

Lygus bugs – Alfalfa is a preferred host plant for several species of lygus bugs, but the bugs also infest many other crops. Lygus bugs are strong flyers and move into alfalfa seed fields from weeds, hay, mint, wheat, and other crops as they are harvested or reach maturity.

Adult lygus bugs vary in color from pale yellowish green to dark reddish brown. They have a yellowish, triangular area between the wing bases.

The adult female lays eggs singly in tender plant tissues. First instar nymphs are tiny, transparent, and difficult to see. The second and third instar nymphs are shiny green and move very rapidly compared with the dull green, slow moving pea aphid that they resemble. The nearly mature fourth and fifth instar nymphs have short wing pads.

Lygus bugs complete a generation in about 4 to 6 weeks. All stages of lygus bugs can occur in seed fields throughout the growing season. Adults overwinter in alfalfa crowns, plant debris, and cracks in the soil.

Damage occurs when lygus bugs pierce tender leaves, stems, buds, petioles, and developing seeds with their beaks and inject toxic saliva as they feed. This causes stunting of plants, blasting of buds, shedding of bloom and seed curls, and shriveling of seeds. The most serious losses are from blossom drop and shriveled seed.

Nymphal and adult feeding damage appears during the bud stage and continues until the seeds begin to harden in the pod. Little damage occurs late in the season even though large lygus populations may exist.

Check seed fields at least once a week for lygus bugs and their predators. Base spray decisions on numbers of insects counted on sweep net samples, not on calendar date. During bloom and seed maturation, apply insecticides to bring lygus bug populations to less than four bugs per sweep (180 degrees or a half-circle sweep). Populations of 10 to 15 bugs per sweep can be tolerated in late season as seeds are hardening. Late-season lygus sprays (cleanup sprays) do little to prevent damage to the final seed crop and usually are not worth their cost.

Damsel bugs and bigeyed bugs are important predators of lygus bugs. Count these beneficial insects when taking sweep samples for pest counts. Combined damsel bug and bigeyed bug numbers must be in about a 2 to 1 ratio to lygus numbers for control to occur. In other words, there must be twice as many predators (damsel and bigeyed bugs) as prey (lygus bugs). Spiders such as crab spiders, wolf spiders, and jumping spiders are also important lygus predators and should be considered in control decisions.