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Sawflies[1]

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While larval forms look like caterpillars (Fig. 1) and thus often mistaken for the young of moths or butterflies in the order Lepidoptera, sawflies are really more closely related to bees, ants, and wasps in the order Hymenoptera. Larval stages of the sawfly families Tenthredinidae, Diprionidae, or Cimbicidae can be easily distinguished from true caterpillars by examining the insect's prolegs. True caterpillars exhibit five or fewer prolegs on the abdomen, while these families have seven or eight pairs of fleshy prolegs on the abdomen, and three pairs of true legs on the thorax. Additionally, the prolegs of true caterpillars are armed with hooks or crochets, which is not the case in sawfly larvae. Another less common family called Pamphilidae (webspinning and leafrolling sawflies) also resembles caterpillars but have no distinct prolegs present. Adult sawflies (Fig. 2) vary in appearance, resembling flies in some species and bees in others. The connection between adult and larval forms is hard to make for the layman. The home gardener is typically concerned with the larval stage.

Fig. 1. Sawfly caterpillar larva on gooseberry. By K. Grey.

Fig. 2. An adult web-spinning sawfly. By R.D. Akre.

Larval sawfly damage varies with species, and includes leaf consumption, notching, skeletonizing, leaf mining, or gall making. For the most part, sawflies are present only as occasional pests.

Some common sawfly species include the green or tan spotted imported currantworm, which can literally strip foliage off of currants; the pear or cherry slug, a serious skeletonizer (see WSU EB1369); the light or dark striped raspberry sawfly, which feeds on caneberry leaves (see PLS-37); false webworms, which are often gregarious and spin silken nests that become filled with discarded food, cast skins, and fecal pellets;

[1] One common family of sawflies, the horntail wasps, is not mentioned here, but is described in PLS-4.

willow leaf sawfly, whose presence is indicated by obvious fleshy bumps on the leaves. Some sawflies also exhibit a distinctive defensive behavior when disturbed. This behavior is seen when they raise their hind end up in a snake-like posture, often waving it back and forth seemingly to intimidate would-be predators.

Management in most cases is unwarranted unless twenty percent or more of the foliage is threatened. Oftentimes, hand picking and destroying is a useful option. Should chemical management become necessary, refer to the Hortsense website (http://pep.wsu.edu/hortsense) or the PNW Insect Management Handbook for current recommendations. Once again, these pests are easily mistaken for true caterpillars, in which case *Bacillus thuringiensis* (Bt) might be selected for caterpillar management. Unfortunately, Bt will not control sawflies since it is selective for the insect group indicated on the package. This usually includes only true caterpillar types.

The following images (Fig. 3-6) reveal some of the common sawfly pests in our region.

Fig. 3. Rose slug larva and damage to rose leaves. By A.L. Antonelli.

Fig. 4. Willow gall sawfly, *Pontania* sp. on native willow. By A.L. Antonelli.

Fig. 5. Alder woolly sawfly larva on alder. By A.L. Antonelli.

Fig. 6. A larval pamphilid web-spinning sawfly. By A.L. Antonelli.