

TEXAS IPM Partners with Nature

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CALHOUN

INTEGRATED PEST MANAGEMENT
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VICTORIA

REFUGIO

Grain Sorghum

As grain harvest continues, some questions have been asked about grazing milo fields after harvest. I have received several reports of high nitrate levels, in Refugio County. In Calhoun County, I have reports of cows dying in milo fields. The fields have been tested and one possible culprit is bloat from the grain missed by the harvester. My suggestion is to have all sorghum fields tested for nitrates prior to grazing.

From the Forage Sorghum Production Guide:

Nitrate Poisoning. Sorghums can accumulate nitrates (NO3) during any weather condition that interferes with normal plant growth; however drought is the most common cause. This NO3 is converted to nitrite (NO2) in the rumen, which diffuses out into the bloodstream and binds to hemoglobin. This prevents the transport of oxygen (O2) causing the animal to die from oxygen deprivation. Most NO3 accumulate in the stem or lower portion of the plant. If NO3-N exceeds 0.35% it should either be disregarded or diluted with safe feed (preferably grain). Unlike HCN, NO3 will NOT leach out by the sun, however ensiling the forage can lower the NO3 by approximately 50%.

Soybeans

Soybean harvest is underway in earlier planted fields. This year earlier planted soybeans seem to be performing better than later planted soybeans. The greatest issue in soybean fields is moisture. If there is no additional rainfall, I would evaluate the yield potential of the field prior to making an insecticide application. If there are no pods on the plant at this time, the potential for economic losses caused by insects is very small.

That being said, we have begun to find a thrips species in soybeans that may have the potential for defoliating the plants. I think that this thrips is Caliothrips phaseoli (Hood), and I have a sample being sent off for positive identification. Thrips are small insects, 1/16 inch long and the width of a hair. Unlike the thrips in cotton, these tend to be on the upper and lower leaf surface. I have included a picture to help in identification.



Most fields have relatively low numbers of this insect but one field has a population exceeding 100 thrips per leaflet. Populations of this magnitude were found to prematurely defoliate a soybean field in 2006.

A research trial has been initiated in two Calhoun County fields to determine the effect of the thrips on soybean defoliation. Results of this trial will be available as results are found.

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