

Looking back, this year brought many challenges our way. We saw shortage of Bravo earlier in the season, a lingering drought and the insect problems that came along with it, and the rains and flooding that washed out fields, delayed harvests, and lowered grades. Some growers made out alright, many did not. I think we'll all agree there's no rush to see another year like 2015.

Looking forward, I would like to take a moment to remind everyone of the upcoming 2016 South Carolina State Peanut Growers' Meeting. Come hear the latest updates on peanut production, visit with growers, agents and industry, pick up the latest revision of the Peanut Production Guide (a.k.a., the Money-Maker) and have a good time. The date for the calendar is January 28<sup>th</sup>, and the Santee Conference Center is the destination. Registration kicks off at 8:30 am, and attendance is free. After that, local county production meetings will begin in February, with your county agent having additional details on when and where these will be. Hope to see you there!

## **Variety Trials**

Each year we conduct several different studies at the station. One this year examined the performance of Virginia and runner varieties under three fungicide management programs (high, moderate, and low). The high management program consisted of Propulse at 21 DAP (days after planting), Bravo + Orius at 45, 60, and 90 DAP, Convoy at 60 and 90 DAP, and Provost at 75 and 105 DAP. The moderate management program applied Bravo at 45 DAP, and Bravo + Orius at 60, 75, 90, and 105 DAP. The low program did not include soil fungicides and was managed with Bravo only at 45, 60, 75, 90, and 105 DAP. Peanuts were planted on May 1<sup>st</sup> and dug 135 days later on September 13.

Now, under individual production, we wouldn't dig these varieties all on the same date. Having a shared dig date here helps compare relative performances by looking at differences after varieties experienced the same set of conditions. Under high management, runner yields were all competitive, with FloRun 107 having slightly lower yield than the others. With moderate and low management, the white mold resistance of Georgia 12Y became more pronounced, as it yielded the most and had the least white mold among the tested runners. Georgia 13M generally came in second place for both yield and white mold amounts. With lower levels of fungicide input, Georgia 06G, FloRun 107, and TUFRunner 727 became considerably more affected by white mold, and their yields suffered. Nevertheless, while Georgia 12Y has the white mold resistance and could be compatible with slightly less intensive soil fungicide management programs, Georgia 06G has ~10 day shorter maturity and ~2.5% greater SMK values, points that keep it a strong choice.

For the Virginias, the top performer with no soil fungicide was easily the reigning champ Bailey, though this distinction became blurred by Sullivan and Sugg in the moderate fungicide program and by Sullivan alone in the high management program. The tight performance of Bailey and Sullivan gives growers two nice small-podded options for Virginias, with Sullivan additionally being high oleic. Champs consistently had the most white mold and least yield among the Virginias examined – not too surprising given Champs’ high susceptibility to *Sclerotium rolfsii* infection. As we could expect, the best yielding varieties and treatments corresponded to the lowest amounts of white mold severity.

The benefits of good resistance are most apparent through less disease and improved performance under less intensive management, however, one of the nicest features about it is that it doesn’t need reapplication to keep working. Another benefit of resistance, even under high management practices, is that it provides a backup in case fungicide applications are missed or otherwise ineffective. This can happen when too frequent rain prevents spraying or too little during a drought prevents fungicide movement into the soil. These things together make resistant varieties a valuable asset to effective integrated disease management and a welcomed friend to peanut production.

The yield and grade table comes from a digging date of 141 days. Seed for some of the newer high oleic runners (Georgia 13M, Georgia 14N, Florunner 157 and TUFRunner 297) may be limited in 2016. Most of the numbers speak for themselves, with a couple items worth mentioning. Among the varieties compared, the results from the fungicide management trial agree well with the results from the yield and grade trial, and the two tables provide complementary views of the same picture. For example with the Virginias, if we look at harvest value and grade, Champs would be the leader, but if we look at the white mold amounts, Champs moves from first to dead last. This illustrates how tightly the performance of non-resistant varieties is to management intensity. It is also worth noting that from our trials at Blackville, the “medium” maturing Georgia 13M has been showing itself as a later maturing variety (150+ days) than originally thought (~140 days). Even so, its good grade and yield make this variety a viable option to keep in mind, particularly if a later maturity date would help balance planting and harvesting multiple fields.

As with many things on this great peanut journey, it’s always good to keep varieties in perspective and to consider how well they fit (limited by contracts, lack of irrigation, late planting dates...) or might improve our production systems (better disease resistance, smaller pods less susceptible to drought, maturity balances multiple fields...). I wish everyone a great start to 2016, and I look forward to seeing you at the meetings!

<i>Runners</i>	Management intensity					
	Low		Moderate		High	
	White mold (% row symptomatic)	Yield (lbs/A)	White mold (% row symptomatic)	Yield (lbs/A)	White mold (% row symptomatic)	Yield (lbs/A)
Georgia 12Y	20.7 c	3326 a	8.2 c	3912 a	1.8 c	4244 a
Georgia 13M	47.5 b	2201 b	30.5 b	3306 b	5 bc	4210 a
Georgia 06G	68.2 ab	1315 c	50 a	2564 c	7.2 bc	4251 a
FloRun 107	79.6 a	1118 c	49.8 ab	2691 c	16.8 a	3850 a
TUFRunner 727	72.6 a	1258 c	52.9 a	2556 c	12 ab	4190 a
<i>Virginias</i>						
Bailey	17.9 d	3601 a	11.1 c	3650 a	1.1 b	4178 a
Sullivan	37.6 bc	2699 b	10.1 c	3642 a	2.9 b	4207 a
Sugg	32.9 cd	2876 ab	10.7 c	3695 a	9 b	3653 b
Wynne	49.6 b	2298 b	28.3 b	3113 b	6.1 b	3469 b
Champs	84.9 a	1213 c	75.1 a	2245 c	23.5 a	3003 c

<i>Runners</i>	Yield (lbs/A)	Acre value (\$/A)	TSMK (%)	OK (%)	Harvest value (\$/ton)
TUFRunner 297	5478 a	955 ab	76 ab	3 d	357 ab
Florunner 157	5422 a	968 a	75 abcd	4 abc	357 ab
TUFRunner 511	5420 a	962 a	75 abcd	3 cd	355 bc
Georgia 06G	5295 ab	928 abc	75 abc	3 d	350 bcde
Georgia 09B	5182 abc	895 abcd	74 bcde	4 bcd	346 cde
Georgia 12Y	5173 abc	906 abcd	73 de	4 abc	350 bcd
Florida 07	4916 bcd	842 cdef	73 de	3 cd	342 de
Georgia 13M	4903 bcd	869 bcde	74 cde	4 ab	354 bc
FloRun 107	4788 cd	834 def	72 ef	5 a	347 bcde
TUFRunner 727	4662 d	798 ef	73 cde	4 bcd	342 de
ACI 789	4567 d	775 f	71 f	4 abc	339 e
Georgia 14N	4559 d	833 def	76 a	3 cd	366 a
<i>Virginias</i>					
Bailey	5339 a	971 a	70 ab	2 a	364 bc
Sullivan	5241 a	941 a	70 b	2 a	359 c
Wynne	5043 a	925 ab	71 a	2 a	367 ab
Champs	4683 b	870 bc	72 a	2 a	372 a
Sugg	4609 b	849 c	71 a	2 a	368 ab