

# Japanese Beetles Rise Again

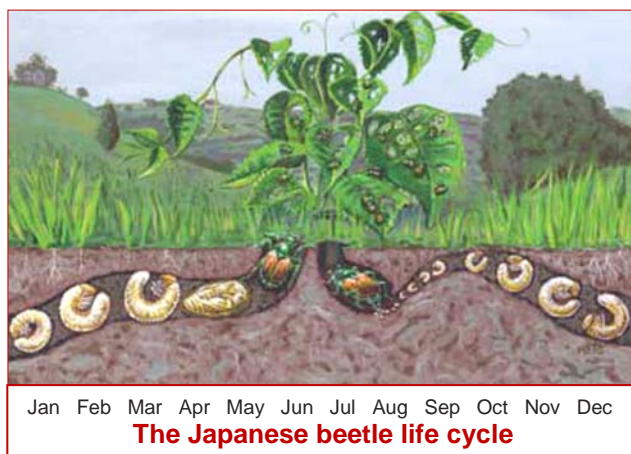
By Bobbie Reed, *Master Rosarian*

It's that time again. We've survived the winter cold and snows, the erratic spring, the onslaught of summer heat, and now here they are again – the Japanese beetles are back. What are these critters that frustrate Georgia gardeners so much?

The proper name is *Popillia japonica*, and as the name implies, they're not from around here. They were introduced accidentally in New Jersey around 1916, and have since spread to infest all the states east of the Mississippi except for Florida. They are native to Japan, where they are not much of a problem, lacking the expanses of turf that support them here.

We might see them in one of two forms. Female beetles deposit eggs about ½ to 4 inches deep in the soil; the eggs hatch after a couple of weeks as 1 inch long, white, C-shaped grubs that feed on plant or turf-grass roots over the late summer, fall, and winter. As soils warm in the spring, they pupate for two weeks, and then emerge as adults in May or early June. The adult Japanese beetle is about ¾ to ½ inch long, with coppery brown wings over a metallic green body, and tufts of white hair along the abdomen. Each adult beetle lives for 30-45 days; its whole life cycle is usually one year in the South. Since each female beetle can lay 40-60 eggs over that period, populations can seem to explode from one year to the next.

Diagram by USDA Animal & Plant Health Inspection Service



In some parts of the country, folks are concerned about the damage the Japanese beetle grubs do to lawn grasses. Around here, we struggle to contain the damage the adults wreak on our landscapes.

The adults seem to eat everything! That's not exactly true, but they are extremely fond of our roses, as well as hollyhocks, dahlias, grapes, hibiscus, clematis, zinnias, peonies, Japanese maples, crepe myrtles, Virginia creeper, apples, plums, apricots, cherries, and peaches. Hmm, we only have a few of *those* in our garden. Some plants they *don't* eat include foxgloves, hosta, lantana, coreopsis, impatiens, begonias, boxwood, tulip poplar, dogwood, hickory, redbuds, sweetgums, magnolias, pines, and holly. We certainly have more of those. At least our garden isn't *too* much of an invitation to the little beasties.

As you walk around your garden early in the morning, look for crowds of Japanese beetles on your roses. They love to bask in the sun while they eat and ... reproduce; plants in shady areas don't seem to attract them. The beetles love to chew on flowers, eating holes in the rose

buds, eating whole petals, and eating pollen. They may also turn the leaves into lace by chewing the foliage between the veins. They are attracted by the smell of the plants, as well as by the pheromone smells of the Japanese beetles that have already gathered; adult beetles will fly a long way to feast on our roses.

Since we're not going to give up on roses or completely replant our gardens, what can we do to minimize the damage?

One thing that doesn't work is the Japanese beetle trap. Lures will indeed attract the beetles, but only three-quarters of those attracted will make it into the trap. Meanwhile, beetles are munching on all the plants near the traps. If you use them, keep them near the edge of your yard, and away from your roses.

According to scientists who are looking for biological controls, there aren't many that are commercially available. Milky spore disease, caused by *Bacillus popilliae*, is useful when applied over large areas (community-wide) to reduce peak populations, but it is not so useful when applied on a yard-by-yard basis. Also, once the milky spore has been applied, the homeowner must refrain from applying broadcast insecticides to the lawn. Other options are nematodes like *Heterorhabditis bacteriophora* that parasitize the grubs. There is also a strain of *Bacillus thuringiensis* (Bt) that is registered for use on Japanese beetles, but may be harder to find.

Pesticides are next. Some effective ones for adults include acephate (Orthene), carbaryl (Sevin), Malathion, and rotenone, but repeated applications will be needed as additional waves of beetles arrive. For grubs, try imidacloprid (Merit® Insecticide for turf), or Dursban or Diazinon if you still have some (they were withdrawn for residential use several years ago), applying them at times when the grubs are near the surface of the soil – late August is best.

Are there less toxic approaches? The traditional method is to use that early morning stroll in the garden to pick sluggish beetles off the roses, dropping them into a container of soapy water. I've always found squashing them to be refreshing, but don't drop the bodies onto the lawn; the eggs may still be able to hatch. Since Japanese beetles are attracted by the smell and color of the roses, minimize both by cutting your roses as soon as the buds begin to open. Enjoy them indoors, rather than letting the beetles eat them.

Finally, work on cultivating a more accepting attitude toward the Japanese beetles. We can't kill them all, but they'll only be around for six weeks. Take this season to spend more time in the air conditioning and know that come late July, your rose garden can be yours again.



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