

MID-COAST IPM NEWS

Calhoun

Refugio

Victoria

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CROP STATUS

Soybeans



Soybean maturity ranges from first trifoliolate (V1) to bloom (R1). The insect pests that I have seen in soybeans thus far include **loopers** and **three-cornered alfalfa hoppers**.

Loopers ($\frac{1}{2}$ - $\frac{3}{4}$ inch) were found at 15 per 100 sweeps. The economic threshold for soybean loopers is when defoliation exceeds 40% prebloom, 20% during blooming and pod fill, and 35% from pod fill to harvest, or when $\frac{1}{2}$ inch or larger larvae number 4 or more per row-ft, or 150 per 100 sweeps.

Three-cornered alfalfa hoppers girdle the main stems of soybean plants and were found at 4 per 100 sweeps. The damage first appears as slight indentations and later as swellings encircling the entire main stem. Randomly selected row-foot sections, at several locations in the field, should be examined for fresh damage early in the season (3- to 10-inch plants).

This insect can be found in soybean fields from the seedling stage through maturity. During the seedling stage its feeding causes girdled main stems; in later growth stages petioles are girdled. Plants damaged in early growth stages may not be noticed until they

are much older and heavier. Because of the damaged stems, plants may lodge when stressed by wind, rain or cultivation equipment. The restricted flow of nutrients in girdled plants can reduce the number of pods produced. However, this type of damage rarely reduces yield because healthy plants adjacent to damaged plants compensate by producing higher yields. This is a phenomenon known as "plant stand compensation." Main stem girdling is difficult to prevent with insecticide applications. A better management strategy for this type of damage is to manipulate seeding rates in order to obtain at least six undamaged plants per foot of row.

Before bloom, the economic threshold for three-cornered alfalfa hoppers is when the infestation has reduced the number of non-girdled plants to 6 or fewer per row-ft. and nymphs are still present.



Cotton

Cotton ranges from 1-6 true leaf. Thrips, aphids and loopers continue to be found in most fields. The cotton seed treatment test was rated

Wednesday and the seed treatments continued to maintain control of insect populations below economic thresholds. Cotton plants were at 2 true leaves. The untreated plots had 3.5 thrips and 37 aphids per plant while the Cruiser and Gaucho Grande treated plots had 1.6 and 1.8 thrips per plant and 1.6 and 1.4 aphids per plant. Also present in these fields were various species of beneficials including ladybugs, aphid parasitoids, and syrphid fly larvae.

Dr. Roy Parker suggests that young cotton fields with aphid populations should be looked at again 48 hours later to determine if the aphid population is increasing or decreasing. Increasing aphid populations may need treatment to prevent economic losses. **Insecticidal control of cotton aphids should be delayed until infestations exceed 50 aphids per leaf.**

I have seen many fields with loopers and looper damage. However, I have not seen cotton with loopers larger than ½ inch and damage continues to be minimal. Apparently the loopers are not surviving on the small plants. Occasional yellow striped armyworms are being found at about 2 per 100 plants and should not be of concern unless they get to much higher numbers.

The decision to apply insecticide should be based upon the number of fleahoppers present and percent square set. As the first small squares appear (approximately 4 to 6-leaf stage), examine the main stem terminal buds (about 3 to 4 inches of plant top) of 25 plants at each of at least four locations across the field. More sites should be sampled in fields larger than 80 acres. **15 to 25 fleahoppers per 100 terminals is considered economically damaging.**



Sorghum

Yellow sugarcane aphids are being found in grain sorghum. Plants with more than 5 leaves should not be injured by these aphids. However, monitor these fields to ensure the populations do not continue to rise above tolerable levels.

Please feel free to call Stephen any time with questions or concerns. He will be happy to assist.

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