



# Japanese Beetles

Japanese Beetles and their larvae are destructive pests in the home garden. Learn more about these insects and what you can do to reduce the damage they cause.

Japanese beetles (*Popillia japonica*) are an invasive species that first showed up in the US in New Jersey in 1916 after being accidentally imported from Japan. They have spread over most of the US, but are most prevalent in the Eastern half of the country. The adults are about a ½ inch long, shiny green with copper wings, 6 black and white hairy spots on either side of the abdomen and strong black legs that will lift when alarmed. The grubs are the larvae that live in the soil. They are whitish, C-shaped with a tan head.

Japanese beetles feed on leaves, flowers and fruit of over 300 different types of plants. They eat the soft tissue (mesophyll) of the leaves between the veins leaving them to look skeletonized. They do favor some plants more than others. Some of their favorites are rose, grape, linden, Japanese maple, apple, crabapple, cherry, plum, birch, elm, raspberry, currant, hollyhock, corn, and beans. The grubs feed on the roots of grasses and are one of the most destructive pests of turf grasses in the US. You can tell if grass has been damaged by grubs because it will contain large areas of brown dead grass that can be pulled back like a carpet because the roots are gone.



## Life cycle

Japanese beetles have only one generation per year. Around mid-June, the adults emerge from the soil and start to feed and mate. The feeding lasts around 6-8 weeks. The females dig holes about 2-4" deep in soil and lay their eggs. The eggs hatch in about 2 weeks and the grubs begin feeding on roots. The grubs grow quickly and are nearly full grown around late August (approximately 1" long). They burrow deeper into the soil in the fall. The grubs become inactive and overwinter when the soil is colder than 50 F. In the spring, when the soil warms, the grubs resume feeding for 3-5 weeks, then pupate until emerging as adults and the cycle begins again.

## What can be done to control the damage?

The average homeowner with a small to medium size yard can be effective by hand picking the beetles and dropping them into a cup or bucket of soapy water. Doing this twice a day is best; early morning and late afternoon when the beetles are less active. Chewed leaves give off an odor that is attractive to other Japanese beetles, so it is important to catch them early before they do too much damage. Dispose of the dead beetles as they also give off an odor that attracts more beetles.



### **Don't use traps**

Japanese beetle traps contain an odor that attracts the beetles. While they may appear effective as they kill many beetles, the odor will attract more beetles from neighboring yards.

### **Keep plants and grass healthy**

Most beetle damage is cosmetic on healthy plants and will not kill the plant. Keep your plants healthy so they can resist the damage better.

### **Don't water grass in the summer**

Grubs like to live in soil that is moist, so keeping the soil drier in the summer months will help control them. Water later in the fall to help grass recover from any grub damage.

### **Replace favorite plants with less favorable ones**

Sometimes it is better to switch to plants that are less appealing rather than constantly fighting the insects. Some plants that are less attractive to Japanese beetles are boxwood, clematis, dogwood, hemlock, holly, magnolia, oak, yew, chrysanthemum, conifers (e.g. arborvitae, spruce, fir, pine), daylily, geranium, ginkgo, Japanese tree lilac, forsythia, common lilac, red and silver maple, white poplar, redbud, and rhododendron, alliums (e.g. onion, garlic, chives), and marigolds.

### **Pesticides**

As a last resort, several insecticides are labeled for use against adult Japanese beetles. As many of these pesticides are also toxic to beneficial pollinators it is extremely important to follow all label instructions. Apply contact pesticides when the plants are not flowering to reduce impact on pollinators. Chlorantraniliprole (the active ingredient in Acelepryn) is a reduced risk insecticide that provides effective Japanese beetle control for 28 days. This product can be used on trees, shrubs, and perennials. *Bacillus thuringiensis galleriae* or Btg (the active ingredient in beetleGONE!) is also a reduced risk insecticide. It can be used on a wide range of landscape plants, vegetable and fruit crops and is approved for organic production.

Grubs can be controlled with soil insecticides, again being cautious about use as they may potentially hurt pollinators. Soil insecticides are best applied prior to egg laying, typically early July. Controlling the grubs will not prevent damage from adult beetles as they will return to your yard from other places. If you decide to use insecticides for control, consult University of Wisconsin Garden Facts Turfgrass Disorder: White Grubs for information.

**\*Photos by Christine Weingarth**

## Resources

Japanese Beetles

<https://hort.extension.wisc.edu/articles/japanese-beetle/>

<https://extension.umn.edu/yard-and-garden-insects/japanese-beetles>

[Woody Ornamentals Pest Management in Wisconsin](#)

[Turfgrass Disorder: White Grubs](#)

Other helpful Brochures available at

<https://learningstore.extension.wisc.edu/>

## CONTACT US:

Washington County Master Gardeners

[wcmastergardeners.com](http://wcmastergardeners.com)

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