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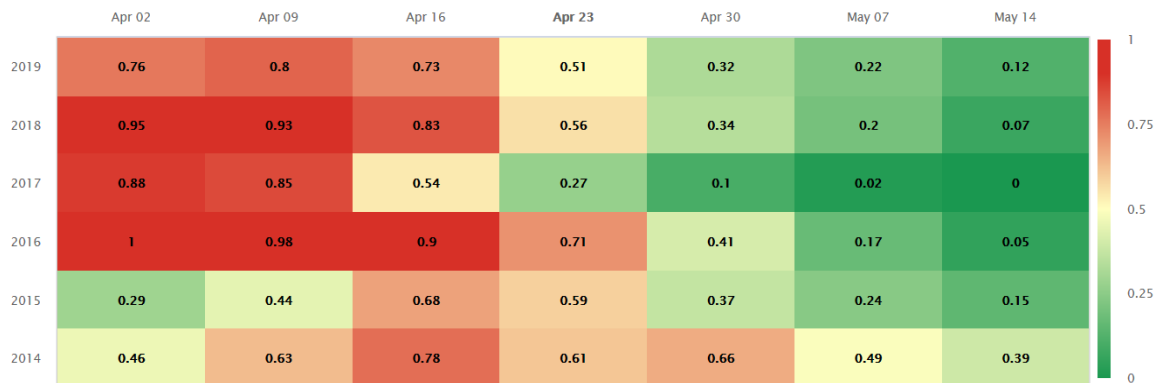
Thrips in Cotton

I have been getting a lot of questions about managing thrips in cotton. Below are a few thoughts to consider as you make decisions for your at-plant thrips management program.

1. Use a preventive insecticide at planting. Positive yield responses are consistently observed in UGA research when an at-plant insecticide is used for thrips control.
2. At-plant insecticide options include in-furrow granule applications of aldicarb, in-furrow liquid applications of imidacloprid or acephate, and commercial seed treatments of imidacloprid, thiamethoxam, and acephate. Imidacloprid seed treatment is the most common at-plant insecticide used. In-furrow applications of aldicarb, imidacloprid, and acephate tend to provide greater residual control of thrips compared with the commercial seed treatments. I have been a question or two about acephate which can be applied as a seed treatment. It has limited residual activity, about 7 days.
3. Historically thrips infestations and plant injury is greatest on early planted cotton (ie planted prior to May 10th). However, this high thrips risk window is a moving target from year to year. Temperature and rainfall during winter and early spring have a significant impact on thrips population development and the severity and timing of infestations moving to cotton. As we near planting you are encouraged to take advantage of the Thrips Infestation Predictor for Cotton. This web-based tool will predict thrips risk by planting date by geographic location and can be found at: <http://climate.ncsu.edu/CottonTIP>. Below is the output from the model assuming a planting date of 4/23/19 for Moultrie, GA.

Output Calculated for 31.18,-83.83 and April 23, 2019 Planting Date

Figure 1. Relative Thrips Injury Risk over the Current and Preceding 5 Years



This figure allows Predicted Thrips Injury Risk for the current year to be viewed in context of the previous five years, and the user's prior experience. Predictions are provided as relative thrips injury risk expressed on both color and numerical scales (dark green or 0 = lowest risk; dark red or 1 = highest risk) for the selected location. Thrips injury risk levels are relativized across all years and dates shown. The date having the lowest risk during the six year period is designated by the darkest green and has a value of zero. Similarly, the date having the highest risk of thrips injury within the period is designated by the darkest red and has a value of one. All other dates shown have thrips injury risk values between zero and one, and colors ranging from red (high risk) to green (low risk).

The range of dates shown includes the number of dates (3) before and after the selected planting date and the interval between dates (7 days) that was selected prior to clicking submit. If a different planting date or range of planting dates is entered, the thrips injury risk profile will change to reflect differences in relative risk of thrips injury over this different range of potential planting dates.

