

PHYTOGEN VARIETAL PERFORMANCE & PLACEMENT


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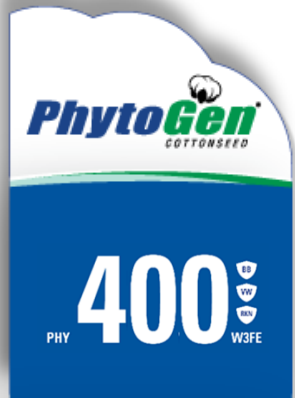


Agriculture Division of DowDuPont



2022 VARIETIES

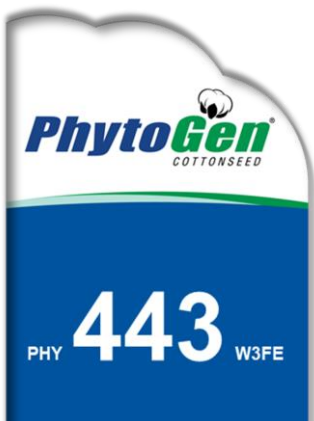
Variety				
PHY 332 W3FE	✓	✓	✓	✓
PHY 350 W3FE	✓	✓	✓	
PHY 360 W3FE	✓	✓		
PHY 390 W3FE	✓	✓		
PHY 400 W3FE	✓	✓		
PHY 411 W3FE	✓	✓		✓
PHY 443 W3FE	✓	✓	✓	✓



- Should be on every farm
- Sand to Clay / Irrigated or Dryland
- Medium plant height – easy to manage
- Bushy plant type
- WideStrike 3, Enlist, RKN and BB Res.



- RKN / REN acres; generally, course textured soils, well drained
- Mid maturity, 3 days later than PHY400W3FE
- More aggressive than 400 / more PGR required.
- Bushy plant type but taller than 400.
- WideStrike 3, Enlist, RKN, REN and BB Res.



- RKN / REN acres south of I-20
- Mid maturity, 3-5 days later than PHY400W3FE
- More aggressive / stress tolerant than 332.
- Columnar plant type
- WideStrike 3, Enlist, RKN, REN and BB Res.



2021 INNOVATION TRIALS W/ COMPETITORS SODE

Variety	Hardwick – Tensas Parish	Marien – Rapides Parish	White – Catahoula Parish	Dean Lee – Rapides Parish	Eusippe – Jefferson County	Matthews – Rapides Parish	Mathis – Ouachita Parish	Logan – Caddo Parish
PHY332W3FE		835	1027	1049	1318	1011	1265	843
PHY400W3FE	1484	736	986	1000	1340	1029	1373	847
PHY443W3FE		842	980	1152	1233	1253	1231	830
PHY411W3FE	1445	945	1058	1189	1326	908	1412	882
DP1646B2XF			978	1039		1150	1299	
DP2127B3XF	1232					1187		
DP2115B3XF	1430					1252		NG4190B3XF
NG4936B3XF	1253	870			1278			846
ST4990B3XF	1366	794					1411	
ST5091B3XF	1328	784			1297			
REN #/pint	0	3795	5460	1635	9583	540	585	1910

RED HIGHLIGHTED ENTRIES ARE TOP YIELDER +/- 3%

Some additional competitor entries may be found in the individual location reports.



