

Beneficial Species Profile



Photo credit: Russ Ottens, University of Georgia, Bugwood.org; Gerald J. Lenhard, Louisiana State University, Bugwood.org

Common Name: Spined soldier bug

Scientific Name: *Podisus maculiventris*

Order and Family: Hemiptera; Pentatomidae

Size and Appearance:

	Length (mm)	Appearance
Egg	1 mm	Around the operculum (lid/covering) on the egg there are long projections; eggs laid in numbers of 17 -70 in oval masses; cream to black in color.
Larva/Nymph	1.3 – 10 mm	1 st and 2 nd instars: black head and thorax; reddish abdomen; black dorsal and lateral plates. Younger instars are gregarious; cannibalistic. 3 rd instar: black head and thorax; reddish abdomen with black, orange, and white bar-shaped and lateral markings 4 th instar: similar to 3 rd instar; wing pads noticeable 5 th instar: prominent wing pads; mottled brown head and thorax; white or tan and black markings on abdomen.
Adult	11 mm	Spine on each shoulder; mottled brown body color; females larger than males; 2 blackish dots at the 3 rd apical (tip) of each hind femur; 1-3 generations a year.
Pupa (if applicable)		

Type of feeder (Chewing, sucking, etc.): Nymph and adult: Piercing-sucking

Host/s: Spined soldier bugs are predators and feed on many species of insects including the larval stage of beetles and moths. These insects are found on many different crops including alfalfa, soybeans, and fruit. Some important pest insect larvae prey include Mexican bean beetle larvae, European corn borer, imported cabbageworm, fall armyworm, corn earworm, and Colorado potato beetle larvae. If there is not enough prey, the spined soldier bug may feed on plant juices, but this does not damage the plant.

Description of Benefits (predator, parasitoid, pollinator, etc.): The second instar is the first feeding stage and is also cannibalistic. Prey is impaled by piercing-sucking mouthparts and the internal juices are then sucked out. Because the spined soldier bug preys on some economically important pest insects it has been used as a biological control.

References:

O'Neil, B. (nd). Know Your Friends: Spined Soldier Bug. Purdue University. Retrieved from <http://www.entomology.wisc.edu/mbcn/kyf208.html>

Richman, D.B., Mead, F.W., Fasulo, T.R. (2001, August). Spined soldier bug – *Podisus maculiventris*. Featured Creatures. University of Florida. Retrieved from http://entnemdept.ufl.edu/creatures/beneficial/podisus_maculiventris.htm