# **JAPANESE BEETLE**



#### WHAT IS THE THREAT:

The Japanese beetle, Popillia japonica Newman, is a widespread and destructive pest of turf, landscape, and ornamental plants throughout much of the United States. The Japanese beetle adult measures 15 mm (0.6 in) in length and 10 mm (0.4 in) in width, has iridescent coppercolored elytra and a green thorax and head. Adult Japanese beetles feed on the leaves, flowers and fruits of many different plants, while the larval white grub stage primarily feed on roots of grasses often destroying turf in lawns, parks, and golf courses.

#### WHERE IS THE THREAT:

The Japanese beetle is an invasive scarab beetle introduced into New Jersey about 1912. It is now well established in most states east of the Mississippi River (except Florida), as well as parts of most other states west to Colorado. More than 300 species of plants are known to be host to Japanese beetle. Adult Japanese beetles feed on foliage, flowers, and fruits. The larvae, commonly known as white grubs, primarily feed on roots of grasses often destroying turf in lawns, parks, and golf courses. Primary hosts include maples, ornamental species apple and stone fruit (including plums and peaches), linden/basswood, elms, and grapes. Secondary hosts include buckeyes, birches, chestnuts, walnut, sycamore, poplars, willow, sassafras, mountain ash, and turf grasses.

#### SYMPTOMS:

Both adults and larvae cause plant damage, but the host and nature of damage are usually different. Adults cause damage on foliage, flowers and fruit of a wide range of hosts and are most active on warm sunny days. The feeding on the upper leaf surface usually results in skeletonization. The grubs, which primarily feed on roots of grasses, cause considerable damage to pasture, lawn and golf courses. Feeding damage on roots reduces the ability of grass to take up enough water to withstand stresses of hot and dry weather, and result in dead patches.

### WHAT TO DO ABOUT IT:

Trunk injections of IMA-jet should be made in spring after flowering (on fruit bearing trees), when Japanese beetle outbreaks are expected. IMA-jet can provide protection for a full year. ACE-jet can be injected when leaf injury first appears. One application is sufficient to control Japanese beetle in the tree canopy for approximately 3-5 weeks. Alternatively, AzaSol, an insect growth regulator and feeding deterrent, can be applied as a trunk injection, soil drench or foliar spray.



Japanese Beetle Adults



Japanese Beetle Larvae



Foliage Damage



Linden Tree Damage

Header Image: Matthew Beziat / FLICKR, Japanese Beetle Adult: Ohio State University, Japanese Beetle Larvae: David Shetlar, Ohio State University, Foliar Damage: Liz Castro / FLICKR, Linden Tree Damage: Joe Boggs, OSU Extension



## arborjet.com