2021 INNOVATION TRIALS – PHY ONLY SODE

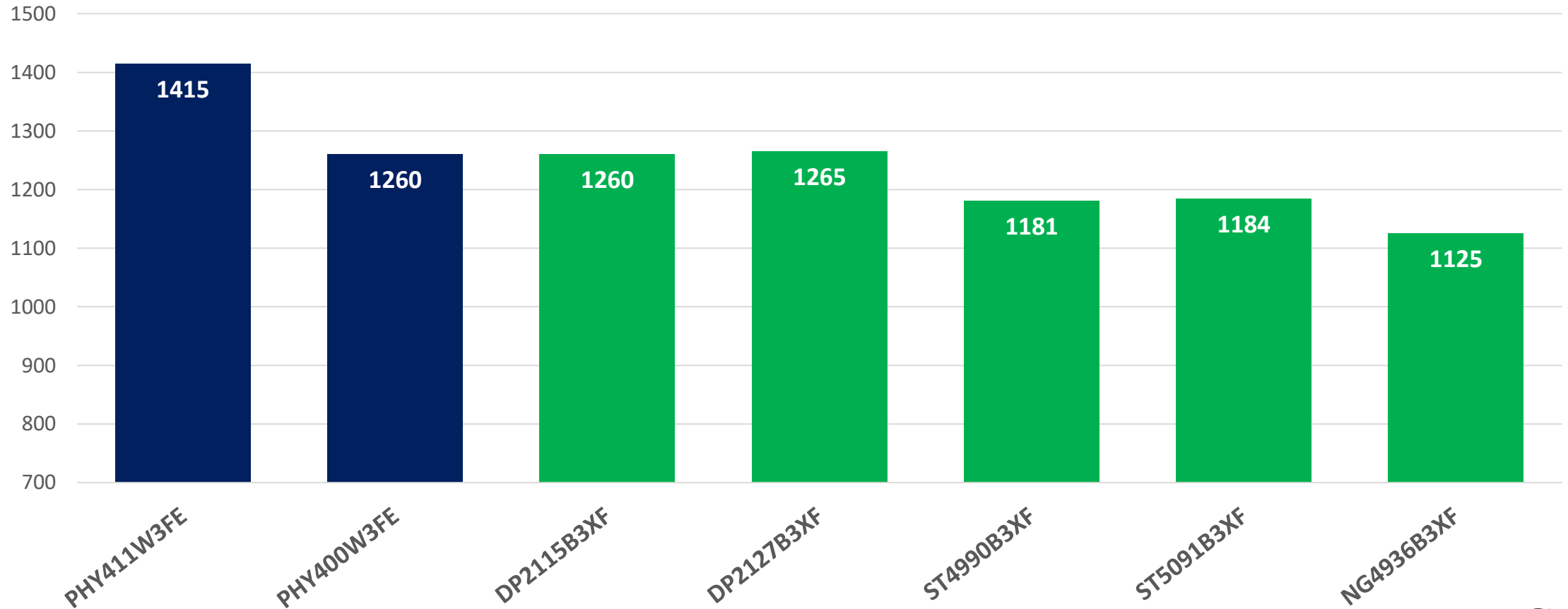
Variety	Lee – Madison Parish	Horn – Washington County MS	Horn – Washington County MS	Pickens – Desha County AR	Mencer – Chicot County AR	Wyatt – Madison Parish	Dunnahoe – Desha County AR	McLemore – Franklin Parish	Vining – Madison Parish	Patrick – East Carroll Parish
PHY332W3FE	1167	1280	1250	1268	1206	1058	1244	1024	1038	1019
PHY390W3FE	1135	1113	1340	1352	1348	1042	1454	1138	1119	1114
PHY400W3FE	1218	1153	1364	1388	1476	1039	1604	1261	1148	1124
PHY443W3FE	1209	1281	1229	1328	1240	1029	1471	1100	1091	1022
PHY411W3FE	1334	1324	1302	1268	1384	1175	1461	1299	1190	1079
REN #/pint	14510	250	0	0	130	250	0	14015	0	0
Soil Type	Silty Clay Loam	Sandy loam	Silt loam	Sandy loam	Silty clay loam	Silty clay loam	Sandy loam	Silt loam	Silty clay loam	Silty clay loam
Irrigation	N	N	N	Y	Y	N	Y	Y	Y	Y
Location	Tallulah	Metcalf	Greenville	Pickens	Lake Village	Waverly	Rowher	Chase	Sondheimer	Lake Providence

RED HIGHLIGHTED ENTRIES ARE TOP YIELDER +/- 3%

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2021 LSU OVT & CORE BLOCK – 10 LOCATIONS

