



BUG BIZ

Pest Management and Insect Identification Series



Oncopeltus fasciatus, Large Milkweed Bug (Hemiptera: Lygaeidae)

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Description

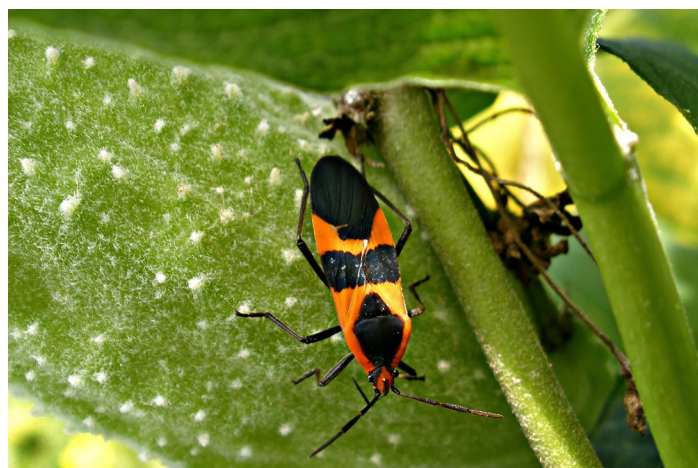
Large milkweed bugs (*Oncopeltus fasciatus*) are orange-red hemipterans, or true bugs. Adults are 1/2 of an inch to 3/4 of an inch (12 to 18 mm) in length. When at rest, the partially stiffened forewings (hemelytra) cover the abdomen. They possess three distinct patches of black along the forewings. The front black patch covers the thorax except for a narrow orange margin. The middle and rear patches are equally spaced on the forewings (hemelytra). This creates the appearance of an orange or red X when viewed from above. There is no white coloration on them, which distinguishes them from the small milkweed bug (*Lygaeus kalmia*). The lower surfaces of the thorax are also black with the basal segments of the legs (coxae) a mix of orange and black and the remaining leg segments all black. The abdomen and head are mostly orange with all black compound eyes, antennae and beak (proboscis). Nymphs are darker orange-red with black or dark brownish-red wing buds and appendages. Abdomens of nymphs have two small dark spots located at the midpoint of the rear (posterior) segments and several small black dots on either side. Eggs are yellow in coloration when first deposited, then change to a dark orange-red before the nymphs hatch.

Life Cycle and Biology

The large milkweed bug has a hemimetabolous life cycle characterized by immature stages that resemble small adults with undeveloped wings and reproductive organs. The nymphs undergo five molts during their typical 30-day development period, the duration of which may vary according to weather conditions. About a week after their final molt to the adult stage, they are able to mate. Eggs are laid in clusters of 30 to 50 during warm months in Louisiana, but can be laid year-round under favorable conditions in more tropical regions (i.e., southern Florida). In Louisiana the species can complete one to three generations annually, depending on seasonal weather. Populations can be migratory or sedentary. Individuals may travel long distances to overwintering sites from



Large milkweed bug (*Oncopeltus fasciatus*) adults and nymphs feeding on a milkweed seed pod (Marilyn Sallee, Bugwood.org, Creative Commons 3.0).



An adult large milkweed bug (*Oncopeltus fasciatus*) adult feeding on milkweed seed pod (Ansel Oommen, Bugwood.org, Creative Commons 3.0).

northern populations or higher altitudes or remain local in more tropical zones. Migration is also strongly correlated to flowering of milkweed host plants (*Asclepias* spp.). Large milkweed bugs are herbivorous. Nymphs feed exclusively on milkweed seeds. Adults can feed on other plant seeds

such as those of sunflowers and watermelons. Milkweed feeding results in an accumulation of toxins in the cuticle of the body (exoskeleton) and wings that make large milkweed bugs unpalatable to predators, a defense shared with most milkweed specialists. The bright orange to red coloration with bold black patches is a visual indicator to predators of their unpalatability (aposematic coloration).

Ecological Significance

Nymphs live in small groups and adults can be found in clusters as well. Adults are believed to release an attractant pheromone (kairomone, a type of airborne hormone) while feeding, which causes others of the same species to congregate on the same food source. While mating, adults cluster in large groups around objects giving the appearance of an infestation. However, large milkweed bugs are more of a visual nuisance and do not pose a threat to gardens. Some growers consider the species' presence beneficial because they mitigate the excessive growth of milkweed in nonpesticide gardens by feeding on milkweed seeds.

Control

In situations where milkweed plants are grown for the cultivation of monarch butterflies (*Danaus plexippus*), the presence of large milkweed bugs may be regarded as a threat. The use of insecticides is not recommended because treatments will also kill monarch larvae and other

nontarget insects. Large milkweed bugs are unpalatable with few natural predators. Hand removal is the safest option for protecting milkweeds while keeping plants free of insecticides. Also, removing overwintering sites like dead seed stocks or leaf litter will help reduce populations of large milkweed bugs during future seasons. Small infestations do little damage to healthy stands of milkweed.

References

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Contact Us: For advice about arthropod identification or diagnosis, contact the LSU AgCenter Department of Entomology. Reach the department through the Contact Us webpage: <https://bit.ly/36c4awm>.

