

Japanese Beetle



About Japanese Beetle

Japanese Beetles are not yet considered a threat in Missouri, but they have been found. The Japanese beetle, *Popillia japonica Newman* starts as larvae called a “grub” and lives in the soil and is rarely seen

above ground. Larvae possess chewing mouthparts and feed on the roots of crops. Both larvae and adult beetle are damaging, but it is the adult beetle that is captured in traps.

Japanese Beetle larvae are creamy white with a brown head capsule. They resemble other white grubs in appearance and can be identified by the distinct v-shaped pattern of bristles found on their raster (hind end). Their bodies form a C-shape and measure about 1-inch long.

Japanese Beetle Identification



May Beetle
(3-year grub)

Japanese Beetle
(1-year grub)

Masked Chafer
(1-year grub)

Adult Japanese Beetles emerge from the soil from June to August. They are metallic-green with bronze-colored wing covers. Just beneath the wing covers, along each side of the abdomen, are six tufts of white hair. False Japanese beetles are similar in size and appearance but are not as shiny or brightly colored, and do not possess the characteristic arrangement of the six white tufts along their abdomen.

How to Field-Scout for Japanese Beetle (JB) Larvae

Because the Japanese Beetle is a relatively new pest in Missouri corn and soybean fields, scouting procedures and thresholds may be modified with experience. Although Japanese Beetle larvae will damage crop plant roots, thresholds for insecticide application are based on feeding damage by adults. Beetles tend to aggregate in large numbers, so feeding damage may appear worse than it is. Scout the entire field to determine the extent of injury. Do not overestimate feeding damage.

Soybean

For soybean, thresholds are based on the percentage defoliation, not the number of actual beetles captured. Observe five plants in at least five places in the field. Larger fields may require additional locations. Estimate the amount of defoliation. Feeding often begins on leaves at the top of the canopy, so do not focus solely on these leaves. Threshold for insecticide application is 30% defoliation before flowering (R1) and 20% defoliation between flowering and mid-pod-fill (R6).

Corn

In corn, although leaf feeding is possible, threshold for insecticide application is based on number of beetles present. To scout, observe 10 plants in at least five places in the field. Count beetles and calculate the number of beetles per ear. Determine the extent of silk clipping. The threshold for insecticide application is three or more beetles per ear. Do not apply insecticide if pollination is more than 50% complete (brown silks).

For up-to-the-minute information on Japanese Beetles:

visit our Japanese Beetle page: <http://ipm.missouri.edu/pestmonitoring/jb/index.cfm>