

Hard scouting can avert loss From Stinkbugs, Bean Leaf Beetles

COLUMBIA, MO.

Missouri corn and soybean producers should scout hard for brown stink bugs and bean leaf beetles. Populations of these pests are especially high in late-planted fields and threaten major damage or yield loss if not treated, said Wayne Bailey, University of Missouri Extension entomologist.

Bean leaf beetles are inflicting heavy damage to soybean plants in northern Missouri. "Most reports are from areas where soybean fields are few in number and beetles have congregated in those fields that have been planted," Bailey said.

"There's high beetle numbers out here, and it seems like they're just hitting newly planted beans," said Wayne Flanary, MU Extension agronomist in Holt County in northwestern Missouri. "I've seen this damage in April or May with overwintering populations, but because of late planting they are attacking newly planted soybeans. I've seen 1/4 inch long and can be tan, dark red, pink, green or brown. Most have black spots on the upper back, Bailey said, and all bean leaf beetles have a black triangle just behind their heads.

Adult beetles damage plants by chewing holes in leaf surfaces. They typically do not chew through larger leaf veins or ribs, Bailey said, but late planting this year has favored beetles and reduced soybean fields. "This year we have high beetle numbers, which can totally defoliate and often kill the seedlings."

The economic threshold is five or more beetles or one or more plants destroyed per row foot, Bailey said. Many insecticides are labeled for bean leaf beetles. Seed treatments also help reduce their numbers.

"They'll be around for a while, but they're pretty easy to kill," he said.

Brown stinkbugs pose a serious risk to seedling corn plants, but are harder to kill, Bailey said. Northern and southwestern Missouri have had the most damage so far, but corn seedlings throughout the state are at risk.

Adult stinkbugs suck out plant juices, giving the plants a twisted, stunted or shabby appearance. "They typically damage 5 to 10 percent of plants, but damage is much higher this year," Bailey said. "A lot of fields are at 25 percent right now. In some cases they can damage as much as 60 percent of plants."

Stinkbugs may also damage the plant's growing point, he said. "This kind of damage results in plants that may die rapidly. If the plant survives, it can be stunted or produce a tiller which is almost always a weed."

Signs of damage often appear first along field edges, but if unnoticed can spread throughout the field. A good indicator of stinkbug damage is the presence several oval holes located in a



Figure 1. Green stink bug adult.

line across the corn leaves as they grow out of the whorl, Bailey said. A yellow border often surrounds the holes.

Frequent scouting is essential to prevent major economic loss, as feeding damage may start 10 to 20 days before clear signs of twisting, stunting, wilting or plant death appear.

"If you can find stinkbugs when they're actively feeding, you can knock their population down, but any plants fed on will have problems." The economic threshold is one stinkbug per row foot.

"When scouting, look near the base of the plants, on foliage, at leaf nodes and in plant whorls," Bailey said. "The bugs hide low during the day or when it's windy."

To treat, select a spray labeled for stinkbugs. Make sure to get a positive stinkbug identification first, as other insects such as wireworms and billbugs can cause similar damage.

"If plants are stunted but survive, you can come close to the original yield if conditions are right," he said.

Later in the season, green stinkbugs may pose a problem for soybeans. For questions or help identifying pest damage, contact your local MU Extension office. Δ