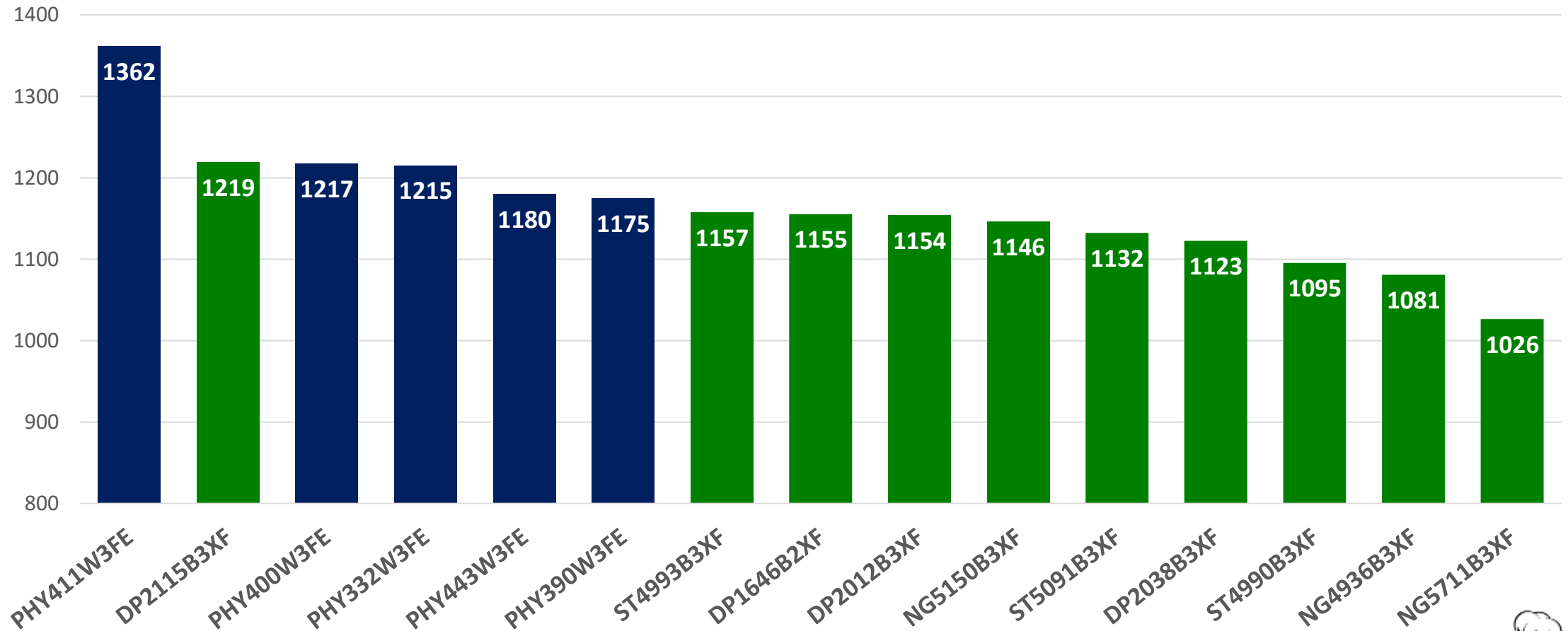


BALANCED DATA – HEAD TO HEAD COMPARISON

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2020 & 2021 LSU OVT RESULTS:

