



Japanese Beetles (White Grubs)

Host Plants/Description

Japanese beetles have a voracious appetite for many different plants. Roses are a favorite, but they also like many deciduous trees and shrubs, especially linden, sassafras, sycamore, maple, birch, elm, and fruit trees. They also will attack raspberries, grapes, rhubarb, and corn (silks), as well as hollyhocks, dahlias, zinnias and many other ornamental and fruit-bearing plants. The larvae of the beetles, white grubs, are serious lawn pests.

The adult beetles are metallic green with copper-colored wing covers, and measure about 1/2 inch in length. Larvae are a dirty white color with brown heads. They grow to about 1 inch long, and can be distinguished from other white grubs by the underside of the last segment, which has two rows of spines that form a "V. "

Plant Damage/Symptoms

Adult beetles skeletonize leaves, eat flowers, and consume fruits, leaving only the pits. They are social insects, and as many as fifty can sometimes be found feeding at the same time on a single rose bloom. Adult beetles are most active on warm, sunny days, and usually appear in the Chicago area for about six weeks, beginning in early July. Beetle larvae feed on the turf roots, causing large patches of brown, dead grass to appear in late summer or early fall. Predators such as raccoons and skunks often add to the damage by digging up the turf in search of the grubs.

Controls

If done frequently, handpicking the beetles is effective. This is best done on a cool morning, while beetles are still inactive. Place a sheet beneath affected plants and shake infested branches until the beetles fall down. Gather up the sheet and dump the beetles into a bucket of hot, soapy water or a jar of rubbing alcohol.

Vegetable plants may be protected with floating row covers, and rose buds can be protected with a cover of nylon netting.

Japanese beetle traps are available, but generally not recommended because they actually attract more beetles into the area unless they are put out in large numbers across an entire neighborhood.

If chemical control is deemed necessary, carbaryl (Sevin) or acephate are recommended. Begin insecticide applications as the first adults emerge. This occurs at the same time that *Hydrangea arborescens* 'Grandiflora' is in full bloom. Repeat sprays weekly. Trees that are in good health are unlikely to be severely damaged by Japanese beetle attacks, and as it is nearly impossible to treat all plants that might be affected, it is wise to treat only those that are the most prominent or prized in the landscape.

Adult beetles look for moist areas to lay their eggs, so reducing the frequency of irrigation can help to control populations of grubs in lawns. Provide *deep, infrequent* irrigation to develop deep roots and drought tolerance.

Milky spore disease is a natural control for grubs that won't hurt plants or animals. It is sold as a dust or in granular form, and it may be applied to grassy areas as long as the ground isn't frozen. Be patient, as it may take a few years to establish control in this manner.