walnut trees (*Juglans nigra*), called juglone, is leaching into your soil. It's a fairly toxic chemical. It's secreted by all parts of the walnut tree, but particularly the roots. The most trouble comes when other plants come into contact with the roots of the tree. Petunias, tomatoes, blueberries, potatoes, and some peppers are the quickest to fall victim to juglone's poison, but it's a real hit-or-miss situation. The closer a plant is to one of the roots, the more likely it's going to die. But the same plant placed in another area under the same tree may live simply because it's not near a root.

### DOOMED BLOOMS

Avoid these flowers and shrubs that are susceptible to juglone:

Asian hybrid lilies	<i>Lilium asiatic hybrids</i>
Azalea	
Buttercup	<i>Narcissus 'John Evelyn'</i>
Chrysanthemum	(some species)
Colorado columbine	<i>Aquilegia caerulea</i>
Flowering tobacco	<i>Nicotiana glauca</i>
Hydrangea	
Lilac	
Peony	Some species
Petunia	
Rhododendron	
Wild Columbine	<i>Aquilegia canadensis</i>

### FRIENDLY FLOWERS

Astilbe	<i>Astilbe arendsii</i>
Anemone	
Begonia	(fibrous cultivars)
Bloodroot	<i>Sanguinaria canadensis</i>
Clematis	'Red Cardinal'
Crocus	
Forget me knot	
Glory-of-the-snow	<i>Chionodoxa latifolia</i>
Grape hyacinth	<i>Muscari botryoides</i>
Hollyhock	<i>Alcea rosea</i>
Iris	
Jack in the Pulpit	
Lady Fern	
Multifloral rose	<i>Rosa multiflora</i>
Ostrich Fern	
Siberian squill	<i>Scilla siberica</i>
Spanish bluebell	<i>Endymion hispanicus</i>
Summer phlox	<i>Phlox paniculata</i>
Sweet woodruff	<i>Galium odoratum</i>
White wake-robin	<i>Trillium grandiflorum</i>
Lima Bean, Snap Bean, Beet, Sweet Corn, Onion, Parsnip	