Western Triangle Ag Research Center

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Lygus bug

Lygus bugs are small, oval-shaped insects that feed on a variety of crops and weeds. Several species infest canola and alfalfa (Fig. 1). Lygus color varies from pale green to reddish brown to black and from fairly uniform color to mottled. Nymphs resemble adults, but are smaller and wingless. Lygus incidence on canola has been reported around Sun Burst, MT. Lygus bugs feed on the sap of new growth and reproductive tissue. In canola, feeding results in pod abscission or shrunken seeds (Fig. 2). Adult bugs overwinter under plant litter at the soil surface in shelterbelts, headlands, uncultivated areas and field margins.

Threshold Levels

The economic threshold for lygus bugs in canola is between the end of flowering and early pod ripening stages. Once the seeds have ripened to yellow or brown, the cost of controlling lygus may exceed the damage they will cause prior to harvest. Eight bugs/sweep on alfalfa and 1.5 bugs/sweep on canola is the threshold level for taking action.

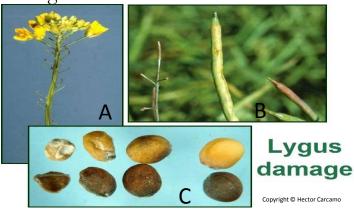


Figure 2. Lygus bug feeding damage in canola: A) Stem discoloration; B) Small lesions on pods; C) Shrunken seeds

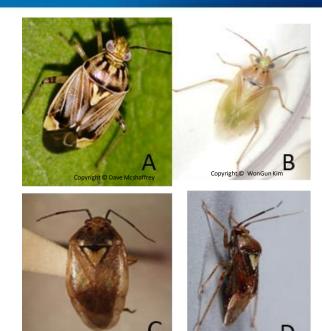


Figure 1. Four species of lygus bug found in Montana A) Lygus lineolaris; B) L. elsius; C) L. borealis; D) L. keltoni

Control

In canola, spraying is best done at "postpetal fall" to minimize the effects of the insecticide on pollinators. Heavy rainfall may reduce levels of early-instar nymphs of lygus bugs. A study in alfalfa found heavy rainfall reduced first generation nymphs by 50%. Nymphs of lygus bugs may be killed by parasitic wasps.

Research

Since this pest incidence has occurred in the Sun Burst area of Montana, the Entomology/Ecology team of WTARC is paying attention on possible spreading of this pest and planning on conducting survey work from next spring.

