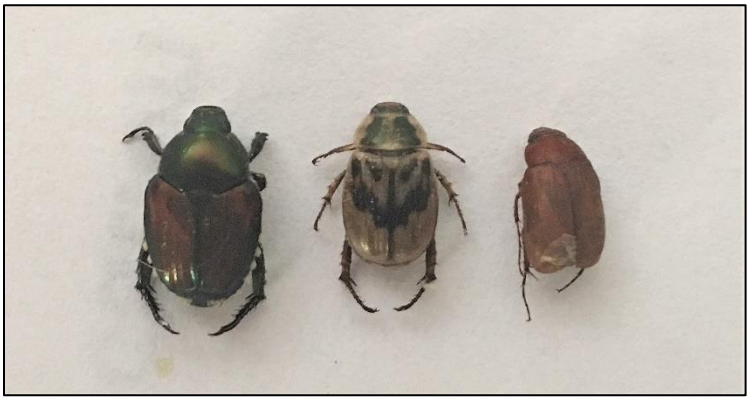
Integrated Pest Management Program

Plant Science and Landscape Architecture
Extension

Scarab Beetles: Japanese, Oriental and Asiatic Garden *(Family; Scarabaeidae)*



Japanese beetle, Oriental beetle, Asiatic Garden beetle

Feeding damage from Japanese beetles

Identification and Damage

Japanese beetle: Adults are ~0.5" in length, metallic green with copper wing covers. The side of the abdomen has five white patches of hairs and the tip of the abdomen has two. The adults are active during the day and feed on many different herbaceous perennials, woody ornamentals, and vegetables. The Japanese beetle will skeletonize the foliage by chewing out the plant tissue between the veins. They will also attack the flowers and over-ripened or damaged fruit. Often feeding in groups, this beetle is most active on warm, sunny days, and prefers plants that are in direct sunlight.

Oriental beetle: Adults are ~0.3-0.4" in length. Coloration is highly variable, ranging from black to straw, with a wide range of patterned markings. This beetle flies at night, but is also very active during the day. Adults feed on flowers, but rarely cause much injury. Larvae chew off grass roots, reducing the plants ability to take up water, leaving it unable to withstand the stresses of hot, dry weather. Large dead patches develop as a result. The damaged sod is not well-anchored and can be rolled back like a carpet to expose the larvae. In addition to turf grass, larvae may damage roots of many nursey plants and small fruits, including plants grown in containers.

Asiatic Garden beetle: Adults are ~0.3-0.4" long and have a copper or cinnamon-brown color. Adults can be a serious pest of vegetables and ornamentals, feeding on foliage at night and returning to the soil during the day. Unlike Japanese beetle, adults do not skeletonize leaves, but rather strip, shred and notch the foliage. Larvae feed on organic matter, roots and root hairs within the soil.

Lifecycle

All three beetles have one generation a year in CT. Adults emerge in late June/early July, depending on the species. After mating, females will burrow into the soil and lay eggs. The eggs hatch and the larvae feed on the roots of grasses and other plants. They continue feeding until the soil begins to cool. In late fall, the grubs migrate down deeper into the soil and hibernate through the winter below the frost line. When spring arrives and the soil warms, larvae move back into the root zone and resume feeding. By the middle of June, they start to pupate and will emerge as adults shortly thereafter.

References:

UMass Amherst Fact Sheets. https://ag.umass.edu/vegetable/fact-sheets/scarab-beetle-japanese-oriental-asiatic-garden-beetles and https://ag.umass.edu/landscape/fact-sheets/asiatic-garden-beetle
Garden Insects of North America. Whitney Cranshaw. 2004, pp. 528, 530.

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