Pea leaf weevil

The pea leaf weevil, *Sitona lineatus* L. **feeds as a larvae** and as an adult on legume crops. Adults overwinter in leaf litter, often in alfalfa fields. Adults are light gray with subtle stripes from head to abdomen (Figure 1). Feeding starts near overwintering sites and shifts to pea crops as peas begin growing. The greatest damage occurs on the nitrogen fixation nodules by larval stages feeding on the roots. Larval feeding reduces yield and nitrogen amendment in soil. Adults feed on the leaves and can cause significant damage on young plants, but have decreasing impact on plants past the six leaf stage. Adult feeding gives a characteristic 'scalloped' edge to the leaves (Figure 2).

Figure 2. Characteristic 'scalloped' damage to pea leaves

Figure 1. Adult pea leaf weevil

Assessment and Control

The action threshold is to spray PLW adults when the pea seedling is at the 1 to 3 true leaf stage if one or more feeding notches appear on 30% (3 out of 10 plants along a seed row) of the pea seedlings, and as long as these 30% have received feeding damage to the plant's clam leaf (the most recently emerged leaf). Seed treatment is another option, but broad spectrum insecticides also target beneficial predators of PLW.

Research

WTARC is assessing the need of growers to address this problem. Biological control measures are an attractive option.