

# 2022 Cotton Commission Breakouts – Agronomic Update

Camp Hand





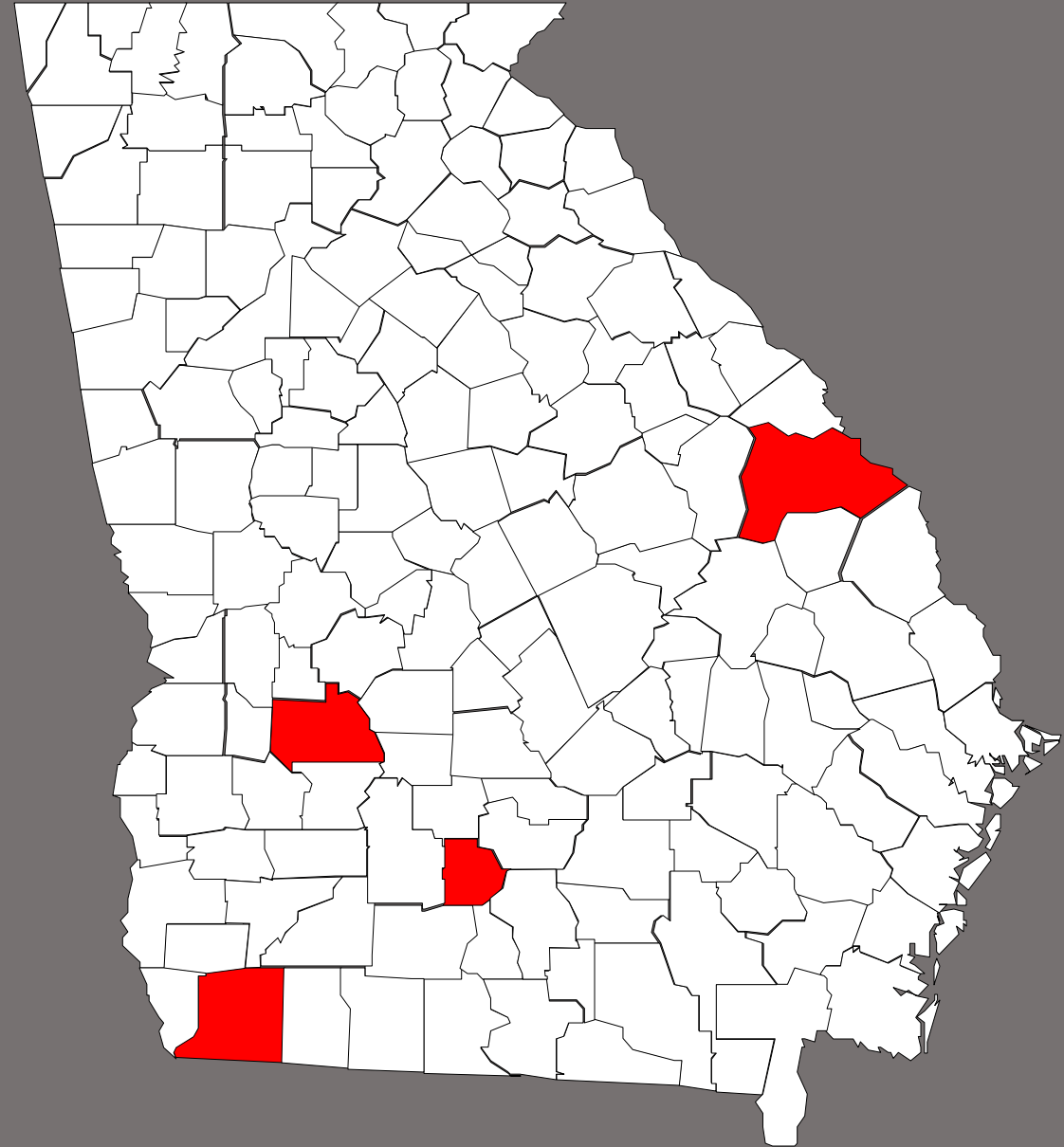






# 2021 OVT Summary

- **Lots of varieties**
  - 54 total
- **Fewer environments**
  - Tifton
  - Plains
  - Midville
  - Bainbridge (irrigated only)
- **Great resource to compare newer varieties to industry standards**