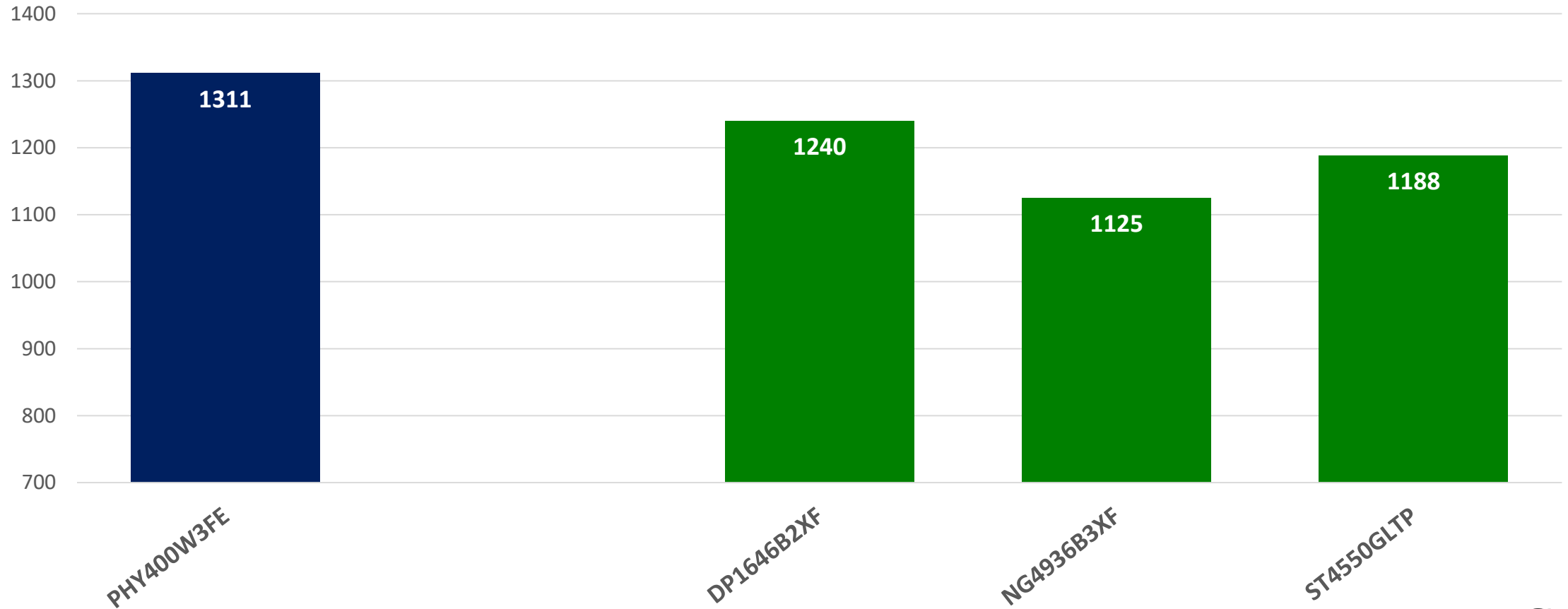


2020 & 2021 LSU Cotton OVT: 9 locations – 2020 & 2021 Northeast Research Station (clay and silt loam), 2020 & 2021 Macon Ridge Research Station, 2020 Red River Research Station (clay and silt loam). 2021 Dean Lee Research Station (Silt Loam)

