

Bean Leaf Beetle Active In Kentucky Soybeans

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Bean leaf beetle (BLB) damage is being reported in scattered areas across the state. Though they are active in all the soybean production areas, the most significant damage seems to be in the central Kentucky counties. These beetles will be pests from plant emergence throughout the season. They are present in most fields every year. In some years seedlings will be heavily damaged. You should have intensive scouting from emergence through the first trifoliolate then from pod set through pod fill.

Figure 1. Bean leaf beetle colors and patterns.

Bean leaf beetle can come in several colors and patterns (Figure-1). However, they will always have a backward pointing black triangle just behind the head. Adults are about 1/8" – 1/4" long. The body is slightly convex and the beetle is longer than wide. Color is variable, ranging from light brown to dark red, spots and/or stripes may be present or absent.

Bean leaf beetles feed on cotyledons, leaves and pods. Leaf feeding consists of very distinctive almost circular holes. Feeding on cotyledons and pods usually appears as scoop-out divots or holes in the surface.

Scouting in early season: look for stand reduction (cotyledon stage) and heavy leaf feeding while crossing the fields. If damage is noticed, try to establish that BLB is the problem by looking for them on the plants. Control should be considered if 30% stand loss (cotyledon) –OR– 30% defoliation (true leaves) is present.

This early season damage is caused by “overwintering” BLB adults that survived the winter in perennial crops and weeds, then move back into soybean fields. In addition to the feeding they will lay eggs in the soil around plants. These eggs will hatch into small worms which will complete their development in the soil.

BLB will have two more adult generations during the soybean season. The 1st generation adults will emerge in midseason and will feed on leaves. We generally do not have problems with this generation. However, economic popu-



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lations are possible. They will also lay eggs in the soil eventually resulting in the 2nd BLB adults. 2nd generation adults emerge during reproductive or pod filling time and feed on leaves, flowers and pods. This population can be more important than the 1st generation, as these beetles are feeding directly on the yield. When soybeans begin to mature these 2nd generation beetles will move out of soybeans and into surrounding perennials (alfalfa etc.) and other weed plants through the fall then overwinter for the following year. It is possible to have a 3rd generation, but that is more likely to occur much further south. Δ

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