# 2021 Small Plot Variety Trial Results

## Varieties that yielded above the trial average in 2021

- Phytogen
  - PHY 400 W3FE
  - PHY 411 W3FE
  - PHY 545 W3FE
  - PHY 580 W3FE
- NexGen
  - NG 3195 B3XF
  - NG 3299 B3XF
  - NG 4190 B3XF
  - NG 5711 B3XF
- Deltapine
  - DP 1646 B2XF
  - DP 2012 B3XF
  - DP 2020 B3XF
  - DP 2038 B3XF
  - DP 2055 B3XF
  - DP 2115 B3XF
  - DP 2127 B3XF
- Armor
  - AR 9371 B3XF
  - AR 9831 B3XF
- Dynagro
  - DG 3615 B3XF
  - DG 3799 B3XF
- Stoneville
  - ST 4595 B3XF
  - ST 4990 B3XF
  - ST 5091 B3XF

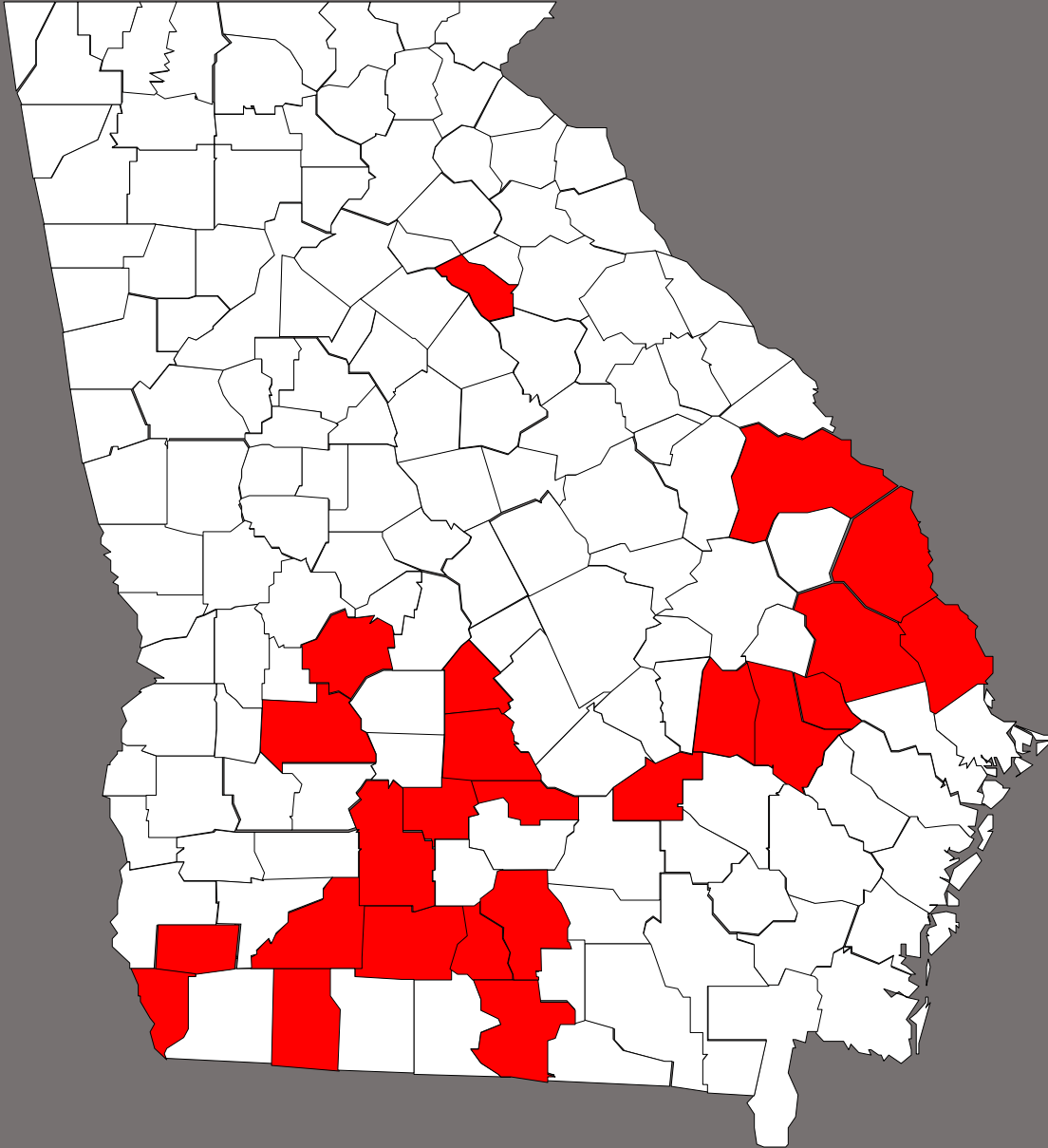
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# 2021 On-Farm Variety Evaluation Program



