For Soybean Growers, It's Scouting Time

Experts recommend intensifying insect scouting from bloom to seed set in soybeans.

Compiled by staff
Published: Jul 5, 2011

After the late, wet spring delayed planting in many areas, soybean stands are finally established and approaching critical reproductive stages. That's when insect pressure is likely to build.

"The reproductive period — from beginning bloom to seed set — is the time to intensify scouting efforts," says Erin Hodgson, extension entomologist with Iowa State University. "You don't want any clipping of the pods, or abortion of the flowers or the seeds. Now is when scouting is most critical to protect yield from damaging insects."

Since its introduction the United States in 2000, the soybean aphid has become one of the most threatening pests for many soybean growers. Although the cool, wet spring may delay aphid onset this year, Hodgson cautions growers not to rule out pressure from this devastating pest. "Soybean aphid populations can explode almost overnight. If left untreated, soybean yields can take a significant hit, reducing output per acre by 15% to 40%," Hodgson says.

Hodgson reports that aphid populations in Iowa have been highly variable the past few years. "In 2011, it's likely that not every field will need to be treated, but some might to protect yield. That's why scouting and integrated pest management tactics will pay off financially."
Growers who scout regularly and track insect numbers will be well positioned to make timely treatments when insect populations exceed the economic threshold.

Dan Sherrod, product development manager, DuPont Crop Protection, recommends that scouting efforts be in full swing now and when weather conditions are dry and between 78 and 84 degrees Fahrenheit, the optimum environment for soybean aphid populations to flourish. Scouting should continue through the reproductive growth stages as soybean plants fill their pods.

Scouting is particularly important in late-developing fields, says Sherrod. Under normal conditions, soybean plants have already filled their pods and are starting to dry down when insect pressure increases in July and August, "The trouble with late planting," he says, "is you'll have green growing plants that are attractive to pests later in the season."

For accurate scouting, Sherrod recommends examining 20 to 30 plants at multiple points throughout the field and recording pest counts and foliar damage. As pest populations are identified, scouting efforts should intensify, particularly with soybean aphids. "Once aphids are detected in the field, check the crop every two to three days, as populations can double in that brief time," he says.

Soybean aphids are just one of many pests growers should watch for as they walk their fields. "When you're out there making aphid counts, look for worms, bean leaf beetles, Japanese beetles and other pests common to your area," advises Sherrod, adding that foliage damage is the best way to spot a worm infestation.

Familiarize yourself with the established treatment thresholds for local insects. For soybean aphids, says Sherrod, the typical threshold is an average of 250 aphids per plant over 80% of the plants in the field. "When populations reach this critical number, particularly during the flowering to early pod stages, it's time to take action, before yield potential is compromised."

Sherrod says spotting the sap-like secretion called honeydew that soybean aphids leave behind, which encourages mold growth, is an indication that the infestation is out of control. "If the field is sticky and you see black, sooty mold, it's critical to make aphid counts and move quickly with a rescue treatment if thresholds are exceeded," he warns.
Source: DuPont