



Assassin bugs

Beginner

Scientific Names

There are several different species of assassin bugs including *Acholla multispinosa* (DeGeer), *Zelus luridus* Stal. The most abundant assassin bug in Ontario apple orchards is *Acholla multispinosa* (DeGeer).

Identification

A. multispinosa is described below:

Eggs:

- In masses containing about 24 eggs on buds or twigs and limbs.

Nymphs:

- Five nymphal instars,
- Early instars appear black,
- Later stages are light coloured and possess wing pads (immature and undeveloped wings).

Adults:

- 1-2 cm in size,
- Dark brown to grayish brown in colour,
- Raptorial front legs,
- Large beaks used for feeding on prey, held under the body in a visible longitudinal groove when not in use,
- Elongated head,
- Abdomen is widened in the middle, not completely covered by the wings,
- Lifestage most commonly seen in orchards.

Often Confused With

- Leaf footed bugs- Leaf footed bugs lack a longitudinal groove in which the beak fits. The hind legs are enlarged and flattened, giving the appearance of a leaf.

Interaction With Host

Both nymphs and adults are predaceous and feed on all life stages of green apple aphid, adult leafhoppers and some caterpillar larvae. Nymphs appear in early June and adults in late July to early August.

Period of Activity

Petal fall through early August.

Insects Attacked

Larvae and adults are generalist predators but may also be pests of fruit.

Monitoring and Management

Adults and nymphs are found in terminals during tapping and regular orchard monitoring.



Zelus luridus nymph



Assassin bug adult



Assassin bug nymph (Photo by D. Epstein, MSU)



Assassin bug – note longitudinal groove where the beak sits at rest



Assassin bug nymph with mouthparts folded under body



Assassin bug nymph – note beak-like mouthparts (extended)



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