1. Oconee
- 2 & 3. Burke (Dryland and Irrigated)
4. Bulloch
5. Screven/Effingham
6. Evans
7. Tattall
8. Pulaski
9. Toombs
10. Jeff Davis
11. Ben Hill
12. Turner
13. Berrien
14. Wilcox
15. Macon
16. Sumter
17. Worth
- 18 & 19. Cook (Dryland and Irrigated)
20. Colquitt
21. Mitchell
22. Grady
23. Lowndes
24. Miller
25. Seminole

# 2021 On-Farm Variety Evaluation Program

- Varieties included:
  - DP 1646 B2XF (Most planted in 2020)
  - DP 2038 B3XF
  - DP 2055 B3XF
  - ST 4990 B3XF
  - ST 5091 B3XF
  - PHY 400 W3FE
  - PHY 545 W3FE
  - NG 3195 B3XF
  - NG 4936 B3XF
  - DG 3615 B3XF
  - DG 3799 B3XF (2020 Trial Winner)
  - AR 9831 B3XF
- Entries based on market share
  - + most planted variety in previous year
  - + previous year's winner
- Managed using grower practices, with assistance from the participating county agent
- Replicated in large plots in grower fields
- Seed cotton samples ginned at the UGA Microgin and fiber sent for quality info in Memphis, TN

# 2021 On-Farm Variety Trial Results

Variety	All Location Avg. Yield	LSD (P=0.1)	% Above Trial Avg.
<b>DG 3615 B3XF</b>	1294	a	84
<b>DG 3799 B3XF</b>	1282	a	84
ST 5091 B3XF	1224	b	72
DP 2038 B3XF	1216	bc	60
DP 1646 B2XF	1201	bcd	56
DP 2055 B3XF	1190	bcd	36
AR 9831 B3XF	1180	bcd	44
NG 3195 B3XF	1178	cd	52
ST 4990 B3XF	1162	de	32
PHY 545 W3FE	1127	e	24
PHY 400 W3FE	1124	e	16
NG 4936 B3XF	1121	e	16

