Cotton Blue Disease (Whitaker)

In the fall of 2018, Cotton Leafroll Dwarf Virus (CLRDV) was confirmed to infect cotton in 14 South Georgia counties. This virus is vectored by aphids and associated with Blue Cotton Disease (CBD) which causes symptoms of including leaf curling, reddening and drooping of leaves, subsequent distortion of leaf growth above the nodes where reddened leaves were first observed, and shortening of upper internodes and their discoloration to deep green along with subsequent lack of fruit retention. Although the virus could be found widespread across Georgia in the fall of 2018, there were very few, if any, documented cases of yield losses in Georgia cotton fields which could be associated with CBD. The UGA Cotton Team has and is working diligently to obtain as much information as we can and to help inform producers of what we know. At this point, the impact from this virus to the 2019 Georgia cotton crop cannot be scientifically determined, but we have found CLRDV in ratooned cotton stalks from 2018 and in henbit over the past couple of weeks. So, there may be two ways for us to potentially limit our exposure by trying to remove cotton stalks from 2018 and by controlling winter weeds well in advance of planting. Both of these approaches are already endorsed and encouraged practices anyway and they may ultimately be helpful in breaking the green bridge for the virus. If you have any questions on this or other issues, feel free to contact your local UGA county extension agent and visit the UGA Cotton Webpage at www.ugacotton.com.

Planting Techniques to Help Ensure a Successful Stand (Freeman)

As we get closer to planting season there are several factors to consider when trying to establish a successful stand. Early in the planting season, soil temperatures play a significant role in stand establishment as low temperatures will negatively affect germination and seedling vigor and also increases the risk of seedling diseases which can impact final plant stands. The “optimum” planting date will vary year to year but it is best to wait until 4 inch soil temperatures have reached at least 65° for 3 days and the forecast showing a trend for warmer weather. Some other important aspects that affect stand establishment are seeding rates and seed placement configurations. In Georgia, plant populations of at least 1.5 to 1.75 plants/ft are needed to maximize yields. In our soils, seeding rates as low as 2 to 2.5 seed/ft can be successful however, seeding rates may need to be adjusted on a field by field basis to account for environmental circumstances that can affect germination and viability. Hill-drop seeding can also impact stand establishment compared to singulated seeding in tough conditions. Research has shown that when equal plant populations occur there is no yield difference between hill-dropped seed and singulated seed however, in some soils and soil conditions hill-dropped seed may increase germination and therefor impact yields by ensuring plant populations reach those that are needed for maximum yields. Variety selection can also play a role in how successful our stands are. In particularly tough environments where establishing an adequate stand is often difficult, planting a larger seeded
variety may be beneficial over planting a small seeded variety as the higher seedling vigor will be apparent in that niche environment. For more information on any of these topics visit our website www.ugacotton.com or contact your local UGA Extension Agent.

Thrips Management Thoughts for 2019 (Roberts)

Thrips are consistent pests of cotton in Georgia and the southeast as a whole. Thrips are the only insect pests of cotton that a preventive insecticide is recommended. For other insect pests of cotton, UGA recommends a reactive approach based on scouting and the use of thresholds. Pests such as stink bugs, corn earworms, whiteflies, and remaining pests are less consistent and demand this reactive approach to maximize profitability. With most insect pests there are agronomic and management practices which influence the risk and severity of infestations. 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.

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.

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.

Snapshot of the Agriculture Improvement Act of 2018 (Liu)

On December 20, 2018, the Agriculture Improvement Act of 2018 (the 2018 Farm Bill) passed into law. The 2018 Farm Bill continues the programs for Title I commodities from the 2014 Farm Bill including the Agricultural Risk Coverage (ARC) program, the Price Loss Coverage (PLC)
program, and the Marketing Assistance Loans (MAL) program. The decisions that producers need to make for this new farm bill include reelecting between ARC and PLC programs and updating PLC payment yield. In the 2018 Farm Bill, producers are allowed to first elect between ARC and PLC in 2019 for 2019 - 2020. For 2021 – 2023, producers will also have a yearly option of re-electing between ARC and PLC. If producers fail to make a unanimous election in 2019, there will be no program payments for 2019, and the farm is deemed to elect the same program between ARC and PLC for each covered commodity for 2020 – 2023 as what they chose for 2015 - 2018. The PLC payment yield updates are based on the farm’s (FSN) crop yield history from 2013 to 2017 for each covered commodity. Other major changes in the 2018 Farm Bill includes creating a new effective reference price, increasing marketing assistant loan rates, changes in the geographical definition of the ARC-County program, and changes in family members’ eligibility.

Pre-Season Equipment (Porter)

From the equipment perspective now is the perfect time of year to ensure that you have everything ready to go for planting and irrigation. UGA has a very good factsheet that can guide you through the Irrigation System Checklist to make sure your pivot is ready to go before you put the seed in the ground to ensure that you minimize breakdowns and issues during the season when you really need to get water to your crop. That factsheet can be found at:

In addition to your irrigation system, the planter is one of the most critical pieces of equipment for producing a successful crop. For in-depth information on setting your planter please contact your county agent, but here are a few quick components to check. Start with the seed metering system, check to ensure all seals and brushes are good and do not need to be replaced. In some areas dealerships will check your seed meters for singulation issues for a small fee. Check your seed plates for any warping or wear and ensure you are using the correct plates for the correct crop, and match up the number of cells correctly to your gear ratio on your planter to make sure you obtain the correct seeding rate. Check you downforce system, based on soil type and tillage conditions it should be set somewhere between 50 to 200 lbs of force for cotton (do not exceed 200 lbs of force for cotton). Next check your gauge wheels for free movement and but no wobble in the bearings. Check your depth settings on all row units. In addition check your seed tubes and closing system to ensure both are working properly. Spending some time on your planter now will pay off at the end of the season.

Make sure you take getting your equipment prepared seriously so you do not incur penalties during the season from equipment that was not properly maintained. For more information on either of these topics please see your local county agent.