4. Thrips infestations are significantly lower in reduced tillage systems compared with conventional tillage. In general the more cover on the soil surface the greater the reduction in thrips.

5. Seedlings are most sensitive to yield loss during early developmental stages. 1-2 leaf cotton is at greater risk to yield loss from excessive thrips injury compared with 3-4 leaf cotton. Once cotton reaches the 4-leaf stage and is growing rapidly, thrips are rarely an economic pest.
6. A rapidly growing seedling can better tolerate thrips feeding. Conversely, seedlings which are growing slowly from cool temperatures or some other stress are more susceptible to thrips.

Scout for thrips and thrips injury early. Use thresholds and only make foliar applications when necessary. Optimal timing for supplemental insecticide applications (when needed) is the 1-leaf stage.

Tips on Managing Seedling Disease In Cotton

I have received a question or two about managing cotton seedling disease. Below are a few points to consider from the UGA Cotton Production Guide.

Good management practices to reduce the chance of seedling disease include the following:

- Plant in warm soils where the temperature at a 4-inch depth is above 65° F and where the 5-day forecast doesn't call for cooler or cooler/wetter weather. **NOTE:** Cotton growers should **NOT** plant cotton if at all possible when conditions are cool and wet or if the forecast calls for such conditions soon after planting, even if they plan to use additional fungicide treatments!
- Plant seed on a raised bed since soil temperatures in the bed are generally slightly warmer than surrounding soil and drainage is likely to be better. Cotton planted in conservation tillage is not grown on raised beds, thus potentially increasing the threat from seedling disease.
- Avoid planting seed too deeply. Seed that is planted too deeply results in longer periods before the young seedling cracks the soil surface, increasing the likelihood of seedling disease.
- Correct soil pH with lime (pathogenic fungi are more tolerant to acidic soils than are cotton seedlings; pH should be in the range of 6.0 to 6.5).
- Fertilize according to a soil test so as to promote rapid seedling growth; however care should be taken to avoid "burning" the seedling with excessive rates of at-plant fertilizers.
- Avoid chemical injury through the use of excessive amounts or improper application of insecticides, fungicides, or pre-plant herbicides.
- Plant only high quality seed as indicated by the percent germination in the standard seed and cool germination tests. Preferably, cool germination test results should be above 70%, though 60-69% is still adequate.
- **Additional seed treatment fungicides such as Dynasty CST, Trilex advanced, and Acceleron, beyond the "base" treatment can significantly reduce the amount of seedling disease, increase stands, and potentially improve final yields where conditions are favorable for disease development.** However, significant outbreaks of seedling diseases are a sporadic problem. Because we cannot reliably predict which years will have greater amounts of seedling disease, growers can become justifiably frustrated when trying to determine the economic benefit of the additional fungicide.

Volunteer Peanut Control in Field Corn (Prostko)

Been getting a few calls about controlling volunteer peanuts in field corn. Remember that the volunteer peanuts that emerge from seeds that made it thru the winter and rains are some super tough plants. A couple of thoughts:

Roundup Ready Corn: Split applications of glyphosate at least 10 days apart. Glyphosate can be applied over-the-top of field corn up to V8 stage or 30" whichever comes first. Drop nozzles or lay-by applicator should be

used when corn is 30" to 48" tall.

Liberty-Link Corn: Split applications of Liberty (glufosinate) at least 7 days apart. Liberty can be applied over-the-top up to V6 stage of growth. For corn 24" to 36" tall, apply with drop nozzles or lay-by rig.

Conventional Corn: Split applications of dicamba @ 0.25 lb ae/A applied EPOST (8" tall corn) + lay-by (up to 36" tall corn). These dicamba applications must be separated by at least 14 days. An alternative treatment would be dicamba (EPOST) followed by Evik (lay-by).

**Atrazine can also be included in any of these EPOST applications as long as corn is < 12" tall.