# 2021 On-Farm Variety Trial Results

Variety	County (Lint yield per acre)																										All Loc. Avg.	LSD (P=0.1)	% Above Trial Avg.
	Cook DRY	Colquitt IRR	Lowndes DRY	Toombs DRY	Turner DRY	Macon DRY	Cook IRR	Jeff Davis IRR	Bulloch IRR	Sumter IRR	Ben Hill IRR	Grady DRY	Mitchell IRR	Miller IRR	Worth IRR	Pulaski IRR	Seminole IRR	Berrien DRY	Evans DRY	Tattnall DRY	Wilcox DRY	Oconee DRY	Burke IRR	Burke DRY	Screven IRR				
DG 3615 B3XF	527	689	868	901	1094	1206	1341	1304	1262	1499	1348	1384	1244	1482	1513	1316	1520	1591	1511	1272	1555	1476	1406	1513	1521	1294	a	84	
DG 3799 B3XF	661	745	817	942	1135	1251	1173	1257	1236	1022	1363	1273	1350	1384	1420	1278	1582	1529	1405	1861	1786	1265	1430	1353	1540	1282	a	84	
ST 5091 B3XF	449	586	828	808	1173	1116	1130	1196	1219	1169	1142	1257	1260	1146	1387	1296	1337	1357	1409	1405	1532	1635	1534	1490	1732	1224	b	72	
DP 2038 B3XF	460	743	741	891	1138	1146	1197	1160	1276	1260	1189	1144	1207	1188	1175	1383	1258	1340	1464	1395	1477	1486	1568	1587	1539	1216	bc	60	
DP 1646 B2XF	451	734	735	813	1062	1009	1225	1199	1156	1146	1269	1283	1289	1024	1218	1397	1298	1380	1461	1571	1215	1379	1445	1591	1670	1201	bcd	56	
DP 2055 B3XF	528	813	702	833	1074	988	1098	1158	1173	1092	1192	1216	1184	1178	1245	1386	1222	1486	1249	1214	1371	1591	1680	1560	1523	1190	bcd	36	
AR 9831 B3XF	615	766	774	714	796	1132	1144	1069	1133	1135	1310	1108	1242	1318	1258	1266	1487	1362	1357	1314	1339	1392	1500	1481	1482	1180	bcd	44	
NG 3195 B3XF	590	562	718	747	1069	1171	1215	1102	1197	1215	1191	1251	1113	1077	1145	1298	1196	1358	1423	1265	1504	1505	1505	1538	1485	1178	cd	52	
ST 4990 B3XF	479	700	676	682	945	1089	1131	1170	1128	1309	1061	1171	1114	1273	1363	1273	1263	1177	1373	1343	1460	1571	1454	1463	1390	1162	de	32	
PHY 545 W3FE	580	675	1039	764	1168	1090	981	1108	1233	1006	985	974	1168	1192	1059	1075	1124	1267	1242	1294	1422	1444	1367	1346	1581	1127	e	24	
PHY 400 W3FE	615	575	797	747	1002	882	1012	1110	1068	1187	1106	1217	1183	1108	1211	1175	1153	1284	1305	1313	1297	1457	1358	1447	1493	1124	e	16	
NG 4936 B3XF	487	526	533	768	846	807	1037	1113	1091	1182	1221	1102	1208	1317	1202	1175	1211	1239	1353	1416	1425	1488	1457	1431	1399	1121	e	16	
<b>Trial Average</b>	<b>537</b>	<b>676</b>	<b>769</b>	<b>801</b>	<b>1042</b>	<b>1074</b>	<b>1140</b>	<b>1162</b>	<b>1181</b>	<b>1185</b>	<b>1198</b>	<b>1198</b>	<b>1214</b>	<b>1224</b>	<b>1266</b>	<b>1276</b>	<b>1304</b>	<b>1364</b>	<b>1379</b>	<b>1389</b>	<b>1449</b>	<b>1474</b>	<b>1475</b>	<b>1483</b>	<b>1530</b>				

