

Leaf-Feeding Insects Threaten Late-Planted Crops

Farmers Need To Scout Often, Says MU Entomologist

COLUMBIA, MO.

Japanese beetle numbers have reached their peak in Missouri, but high numbers of other leaf- and pod-feeding pests threaten late-planted corn and soybean, said Wayne Bailey, University of Missouri Extension entomologist.

Fall armyworm numbers are “very high” in corn and sorghum; corn earworms are migrating from corn to soybeans; and bean leaf beetles are “extremely high” in parts of the state. With high prices for crops, the economic threshold for treatment has been lowered for several insects, Bailey said.

“There are a lot of defoliators working on corn right now, especially late-planted corn. Some of these plants are tasseling, and once that happens, spraying won’t help much,” he said. Fall armyworms prefer soybean or sorghum to the tassel and will almost always leave the corn plant.

“We need as much photosynthetic material on late-planted corn and soybeans as possible,” he said. Damaged leaves or loss of foliage can slow plant growth and further delay maturity of late-planted crops.

In some fields, there are two to three fall armyworm larvae per plant on 75 to 100 percent of the plants. “If I had a field of corn with 25 percent of the plants being damaged, and two to three larvae in those plants, I’d do something about it,” he said.

Fall armyworms do the worst damage to corn and sorghum by feeding from inside the plants on tassels or heads as they emerge from the whorl.

“Both the head and the tassel grow up through the whorl, so the insect can damage either crop before these emerge,” Bailey said. “They can damage all the leaf tissue and there’s less harm to yield. But once they damage the tassel or head, they can really damage yields.”

Corn whorls are tighter than on sorghum; this impedes insecticide from entering and lowers the rate of control, he said.

“Sorghum whorls are more open, so armyworms are easier to kill. You can probably get closer to 75 percent control in sorghum,

whereas you may get 25 to 50 percent control in corn. But it makes sense to treat both crops – we need to protect those plants.”

After feeding on corn, second-generation fall armyworm and corn earworm moths migrate to soybeans. “When it starts drying out, both of these insects may be problems later this summer in soybeans.”

With high temperatures, it may only take two weeks for fall armyworms to complete their cycle from egg to adult moths, Bailey said.

Corn earworms strip the pods of soybean plants, which can cause significant economic damage. “It only takes one larva to strip all the pods from a plant. If you have corn earworms along with fall armyworms, they can strip off a lot of photosynthetic material on the plant,” he said.

Bean leaf beetles, another major soybean pest, are emerging from their first generation and will continue to threaten late-planted beans. They feed on both foliage and pods of soybean plants and can inflict severe pod damage, Bailey said.

“Their numbers seem to be extremely high, but not all over the state,” he said. “Where they’re high, numbers are over the threshold of five beetles per linear foot of row with more than 25 percent of plants being damaged. I think we will see more of these this season.”

Green and brown stinkbugs are also increasing in soybean fields as woody perennials stop blooming and other sources of leafy green material die down, Bailey said. “We’re not yet at the economic threshold, but we’re approaching it. Their numbers will increase in soybeans as we continue to dry down.”

Producers need to be vigilant in scouting late-planted crops to avoid major plant damage and yield loss, Bailey said.

“We need to protect these plants, so we’ve been recommending that producers spray in some fields where they have these insects,” he said. “With commodity prices and the lateness of the season, we need all growth we can get, so we can be more conservative and treat sooner.”

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