



August 13, 2020

Peanut Pointers

July and August are Critical Months for Disease Management in the Peanut Fields Bob Kemerait

Why is disease management so critical in July and August? By this time of the season, three things have happened. In most fields and for most growers, the peanut plants have (or are closed to) lapping the row middles and have entered reproductive growth (the plants are blooming and setting pods). The growth of the peanut canopy increased leaf-wetness periods and also traps humidity. The limbs and vines along the soil surface are in a perfect environment for attack by soilborne pathogens that cause white mold and Rhizoctonia limb rot. To make matters even more challenging, the growth of the plants not only increase the risk for leaf spot, white mold, and limb rot, but the dense foliage makes it difficult to get the fungicide to the target- the interior foliage and the crown of the plant. Secondly, by July, the amount of inoculum (often times fungal spores) is increasing in the field, which means that the plants are under increasing attack. Lastly, because of rains during July and August, it is easy for growers to be delayed in fungicide applications, which increases the opportunity for diseases to “get ahead of them”.

What should growers be doing? Regardless of the fungicide program that growers are using, it is absolutely essential that they be on time (as much as they can) with their fungicide applications. When growers are delayed in a timely fungicide application, the diseases have the chance to not only get established, but to flourish as well.

There are three things the growers must do for effective disease control. 1) They MUST be timely in their fungicide applications. 2) They MUST apply fungicides appropriate for control of LEAF SPOT, WHITE MOLD, and RHIZOCTONIA LIMB ROT. 3) They MUST insure adequate coverage, which may mean irrigating within 8-12 hours after application, applying ahead of a rain event, or even spraying the fungicides at night when the leaves are folded. Successful fungicide programs incorporate all three of these considerations.

The hardest question for an agent. The hardest question for an agent is, “What is the BEST fungicide program out there for peanuts?” In truth, there is no single best program. “Best” is determined based upon a combination of factors to include risk (as determined from Peanut Rx), value placed by the grower in reducing the number of fungicide applications, and absolute efficacy against specific diseases. The cheapest programs may be “best” for growers with low risk and excellent rotation. The most effective programs may be “best” for growers with irrigation, high yield potential, and increased risk. “Best” can best be determined on a field-by-field basis.

What if disease problems occur? Problems with disease management occur frequently in peanut fields during July and August. These problems are almost inevitable, and, again, are typically less the result of



fungicide choice and more often the result of application problem. However, I recommend the following steps to growers in these situations.