2021 Trial Average – 1,192 lbs/acre

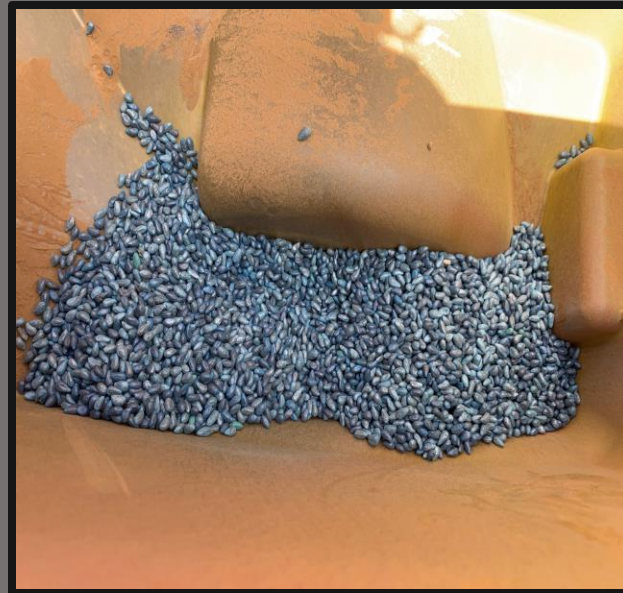
Shaded green – Above location average

# 2020 & 2021 On-Farm Variety Trial Results

Variety	Two Year Avg. Yield	LSD (P=0.1)	% Above Trial Avg.
<b>DG 3799 B3XF</b>	1,203	a	82
<b>DG 3615 B3XF</b>	1,199	a	76
<b>DP 2038 B3XF</b>	1,158	ab	63
DP 1646 B2XF	1,126	bc	51
DP 2055 B3XF	1,124	bc	43
ST 4990 B3XF	1,116	bc	49
NG 4936 B3XF	1,088	cd	33
PHY 545 W3FE	1,060	d	33
PHY 400 W3FE	1,051	d	18

# Mixing Varieties???

- Heard rumblings of growers that were going to mix DP 1646 B2XF and DP 2038 B3XF headed into this past season.
- DP 1646 B2XF – Higher quality, consistent yielder, but falls over
- DP 2038 B3XF – High yield, can have low quality, columnar growth habit.
- Best of both worlds – High yield, quality that meets in the middle, and the upright growth of 2038 supports the 1646



# Mixing Varieties - Results

- Yield
  - No differences – Averaged over 4 locations
- Quality
  - Differences in length and uniformity
  - These differences did not result in differences in loan value per acre
- Comparison to other varieties
  - Yielded similar to 5 other commercially available varieties in 2 locations
- Seems like a hassle... Not a necessary one...

