Inversion Nears

Someone more clever could take this title and weave a theme of the coming day of the Lord. I have included a few items in this issue's column relevant to digging peanut.

The decision on when to make the last fungicide application in a field prior to harvest is usually based on when we anticipate digging and how much leaf spot disease is present. This is practical and has served many peanut fields well, though it is also good to keep in mind soil disease management. As we approached the end of the season in 2021, wet and cool weather maintained moist conditions in the canopy and in the ground. This can favor diseases like Rhizoctonia that cause pod rot. We saw this in several fields, most of which had more than three weeks since any fungicides were applied that had efficacy against Rhizoctonia. With current prices, there is balancing between avoiding unnecessary applications or operating costs and maintaining protection over the investment made in the crop throughout the year. An application of tebuconazole is a relatively inexpensive treatment we can consider applying prior to harvest to protect pods (still with a 14 day PHI), for when favorable weather conditions visit. Regarding leaf spot, we have discussed previously how a chlorothalonil (Bravo) application to cap off the season helps for resistance management. To aid in preserving the long term functionality of site-specific chemistry, for example, it is best to avoid applying Miravis at the end of the growing season. That particular product is best applied earlier, nearer around 60 DAP for our area.

Data from sixteen experiments was pooled to estimate how fast a peanut canopy defoliates with leaf spot infection under favorable conditions in the field. Once there was about 4 to 5% defoliation, it takes about 7 days until the canopy is 10% defoliated, 14 days to increase from 10% to 40% defoliation, and another 14 days to go from 40% to 80% defoliation. Virginia types are best to dig before they exceed 40% defoliation, including if pod maturity is not yet ideal. Runner type threshold is about 50% defoliation.

Without the additional presence of disease or insect damage, digging is still a time of consideration. One of the questions we started to collect data on in 2021 was regarding how beneficial might it be to irrigate dry and hard soil before digging? When we dig, the pods need to come out of the ground, and while light sand does not offer formidable resistance, soils with increased clay can indeed become hard and make digging more difficult. Last year, Bailey II was planted in a clay-sand field in six replications of side-by-side plots 300' in length to compare digging without pre-dig irrigation versus digging after applying 0.25" irrigation. That field had 8 days without rain prior to being dug on 9/30, with 0.75" having previously occurred from 9/20 through 9/22. While this was only one experiment in one year, the result so far was a significant (P = 0.01) yield increase (= less pod loss) for the 0.25" irrigation treatment compared to the check of about 270 lb/A. Minus the cost of the irrigation itself, if we figure a contract price of $465/ton this translates to a saving of about $62/A. This was a helpful first peek into this, and we can anticipate there to be ample room for fine tuning irrigation amounts and how much yield preservation we may see according to individual land and conditions. Pending what we are gifted or not near harvest time this year with rain, we plan to repeat this experiment in several more fields.

While the year has not been without challenges and the last few months before harvest can be influential, the peanut crop so far is in a good position for a healthy production of pods. May your harvests be fruitful.

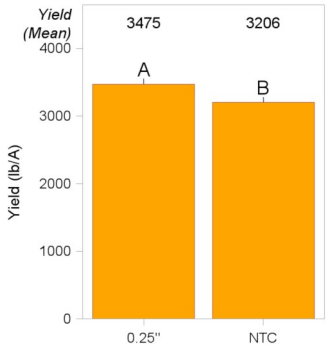

Figure 1. Bailey II peanut yield following no irrigation prior to digging (NTC) or 0.25".