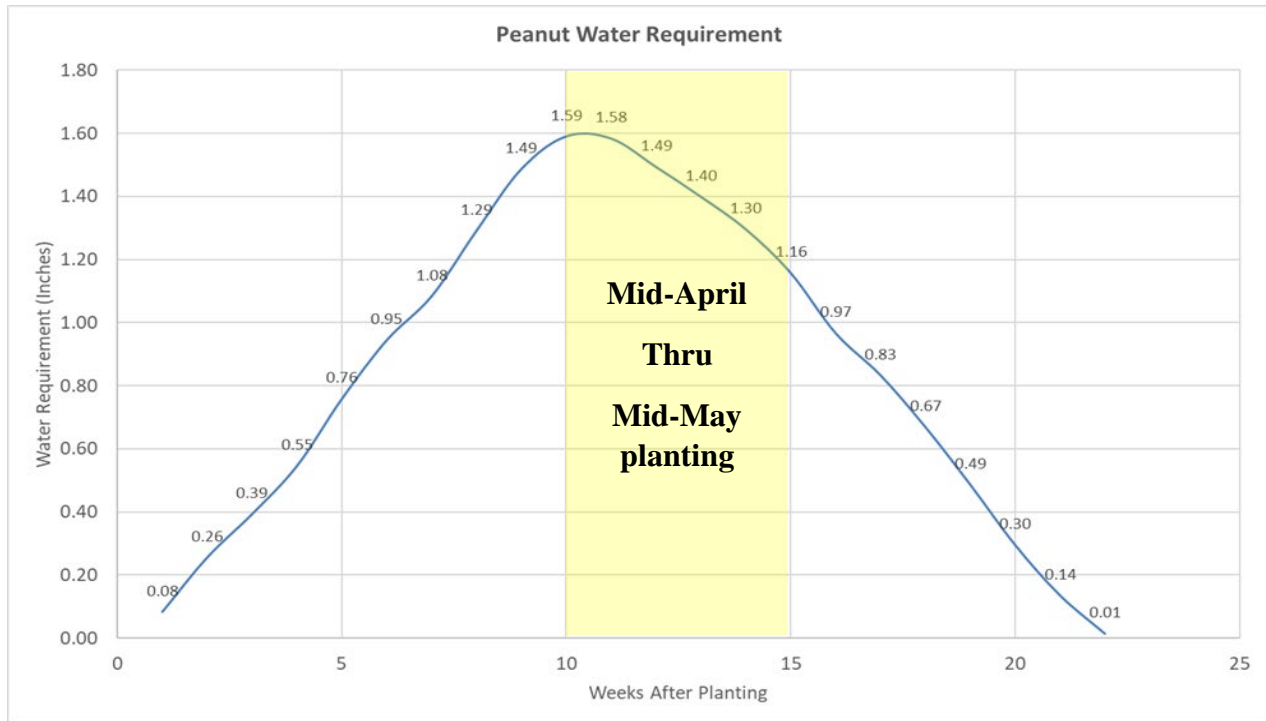
1. Careful scouting allows a grower to address the problem quickly and effectively. Finding early stages of leaf spot or white mold while scouting is much better than seeing it as you drive by the field at 50 mph.
2. Once the disease is identified in the field, take a deep breath and carefully decide if there is anything wrong with your program. Some disease in a field is inevitable, and not reason to panic. A little leaf spot or white mold simply is a reminder to keep on a good schedule with a good fungicide program.
3. Where there is clearly an emerging problem with a disease or diseases in a field, growers should consider making another fungicide application more quickly than had been planned. For example, if the next application is scheduled for 10 days from now, the grower may make the application in 7 days.
4. Growers should insure excellent coverage. Again, this could come from timing or irrigation, rainfall, spraying at night, increased spray volume, or increased pressure.
5. Growers should consider if switching to another fungicide, for example one with greater curative activity or greater efficacy (often at a greater price) is warranted.

Bottom Line Disease management is critical for all peanut growers at all times during the season. However, attention to effective management programs during July and August is absolutely essential. Falling behind could easily result in loss of disease control, loss of yield, and loss of profit. Make sure you stay on the lead lap.

July 2020 Peanut Irrigation Considerations **Cale Cloud, David Hall, Wesley Porter**

Over the past month, we have seen very sporadic rainfall here in South Georgia. Some areas have received substantial amounts of rain while other areas have received very little. There have been a lot of irrigation systems running in southwest Georgia the last couple of weeks, as we have had little rainfall since the second week of June. At Stripling Irrigation Research Park in Camilla, GA only 0.38" of rain were received from June 10-June 30. Thankfully, rain was recently received over the weekend of the 4th at the Park as well as many other parts of South Georgia. It has been hot and humid so far this summer, but thankfully we have yet to run into the heat wave and flash drought that we experienced last year.

Below is the estimated current Checkbook water use for peanuts across most of the state for the month of July.



Most of our peanut crop in the state should be pegging and putting on pods by now and approaching peak water use. Please refer to the graph above to indicate where you are at with weekly water use in your crop. Remember this requirement is IRRIGATION and RAINFALL! Once peanuts begin blooming and pegging, they will use roughly 0.2" of water daily for ~20 days. By the middle of July, those early/mid May planted peanuts can use up to 0.3" of water per day, so it is important to not get behind on irrigation. It is also important to not let your soil temperature get too high with peanuts pegging. High soil temperatures can burn off pegs. If you are using a computer based scheduling model such as Irrigator Pro, it has a maximum soil temperature notification that will alert you whenever your soil temperature reaches threshold, informing you that irrigation may be required to cool your soil temperature, even if there is adequate soil moisture.