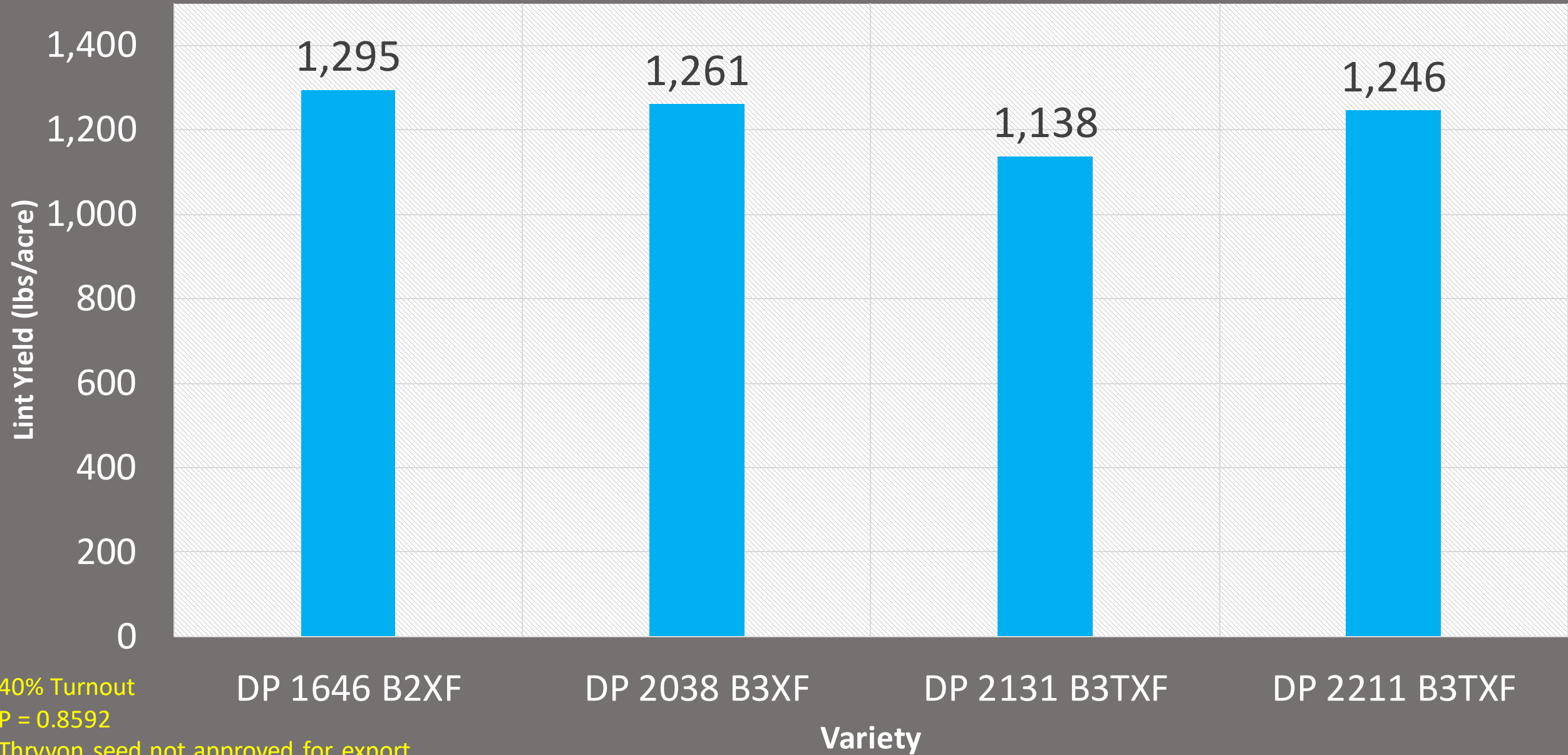
# Thryvon Technology

- Real deal on thrips
- Complicated w/plant bugs
- Tech eventually coming in Deltapine, NexGen, Dynagro, and Armor varieties.
- Did a little variety work in 2021 comparing Thryvon varieties to commercial standards

**Bollgard<sup>®</sup>3**  
**ThryvON™**  
With **XTENDFLEX<sup>®</sup>**  
TECHNOLOGY



# Commercial Thryvon Varieties



# Wide Row Cotton

**DELTA FarmPress** Serving: **Central**

Register Now Log In

## Producers see big savings with wide-row cotton

Donnie Burns/LSU AgCenter



RECENT

Donnie VandeVen picks cotton that was grown on 60-inch rows in 2020. Donnie and brother, Darrell farm 6,000 acres in Tensas Parish, Louisiana.

### Wide-row cotton is improving profitability for some growers, but researchers caution it's not a solution for everyone.

