Be Watching For Soybean Defoliators

NASHVILLE, ILL.

Soybeans are one tough crop when it comes to pests. Soybean cyst nematode, soybean rust (which has yet to enter our state at a troubling time), soybean aphids (which can be problematic from time to time), and a few minor diseases are the only noticeable blemishes on the soybean's "crop resume."

However, from mid-July to mid-August, soybeans are occasionally attacked by outbreaks of insect pests that can feed on leaf tissue. Those pests can occasionally, all-be-it rarely, reach alarming levels. Accompanying Japanese beetles (the now most infamous defoliator) are bean leaf beetles, blister beetles, grasshoppers, green cloverworms, thistle caterpillars, and woolybear caterpillars.

Bean leaf beetles are not new to most producers. As a matter of fact, July is the second time that these leaf feeders get "press attention." They overwinter under residue in Illinois as adults, and are originally a concern in fields that are planted early. During July and August, they make a second appearance presenting a possible defoliation problem for mature soybeans as they feed over large areas of a field. Bean leaf beetles will vary in color and spotting, but these ¼" long beetles can always be identified by a black triangle located just behind the head.

Blister beetles are another potential soybean pest. They overwinter as adults emerging in swarms that land in isolated areas of the field. They can be disastrous in these isolated regions as they strip away foliage between the veins of the plant, but they almost never become a "field-wide" problem.

Sod and fence row areas of the field are "most loved" by grasshoppers as they lay their eggs in these areas. Eggs are the overwintering stage. Scouting these sodded areas in June can detect and eliminate intense grasshopper pressure before it enters the field. However, this "crystal ball" is past and scouting the bean field is the only means by which one can determine the necessity of grasshopper control.

Diseases are particularly hard on green cloverworm, a pale green larvae with two white stripes and three false legs in the mid section of its body. A three by three foot section of white cloth called a "beat cloth" may be utilized to determine the extent of disease. The producer simply "beats" the soybean foliage on either side of the cloth and examines the cloth for insects. Diseased insects will have one of three characteristics. They will either be dried out and shriveled, covered with a white cocoon-like cottony mass, or riddled with small, white eggs laid just behind the head. If disease is present green cloverworms will probably be decimated. They normally must piggy-back with other insects to cause problems.

The painted lady butterfly is a beautiful red, black, brown, and white mottled insect whose larva, known as the thistle caterpillar, can be another potential soybean pest. The thistle caterpillar, which commonly feeds upon thistles growing along the roadside or within pastures, does occasionally defoliate soybeans. The pest weaves a nest of leaves around itself, where it lives in isolation from other thistle caterpillars and the outside world. It can defoliate but typically harms only a few isolated plants.

Woolybears, called "woolyworms" by children who collect them as pets during the summer, are white hairy larvae when young. As they age, the worms turn dark brown or red. It is not uncommon to see quite a few of these worms crawling across roads in the fall. Two generations generally occur each year, and the pests are usually more abundant and damaging during dry years. The recent rains that have dowsed our area may have brought diseases into the woolybear population, thus limiting their potential as a pest. However, when scouting, a beat cloth should be used to determine the accuracy of this statement in the field in question.

Finally, the Japanese beetle, that 1/2" long brownish bronze and metallic green beetle identified by several tufts of white hair located just behind the wings, can and does defoliate area beans. However, yield-reducing defoliation is still limited (though not impossible).

The University of Illinois recommends control measures when 30 percent defoliation has occurred before bloom, and when 20 percent defoliation occurs between bloom and pod-fill. While that level of defoliation can be possible, it tends to be rather rare making soybean defoliation horror stories few and far between. Δ