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Soybean Insects & Defoliation

Over the past month or better, various soybean insects have moved through soybean fields with some just passing through and others likely causing defoliation. Others, still, may even start feeding on pods as pod set hits high gear.

One of the great things about soybeans is their ability to compensate for leaf area lost from insect feeding. In fact, when holes are chewed in the upper canopy, light penetrates deeper into that canopy and inner leaves can increase photosynthetic rate, helping compensate for lost leaf material. Many factors affect that compensatory ability - thin canopies can't tolerate as much 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 under stress - but the plant's ability for recovery is still great. In fact, research out of Nebraska would suggest defoliation losses can reach almost 20 percent before enough is lost to warrant treatment.

While 20 percent doesn't seem like much, defoliation levels are almost always over estimated. Damage doesn't occur evenly through the canopy, so defoliation observations should be made throughout the canopy to get a good idea as to how the *entire* plant is affected. Want to know what 20 percent even looks like? Check out the 2022 KSU Soybean Insect Management Guide online at: https://bookstore.ksre.ksu.edu/pubs/MF743.pdf (and available upon request from District Offices. Want to scout? The University of Nebraska has some excellent scouting tips available 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 can do, in addition to that from soybean podworm (corn earworm), can add up quickly. Be vigilant about scouting for them now as well.

Iris Division Time

You likely won't notice, but after several years, centers of your iris clumps tend to lose vigor, with flowering only occurring on the outside. As one of our most popular early season flowers, we want *lots* of healthy blooms, and that means dividing plants every three to five years to 'rejuvenate' them. The time to do so is now through August (early August is ideal).

Start by digging up the entire clump – roots, rhizomes, and all. Cut rhizomes apart with a sharp knife so each division consists of a fan of leaves plus a section of rhizome (the best ones will have a *double* fan of two small rhizomes attached to a larger one forming a Y – they tend to produce more flowers in the first year after planting.). Discard rhizomes showing damage or remove borers and treat for soft rot if doing so is going to eliminate too many flowers

Cut leaves back by two-thirds, making cuts at an angle to allow water to shed. Remove weeds from the planting area and fertilize via soil test or by applying a balanced fertilizer at the rate of 1 pound of actual nutrient per 100 square feet. Mix six inches deep then plant. Smaller rhizomes may take longer to bloom while larger ones may well bloom next spring.