

Sawflies on Herbaceous Perennials

Introduction

Sawflies in the order Hemiptera are close relatives of bees and wasps yet may feed upon plants. There are two main families of sawflies, the conifer sawflies which feed upon conifers and the common sawflies, which can feed upon a wide range of broadleaved plants. Growers may encounter various species of sawflies feeding upon herbaceous perennials.

Identification, Biology and Life Cycle

Although sawfly larvae may be confused with caterpillars (Lepidoptera larvae), it is important to distinguish between the two, because management strategies against these two types of larvae differ. Both sawflies and caterpillars have prolegs (stumpy legs that help them crawl) on their abdomen.

Caterpillars generally have two to five pairs of fleshy, stubby prolegs on their abdomen. Their prolegs also have hooks or spines at the tip, which help them attach to plants.

Sawfly larvae have six to eight pairs of prolegs without the hooks or spines at their tip.

Sawfly adults are heavy bodied, thick-waisted wasps that do not sting. They insert their eggs into plant foliage with their saw-like ovipositor.

Feeding Damage

Sawfly larvae feed together in groups and can cause extensive damage to herbaceous perennials.

The pale green columbine sawfly (*Pristophora aquiligae*) can rapidly defoliate columbine in the spring. Larvae are pale green. Generally, there is only one generation per year.



Figure 1 & 2: Columbine sawfly larvae (on left) and its damage (on right). Photos by L. Pundt

Hollyhock sawfly (*Neoptilia malvacearum*) feeds on hollyhock causing skeltonization of their leaves. Larvae are light green with dark spots.

Hibiscus sawfly (*Atomacera decepta*) can be very damaging to susceptible *Hibiscus moscheutos* (rose mallow) varieties. Hibiscus cultivars such as Luna, Belle, Lord and Lady Baltimore are very susceptible. The hibiscus sawfly can also feed upon hollyhock and other mallows but not *Hibiscus syriacus* (Rose of Sharon) or the tender *Hibiscus rosa-sinensis* (Chinese or Hawaiian hibiscus).

Young hibiscus sawfly larvae feed on the underside of leaves but as they get older, they feed upon all leaf tissue except the veins. The dark-headed larvae are yellowish-green with transverse rows of black tubular glands on each body segment. Mature larvae form cocoons in lower stems or in the soil. Pupae hatch into thick-waisted, dark adults with an orange spot on their upper thorax. Multiple generations can occur in Connecticut.

All sawfly larvae feed in groups on leaf tissue but not veins, skeletonizing leaves, giving leaves a lacy appearance.



Figure 3: Hibiscus sawfly larvae feeding in groups and their damage. Photo by L. Pundt

Scouting

Look for the thick-waisted adults in the early morning, resting on plant leaves. The young sawfly larvae first feed on the underside of the leaves.

Chemical Controls

Bacillus thuringiensis subsp. *kurstaki*, or Btk, is specific to caterpillars and is not effective against sawflies. Spinosad (Conserve) or a pyrethroid-based insecticide may be effective against sawflies.

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References

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