

Insects Abundant On Corn And Soybean Plants

Thresholds Mean Little; Farmers Should Scout Often & Treat Early, MU Entomologist Says

COLUMBIA, MO.

Higher numbers of several crop pests are accumulating in fields across Missouri, posing new threats to late-planted corn and soybean and undermining traditional treatment thresholds, said Wayne Bailey, University of Missouri Extension entomologist.

While the black cutworm menace is over, corn earworms, stinkbugs, Japanese beetles, bean leaf beetles, burrower bugs and fall armyworms are now out in abundance and can rapidly defoliate plants. Farmers should closely monitor fields for insect damage and take prompt action to avoid major losses, Bailey said.

"We have a situation where thresholds don't fit very well," he said. "Because we planted so late, most corn and soybeans are very small. With all the other setbacks this season, we want to protect as much of the foliage as we can."

Dailey recommends that farmers spray if the amount of defoliation makes them uncomfortable. "Don't feel like you have to wait for damage to reach threshold levels," he said. "If it's at the level where you can't stand to get any more plants damaged, go ahead and treat."

Corn earworm and stinkbug populations are particularly high. Both pests are generalist feeders on corn, soybean and other crops. Over a seven-day period, MU Extension field staff caught 540 earworms in Callaway County, 148 in Boone County and 95 in Audrain County. Over a three-day period, 141 were caught in traps at the MU Delta Research Center in Portageville, New Madrid County.

"These are things we need to keep our eye on," said MU Extension integrated pest management associate Steven Kirk, who manages the trap counts.

Stinkbugs are proliferating and are more widely dispersed in fields than usual. Damage has been rapid, with 10 to 15 percent of plants already injured in some fields, Bailey said. Stinkbug damage often takes a few days to show up and can affect as much as 50 percent of plants if not caught, he said.

"The calls I'm getting are ones where stinkbugs are present in high numbers across whole fields, not just in isolated spots," he said. "Because plants are small, the stinkbug toxin is more effective. So 10 to 20 days after emergence, we're seeing twisted plants and holes across leaves with yellow borders, indicating stinkbugs. Plants are dying now and tillers are coming up."

Tillers resulting from insect damage often become weeds and can cause yield loss by crowding healthy plants and sucking soil nutrients, Bailey said.

"You need to get rid of stinkbugs because high numbers now will stay high even as corn grows towards ear production," he said. "If it gets cooler, they will just be closer to the ground and harder to find."

Stinkbugs are often found close to the ground, near the base of corn plants. "You should treat

if more than 3 percent of your plants are damaged, or if you're close to the economic threshold of one or more stinkbugs per linear foot of row."

Bean leaf beetles and white-margined burrower bugs are damaging soybean. The burrower bug nymphs resemble stinkbugs and are causing plants to wilt and die, Bailey said.



Corn earworm larva and corn ear damage.

Photo: (Lee Jenkins Slide Collection)

"The nymphs have a black head and bright fire-engine red body," he said. "They often reside under crop and weed stubble. You may see soybeans in poor shape, and if you look under the plant, you'll see them feeding. They may be up higher on the plant, but if you can't see them, look low."

True armyworms have been found on wheat in southwest Missouri, with some cutting heads. "Where this was found, it was limited to less than a county area," Bailey said. "As the wheat dries down, this will become less and less because they only like wheat when it's green."

Japanese beetles, currently scattered in smaller numbers around Missouri, may soon be a significant threat.

"They're coming into their own, raising their little metallic heads," Kirk said. "Over a couple days, 620 were caught in Mississippi County. There have been reports from southern Illinois where numbers are already very high. This tells us they're coming in and coming strong, and they're moving this way." Δ