For the producers who have installed soil moisture sensors, please take note of these few comments. Once a stand is established and sensors are placed in an appropriate location in the field, we can often be guilty of taking for granted that the sensors will remain in an optimum location and supply accurate readings for the entire season. If you are not the one making trips across the field spraying or scouting, it would be wise to double check your sensor locations. This year has proved that peanuts can be present during the time of installation, but due to disease, seed vigor, or other environmental factors, those seedlings can be nonexistent weeks later. The lack of plants will result in bare ground and the lack of roots near the sensor causing false water use data to be recorded since nothing will be using water near the sensor. If you are utilizing Irrigator Pro, a lack of canopy will cause 2-inch soil temp readings to be flawed, leading to the programing suggesting irrigation applications due to the high soil temp. Early



to mid-season soil temperatures and moisture availability readings can be affected greatly with poor sensor location. Fruiting and pegging in peanuts are critical periods for water requirements. Don't be fearful to pull the sensor up and reinstall it in a more suitable crop area. You have made an investment in utilizing the sensor and are expecting to receive accurate and quality data from your sensor, but this will only occur if you have your sensor placed where peanuts are present. As can be seen in the image below, the sensor is in a location that has no plants or canopy nearby to accurately read information from. This sensor needs to be removed and reinstalled between two plants that have adequate canopy development.



Update on Stored Grain Protectants Dr. Michael Toews, UGA Extension Specialist on Grain Storage

Empty Bin Treatments

Centynal EC. This is a good product for treating empty bins and elevator boots. Note that the active ingredient in Centynal EC, Defense SC and Suspend SC are identical. Defense SC (labeled for empty bin use only). This is a good product for treating empty bins and elevator boots, but is not labeled for application directly to grain. Note that the active ingredient in Centynal EC, Defense SC and Suspend SC are identical.



Suspend SC. This is a good product for treating empty bins and elevator boots. Note that the active ingredient in Centynal EC, Defense SC and Suspend SC are identical.

Tempo SC (labeled for empty bin use only). Tempo is a good product for treating empty bins and elevator boots, but is not labeled for application directly to grain.

Direct Application to Shelled Corn and Grain Sorghum

Actellic 5E. This product has long been the standard for use on corn and grain sorghum. A full rate will provide protection from weevils for 9-12 months. Reducing the rate will decrease the longevity of the protection. UGA data suggest that Actellic is susceptible to heat degradation in the drier when grain temperatures exceed 120 F.

Centynal EC. Our data show that Centynal EC by itself is inadequate, but a tank mix of Centynal (8.5 oz) plus PBO-8 Synergist (13.5 oz) per 1000 bu will provide 6 months of protection from weevils. This material is heat stable in the drier (tested up to 150 F).

Diacon IGR. Diacon IGR is an insect growth regulator that is effective for killing nearly all immature grain moths and beetles, except weevils. The 4 oz per 1000 bu rate is sufficient for tank mixing.

Diacon IGR PLUS. This product is a premix of Centynal EC and Diacon IGR. It works well for short term storage (4-5 months), but is much better (9 -12 months) if you tank mix with PBO-8 Synergist (13.5 oz)

Malathion. Although widely used in the past, this product is no longer recommended due to well documented resistance in many stored grain insect populations. Expect malathion to break down in the drier.

Sensat. This product is new to the market, but has been in our evaluation program for several years. Test results show excellent weevil control for up to 12 months. No dryer stability data at this time.

Storcide II. Storcide II is labeled for use on wheat and grain sorghum, but not corn. Protection will degrade with heat and time.

Suspend SC. This product is an older formulation that must be completely suspended before measuring and requires frequent agitation. It provides 3 to 6 months of protection from weevils.

Three-way tankmix (only tested on corn). UGA tests from 2014-2018 showed that a threeway tank mix of Centynal (8.5 oz) plus Diacon IGR (4 oz) plus PBO-8 Synergist (13.5 oz) per 1000 bu will provide 6-9 months of protection from weevils. This is a moderately priced option for growers in markets where other products are unavailable or cost is a limiting factor.

Regardless of the product used, be mindful that grain protectants are not a silver bullet.



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Shelled corn should be dried to a maximum of 15.5% moisture content before dropping into the storage bin and must be immediately aerated to further reduce moisture content. Chemical applications should only be made to clean grain that will be stored for more than 3 months. Apply protectants at the bottom of the auger in a course spray to maximize coverage as the kernels are moving up to the top of the bin. Long-term grain storage requires moisture content below 14%, proper housekeeping, use of a spreader when filling bins, and managed aeration.

Additional information is available in the 2020 Georgia Pest Management Handbook under the chapter titled: Stored Product Insect Management.

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