Ginger Rowsey | Aug 20, 2021

AG WEB

CROP PRODUCTION

## Release the Turnrow Monster: Adam Chappell Moves to 76" Wide Row Cotton



"I'm now all in to 76" rows," Adam Chappell says, "and I'm not going back to needlessly spending so much money." (Photo by Chris Bennett)

By **CHRIS BENNETT** August 11, 2021


Cotton Farming

Breaking News

## LSU AgCenter project examines wide-row cotton

December 15, 2020

Facebook Twitter +



Cotton grows on 60-inch rows with a cover crop early in the 2020 growing season at the LSU AgCenter Northeast Research Station — photos by Dennis Burns/LSU AgCenter

# Wide Row Cotton

- Makes sense, right???
  - Reduce seed cost
  - Increase airflow through the canopy, helping with foliar diseases and boll rot
  - Decrease moisture competition
- Does it work in GA???
- Looked at multiple row spacings:
  - 36" rows (standard)
  - 48" rows
  - 60" rows
  - 72" rows



# Wide Row Cotton



36-inch



48-inch

# Wide Row Cotton



60-inch



72-inch

# Wide Row Cotton



36-inch



48-inch



60-inch



72-inch

# Wide Row Cotton

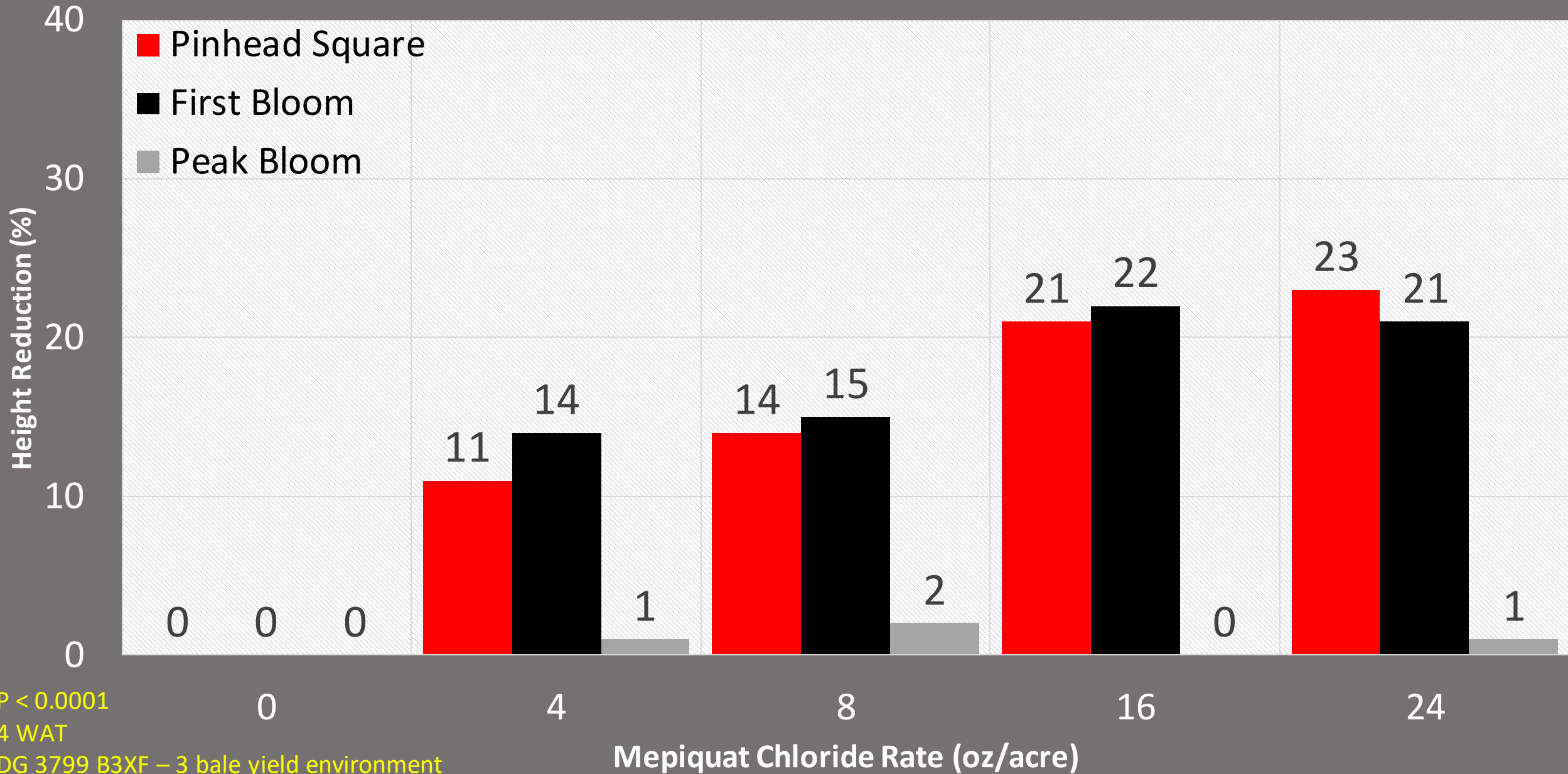
- Stand
  - Mission accomplished – Stand reduced 45 to 52% in 60 and 72” rows
- Lint Yield
  - Highest lint yield in standard 36” rows. Sacrifice 200 to 500 lbs at wider row spacings.
- Boll Rot
  - Not affected by row spacing. 6 to 9% of total bolls regardless of spacing.
- One year of data – Going to conduct again to confirm, but not the “fix” some people hoped...

