Cotton Seed Treatments

_Gaucho Grande vs. Cruiser Seed Treatment_

At both the earlier and the more recent higher rates, Gaucho Grande and Cruiser have provided similar control of thrips, nearly identical reductions in plant damage, and similar stand counts, plant heights, dry weights, fruit set, maturity and yield. A word of caution - with either of these products, expect no more than approximately three weeks of thrips control from the date of planting. To extend this short residual activity, foliar application following a seed treatment – the closer to the first true leaf stage the better, and no more than 3 to 3.5 weeks after planting. Although it seems on the early side, a cotyledon stage spray is probably far better timed for thrips than a second or third true leaf stage application. In most cases (though certainly not always – seen in 2005 and 2006), a single application at the first true leaf stage provides cotton seedlings with enough thrips protection time to get the plants “over the hump”, thus reducing further thrips vulnerability and often extending into a period of fewer migrating thrips.

_Avicta and Aeris Seed Treatments_

Based on three years of evaluations in North Carolina, Avicta seed treatment (Cruiser + abamectin for nematodes + Dynasty, a three-way fungicide) and Aeris (Gaucho Grande + thiodicarb for nematodes + fungicides put on either by a dealer or already on the distributed product) usually provides nematode control similar to Temik 15G at 5 to 6 pounds. Until further testing, the level of thrips control provided by these products should be considered identical to Cruiser or Gaucho Grande alone, thus the same need and timing of a foliar spray.
Wheat Freeze Damage

The first step in evaluating freeze damage is to estimate the number of healthy tillers currently in the field that are going to produce grain. Pull several handfuls of plants out of the soil and separate out the individual tillers. You should have at least 25 tillers to look at.

**If grain heads have not yet emerged**, split the stems open with a knife and find the growing points. Healthy growing points will be green and look like tiny developing grain heads. Dead freeze-damaged growing points will be brown, white, or shriveled. Make an estimate of the number of healthy tillers you have per square foot.

**If the grain heads are splitting out of the boot, or have recently fully emerged**, look at their color. Severely damaged and dead grain heads are white, may have a water soaked appearance, and will not produce grain. Most heads that are green at this date are healthy. But it is best to make sure. Peel open the head and look for the anthers. The anthers produce pollen; and if they are freeze damaged, the head will not produce grain. Healthy anthers are light to dark green. Freeze damaged anthers are yellow, shriveled, and/or white. If you find healthy anthers, the heads are on the way to grain production. Estimate the number of healthy heads you have per square foot.

**If the heads have fully emerged and flowered** healthy heads will be green; and when you open them up, you should find tiny developing kernels where the anthers were just a few days earlier. Estimate how many healthy heads you have per square foot.

The last step is to convert healthy tillers or heads per square foot to yield potential. Use the table on the left to make a yield estimate for this crop. If you want the best possible estimate, come back when the grain is filling, rub the heads between your fingers, and count how many kernels there are per head.

A lot of our wheat has freeze burned leaves. Will freeze damaged flag leaves hurt yield? Dr. Van Duyn looked at the impact of leaf tissue damage on yield. He found that if 75% of the flag leaf was damaged, AND 60% of the two leaves below it were also damaged, yield loses were only around 15%! Wheat has the ability to fill grain even when the upper leaves are damaged.