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FOUR YEAR LSU DATA: PHY400W3FE VS. ELITE COMPETITORS

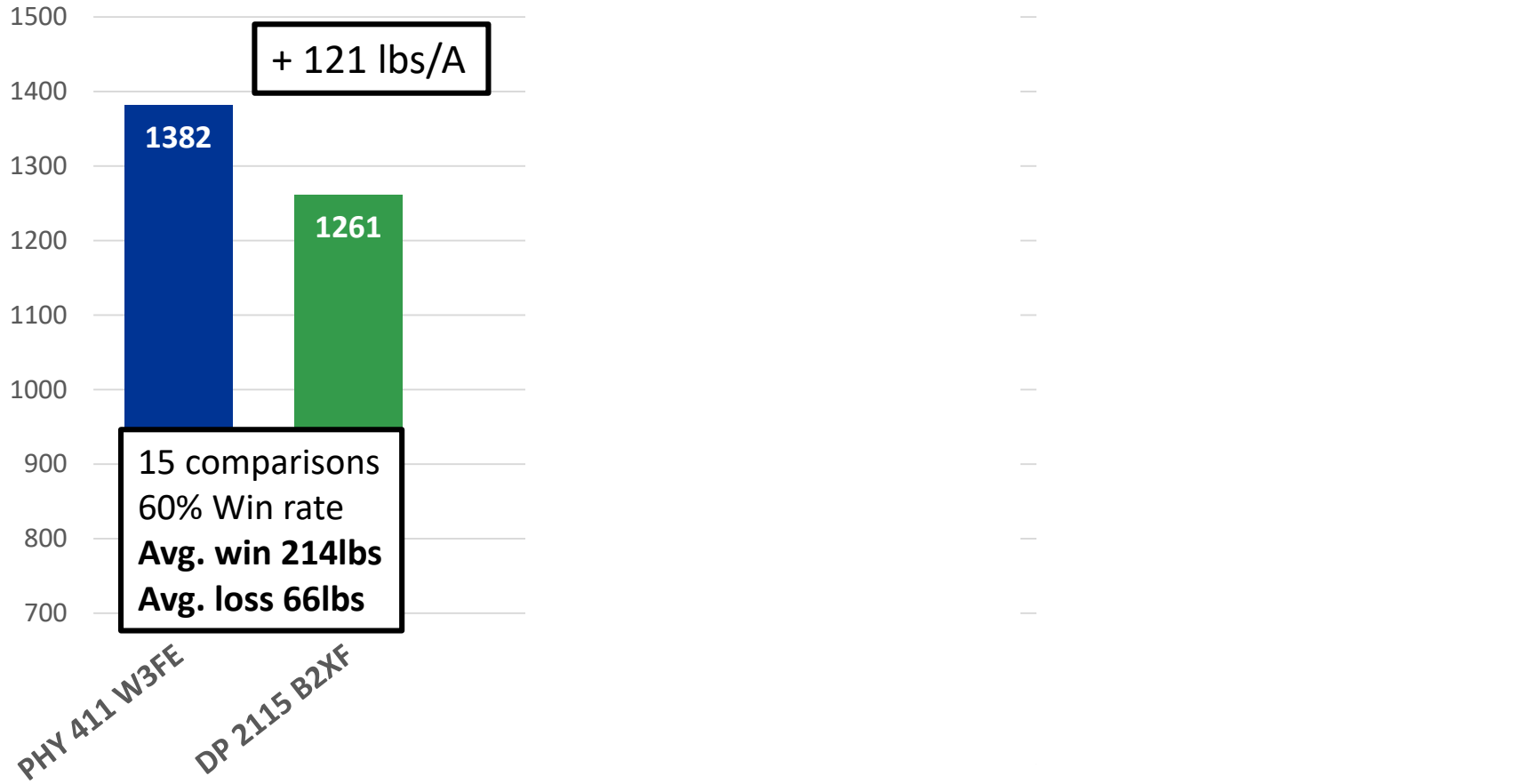


BALANCED DATA – HEAD TO HEAD COMPARISON – 36 locations
These are the only four entries common to the 2019 and 2020 LSU On-Farm Trials
(13 locations) and 2018, 2019, 2020 and 2021 LSU OVT (23 locations).
*ST4550GLTP not tested in 2021 OVT.

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PHY 411 W3FE – 2020 & 2021 LSU OVT / 2021 LSU ON-FARM



BALANCED DATA (Head to Head Comparisons)
2020 LSU OVT / 2021 LSU OVT / 2021 LSU On-Farm

