

Purslane Blotchmine Sawfly

The purslane blotchmine sawfly (*Schizocerella pilicornis*) can be a commonly noticed insect in hemp fields where the weed purslane is abundant. Adults are small (about ½-in) dark-colored non-stinging wasps that rest on the foliage of all kinds of plants.

Purslane is the only host of this insect. Females insert their eggs in edge of a purslane leaf, usually laying only a single egg per leaf. Upon hatch from the egg, which occurs about 3-4 days later, the larva then feeds internally in the leaf, ultimately excavating a blotchy leaf mine.

The larvae will complete development within 5-6 days, then exit the leaf to burrow into the soil. It moves about an inch deep, where it makes a small chamber where it transforms to the pupal stage, which occurs within a tough, silken cocoon.

Pupation last about 7-10 days, after which a new adult emerges from the pupa, cutting its way through the cocoon and digging to the soil surface. (Females are somewhat larger than males and males have antennae that is branched.) Upon mating females will begin laying almost immediately. Several dozen eggs may be laid, almost all on the same day the adults emerge and mate. Adults usually live only a single day.

There can be multiple generations produced per year. Late in the season the larvae will go into dormancy within the cocoon, suspending development until the following spring.

Hymenoptera: Argidae



Adult female of the purslane blotchmine sawfly resting on hemp (above) and adult male visiting its host plant, purslane (below).



Photo credits: Adult female, larva by Melissa Schreiner; male and leaf mine by Whitney Cranshaw

Typical blotch-type mine produced by larval feeding.



Full-grown larva of the purslane blotchmine sawfly exposed from leaf mine.