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### ***Soybean Insects & Defoliation***

From now through season's end, soybean insect pests will be commonplace. Some are just passing through. Some are feeding on pods. The ones we first often notice, however, are the foliar feeders – the ones that make the tops of the plants and edges of the field look rough.

Soybeans have a great ability to compensate for lost leaf area from insect feeding. Holes chewed in the upper canopy? You may just be allowing light to penetrate deeper into that canopy allowing inner leaves to increase photosynthetic rate – to help compensate for lost leaf material. It's not to say that we can always lose foliage and everything be just fine. Thin canopies can't tolerate as much feeding as denser ones; defoliation during reproduction is less tolerated than during vegetative growth; and good growing conditions allow for greater compensation levels than when plants are stressed - but the plant's ability for recovery is still great. Nebraska research has shown defoliation losses can reach almost 20 percent before treatment is warranted.

While 20 percent doesn't seem like much, defoliation levels are almost always over estimated. Damage doesn't occur evenly in the canopy, so make defoliation observations throughout the canopy to get an accurate idea as to how the *entire* plant is affected. Want to know what 20 percent looks like? Check out the 2023 KSU Soybean Insect Management Guide (page 2 online at <https://bookstore.ksre.ksu.edu/pubs/mf743.pdf> or available upon request from District Offices). If scouting, the University of Nebraska has some excellent scouting tips at: <https://cropwatch.unl.edu/2016/decision-making-soybean-defoliating-insects>.

It can take pretty high numbers of foliage feeders to reach the 20 percent leaf loss level where treatment might be needed, but pod feeding insects are a completely different story. Bean leaf beetles and stink bugs are already present in some fields. The damage they do, in addition to others like soybean podworm (corn earworm), can add up quickly. Scout for them now as well.