# PGR Timing and Rate

- PGRs are complicated...
- When do you get the most "bang for your buck"???
- Do late apps do anything??
- Do I initiate when its shin high??? Knee high??? What rate??
- I've heard the plant can't take up more than 24 oz/acre (maximum single use rate).
- TIMELIENESS!!!!!!!!!!!!!!!!!!!!!!!!!!!!



# PGR Timing and Rate



# PGR Timing and Rate – 3 WAT



0 oz/acre @ bloom



16 oz/acre @ bloom

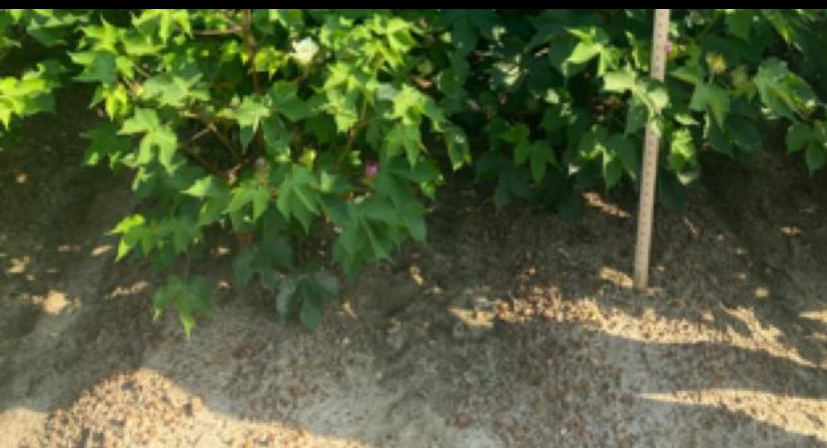


24 oz/acre @ bloom

# PGR Timing and Rate – 3 WAT



**PIX WON'T SHRINK THE PLANT!!!!!!!!!!!!!!!**



0 oz/acre @ bloom



16 oz/acre @ bloom



24 oz/acre @ bloom

# Take Home Points

- Variety Selection:
  - All the varieties in the variety trial can make cotton. Placement is key. Growers should pick one that works for them!!
  - Mixing varieties doesn't seem worth the hassle.
  - Thryvon varieties coming, try on a limited basis when the opportunity presents itself.
- Wide Row Cotton
  - Not sure there is a fit in GA. Looking for one more year.
- PGRs
  - Timeliness is key!!!!

# Thank you!!!

- Georgia Cotton Commission
- Cotton Incorporated
- UGA Extension
- County Agents
- Grower Cooperators
- Industry Partners



Thank you for attending this production meeting!



Please open the camera on your smartphone and point it at the QR code, then open the link that appears to complete this brief survey.