Beneficial Species Profile



Photo credit: Maggie Heumann, UNL

Common Name: Brown Lacewing

Scientific Name: *Micromus spp.*

Order and Family: Neuroptera: Hemerobiidae

Size and Appearance: Small and fly-like in appearance with similar size and shape wings held tent-like over the soft body. Costal crossveins, or the veins on the edge of the wings, appear forked; scalloped wings. Small, prognathous (projecting outward) and free-moving head (as opposed to being fixated). Antenna and wings appear to have short brown hairs.

	Length (mm)	Appearance
Egg		Non-stalked and very tiny. Can
	<0.5mm	be laid singly or in masses
Larva/Nymph		White to brown in color;
	<15mm	Campodeiform (elongated and
		flat), almost alligator-like
		shape; larger mandibles; 3
		instars
Adult		Small and fly-like in
		appearance with similar size
	10-15 mm	and shape wings held tent-like
		over the soft body; Costal
		crossveins forked in wings;
		wings appear scalloped; Small,
		free-moving, outward
		projecting head
Pupa (if applicable)		Exarate (appendages are free
		and not glued to the body)in a
		silken cocoon

Type of feeder (Chewing, sucking, etc.): Chewing and ectognathus (mouthparts retract inside of the head) mouthparts in both forms

Host/s: Wooded areas, near trees, shrubs and dense vegetation. Both adult and larval life stages feed on smaller insects such as scale species and aphids.

Description of Benefits (predator, parasitoid, pollinator, etc.): Predator as both a larvae and adult.

References:

Borror, D. J., & White, R. E. (1970). *A field Guide to Insects of North America* (The Peterson Field Guide Series). New York, NY: Houghton Mifflin Company.

Cranshaw, W., & Kondratieff, B. C. (2006). Guide to Colorado Insects. Englewood, CO: Westcliffe.

Milne, L. J., & Milne, M. J. (1980). *The Audubon Society field guide to North American insects and spiders*. New York: Knopf.

Curtiss, R., & Booth, S. (1993). Lacewings. Retrieved June 17, 2016 from http://jenny.tfrec.wsu.edu/opm/displaySpecies.php?pn=670.

Triplehorn, C. A., Johnson, N. F., & Borror, D. J. (2005). *Borror and DeLong's introduction to the study of insects* (7th ed.). Belmont, CA: Thompson Brooks/Cole.

Williams, M. (2008, September/October). *Systematic Entomology Lecture*. Lecture presented at Auburn University, Auburn, AL.