

Got Grubs?

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All kinds of grubs are lurking in your soil, hidden from sight. Some, like the larva of the ground beetle are beneficial, but most are up to no good. The term 'grub' is rather vague; it refers to the larval stage of many types of beetles. White grubs are the most familiar; they lie curled into a 'C' shape with thick bodies and 6 legs easily visible close to their brown heads. The best known white grub is the Japanese beetle larva, but there are actually many more species of white grubs throughout our region including European chafer, Oriental beetle, Asiatic beetle and June beetle. Even though I see plenty of adult Japanese beetles, I rarely see their grubs in my northern region, even in lawns. Last week we were digging around in strawberry fields, looking for black vine weevil larvae and rather than finding the pest of interest, we found several white grubs.

At first glance the group guessed Japanese beetles, since the adults are such a nuisance there, but on closer examination they turned out to be Oriental beetles and Asiatic garden beetle grubs. And I do mean it when I say 'on closer inspection'. The best way to identify white grubs is to look at their hind ends with a 10 power hand lens. You really have to look at the shape of their anal slit and the pattern of bristly hairs just below it, referred to as the raster pattern. And who said Extension work isn't exciting?

Another grower commented last week that Japanese beetle

(JB) grubs were chewing his lettuce near the soil line, much as a cutworm would. He assumed they must be JB's since he finds lots of adults each summer. But without a close inspection as described above, you really can't be sure. It could be a completely different pest feeding at the soil line and the JB adults flew in from elsewhere. Neither cutworms nor JB grubs are listed as a known pest of lettuce in the current Pest Management Guidelines so we don't have a simple solution for this problem. They are often worse the first year after sod and then move on to grassier sites.

There is one white grub that is becoming a problem for vegetable growers, the Asiatic garden beetle. Both the larva and adult feed on over 100 plants, but are especially damaging to carrots, beets and peppers. The larva/grub is smaller than the other white grubs, is much more active when caught, and is easily identified by the pair of rather large white pouches just under its mandibles, so you don't have to study its hind end to know which

one this is. It also feeds on corn, lettuce and onion. The adult feeds at night so is rarely seen, and is active from July to September, shredding foliage. It nestles in the soil at the base of the plant by day and is attracted to porch lights at night. As always, contact any of us on the team if you need help identifying pests or problems. We appreciate knowing what is being found and where.

Asiatic Garden Beetle

Maladera castanea (Arrow)



The adult is half the size of a Japanese beetle and a uniform orange/tan color with a hump shaped body.

Credits: C.M.F. Pierce and M.A. McDonough, Purdue Univ.



The larva/grub of the Asiatic garden beetle, the red arrow points to the distinctive white sacs just under the mandibles.

Photo credit: D. Shetlar, Ohio State Univ.



The larva/grub of European chafer, very similar to the Japanese beetle and Oriental beetle grub.