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PhytoGen[®]
COTTONSEED

Boll Type

Stripper type

Both

Picker Type



1

2

3

4

5

PHY 400 W3FE
PHY 390 W3FE

PHY 360 W3FE

PHY 411 W3FE



PhytoGen
COTTONSEED

411  

WideStrike 3 

PhytoGen
COTTONSEED

400  

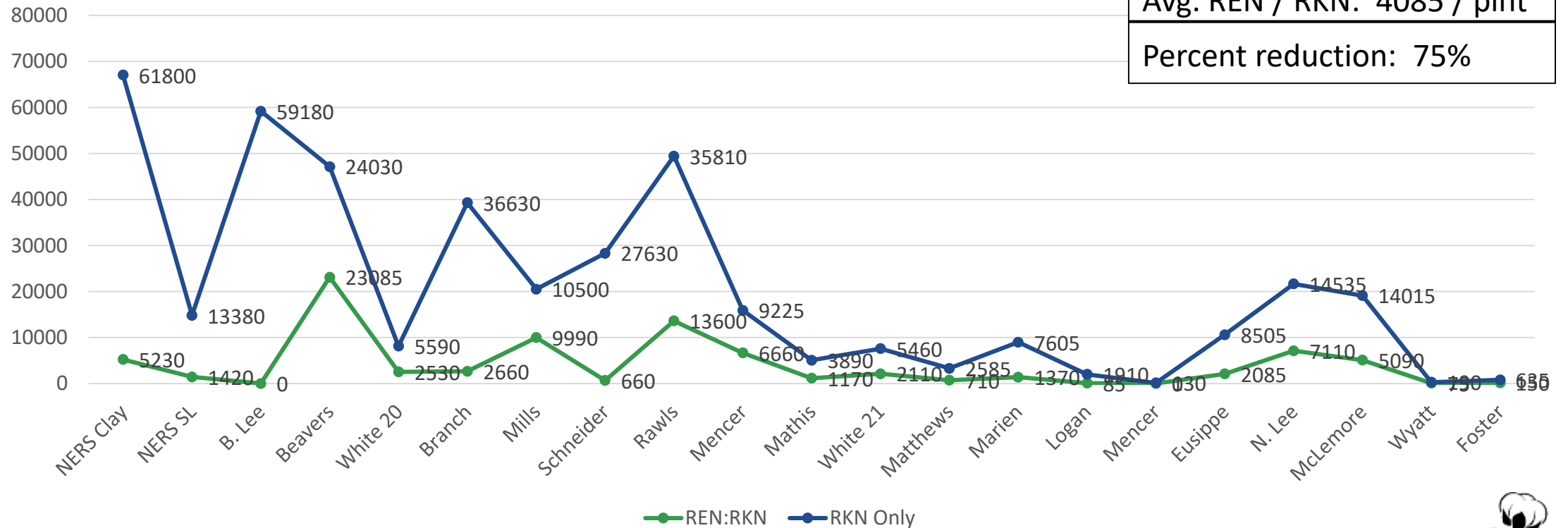
WideStrike 3 

VARIETY	Number of Locations	Gin Turnout (%)	Micronaire	Length	Strength	Uniformity	Leaf Grade	Loan Value (\$0.52 base)
PHY 332 W3FE	18	38.40	4.2	1.22	33.8	83.6	4.1	\$0.5415
PHY 390 W3FE	17	39.81	4.3	1.20	33.5	83.8	4.3	\$0.5433
PHY 400 W3FE	19	40.10	4.4	1.20	33.4	84.0	4.4	\$0.5391
PHY 411 W3FE	19	40.51	4.7	1.13	32.7	83.6	4.4	\$0.5342
PHY 443 W3FE	18	39.25	4.5	1.17	34.4	84.3	4.1	\$0.5391
ST 4990 B3XF	4	37.21	4.6	1.21	31.5	84.5	3.8	\$0.5395
ST 5091 B3XF	4	39.50	4.1	1.20	31.2	83.6	4.5	\$0.5332
DP 2115 B3XF	3	40.36	4.7	1.18	32.3	83.8	4.0	\$0.5342
DP 2127 B3XF	3	41.17	5.0	1.16	32.1	84.4	3.7	\$0.5319
NG 4936 B3XF	4	38.01	4.3	1.23	31.8	84.8	4.5	\$0.5282

END OF SEASON RENIFORM POPULATIONS – 2020/21

REN:RKN Stack vs. RKN Only

Avg. RKN Only: 16345 / pint
 Avg. REN / RKN: 4085 / pint
 Percent reduction: 75%



2022 VARIETIES

Variety	Placement
PHY 332 W3FE	Early product, stacked REN/RKN. Works well north of I-20. Narrow canopy well suited to 30" solid planted. Solid wing-man for 411 or 400.
PHY 390 W3FE	Yield stability improves as it travels north. Racehorse with more top end than 400 but less stress tolerance. Well drained, irrigated coarse textured soils without reniform nematode.
PHY 400 W3FE	Yield stability improves as it travels south. South delta stable across soil types and environments. Fast fruiter with very high K demand. Short bushy plant, low PGR requirement.
PHY 411 W3FE	Top end performance on reniform acres, good stress tolerance. More aggressive plant than 400, more PGR required. Open boll type. Will replace / cannibalize 332 and 443 in most areas.
PHY 443 W3FE	Most aggressive, fullest season product in portfolio. Travels south and handles stress very well. Ideally suited to CenLA and S. MS. Stacked REN/RKN.



DESIGNED TO
THRIVE
FROM THE INSIDE OUT.



Agriculture Division of DowDuPont™

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