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Lygus Bugs

<i>Order:</i>	Hemiptera (true bugs)
<i>Family:</i>	Miridae (plant bugs or leaf bugs)
<i>Metamorphosis:</i>	Simple (egg-nymph-adult)
<i>Mouthparts:</i>	Piercing and sucking in nymphs and adults



Adult **LYGUS BUG**, see color print, Fig. 5, on publication B-1013.

Lygus bugs are found throughout the world and are important pests of flowers and alfalfa grown for seed in the United States. Two species common to this region are *Lygus hesperus* and *Lygus elisus*.

Body Form

Eggs: Eggs are inconspicuous and will not be readily encountered during plant inspection.

Nymphs: Lygus nymphs are approximately 1/16 inch to 2/16 inch in length. They are generally triangular-shaped, pale blue or green in color, and dorso-ventrally flattened. As the nymphs mature and become larger, their colors may vary from reddish brown, to yellow, orange, or a dull green. A distinctive triangle can be found 1/3 the distance down the back. Wing buds on older nymphs are noticeable.

Adults: Adults have fully developed wings that are folded flat over the abdomen when at rest. The coloration and markings of the adults are the same as those of the nymphs.

Life History

Lygus bugs overwinter as adults in plant debris and weeds such as wild mustard and Russian thistle. The adults become active in early spring. They mate and lay eggs soon after emerging from their overwintering site. Eggs will hatch in approximately one to four weeks depending on temperatures. Lygus bugs prefer to feed on the reproductive parts of the plant; however, they can also be found feeding on stem and leaf tissue. Peak activity occurs from midsummer (July) to midfall (October).

Plant Injury

Lygus bugs withdraw plant juices with their piercing-sucking mouthparts. They preferentially feed on the reproductive parts of a plant. During this process, they inject saliva, which is harmful to susceptible plants, into plant tissue. The resulting damage to the plant is a combination of puncture wounds created by the insertion of the mouthparts, the withdrawal of plant juices, and a toxic response to the saliva. Primary bud damage appears as tan or bleached buds and brown shriveled seed pods that will be shed two to

five days after feeding. Continued feeding will eventually halt the growth of new buds. Secondary damage to the plant may be expressed as reduced stem length and leaf size. In Wyoming, alfalfa grown for seed is susceptible to this type of injury.

Management

Chemical treatment may be used to control lygus populations early in the summer. Late-season control may be obtained naturally by a combination of predatory insects such as the big-eyed bug, damsel bug, and lacewing larvae. The elimination of overwintering sites, including fall weed control in and adjacent to the fields and maintaining minimal overwintering alfalfa growth in the field, can significantly reduce early summer lygus infestations.

Issued in furtherance of cooperative extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Glen Whipple, director, Cooperative Extension Service, University of Wyoming, Laramie, Wyoming 82071.

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