COTTON CULTIVAR PERFORMANCE IN MISSOURI FOR THE 2018 GROWING SEASON

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Fifty eight cotton varieties were entered into the Missouri Statewide Official Variety Test (OVT) for 2018 in 5 diverse environments. This poster will summarize the data collected from these tests. Also presented with this poster will be a comparison of the varieties utilized in 4 large plot strip trials on farm compared to the small plot results. On-farm data will include the Bootheel Region of Missouri as well as Northwestern Missouri. The summary of each large plot location is attached below as Figures 1-4. Due to the large amount of varieties in the small plot OVT only the summaries for yield stability and stability under irrigation are shown (Figures 5-6).

Table 1. Strip trial lintyield in Bernie, Missouri for 2018. Values are means ± standard error (n = 3)

Large Plot On Farm Trial 1: Bernie, MO		
Variety	Lint Yield (lbs/ac)	% Turnout
DP1820 B3XF	2071 A	45.8 A
CG9608 B3XF	2031 AB	46.1 A
DP1725 B2XF	1977 AB	45.6 A
DG3214 B2XF	1954 AB	41.9 B
CG9178 B3XF	1918 AB	44.5 A
NG3729 B2XF	1911 AB	41.1 BC
DG3385 B2XF	1871 B	41.5 BC
NG3699 B2XF	1662 C	39.4 C

Table 2. Strip trial lintyield in Portageville, Missouri for 2018. Values are means ± standard error (n = 3).

Large Plot On Farm Trial 2: Portageville, MO		
Variety	Lint Yield (lbs/ac)	% Turnout
DP1725 B2XF	2141	47
DP1614 B2XF	2058	43.6
PHY320 W3FE	2020	42.1
DG3385 B2XF	2001	42.2
ST5471 GLTP	1988	43.6
PHY350 W3FE	1937	40.9
ST5122 GLT	1903	42.2

Table 3. Strip trial lintyield in Senath, Missouri for 2018. Values are means ± standard error (n =3).

Large Plot On Farm Trial 3: Senath, MO		
Variety	Lint Yield (lbs/ac)	% Turnout
PHY350 W3FE	1949	45.6
PHY320 W3FE	1882	44.3
PHY330 W3FE	1835	44.5
PHY340 W3FE	1818	43.9
PHY440 W3FE	1798	44.3
PHY430 W3FE	1721	43.4
PHY300 W3FE	1647	43.2

Table 4. Strip trial lintyield in Norborne, Missouri for 2018. Values are means ± standard error (n =3).

Large Plot On Farm Trial 4: Norborne, MO (Northern, MO)		
Variety	Lint Yield (lbs/ac)	% Turnout
NG3522 B2XF	707	43.3
PHY243 WRF	693	48.3
DP1614 B2XF	636	46.9
PHY300 W3FE	578	46.1
ST5122 GLT	481	44.1

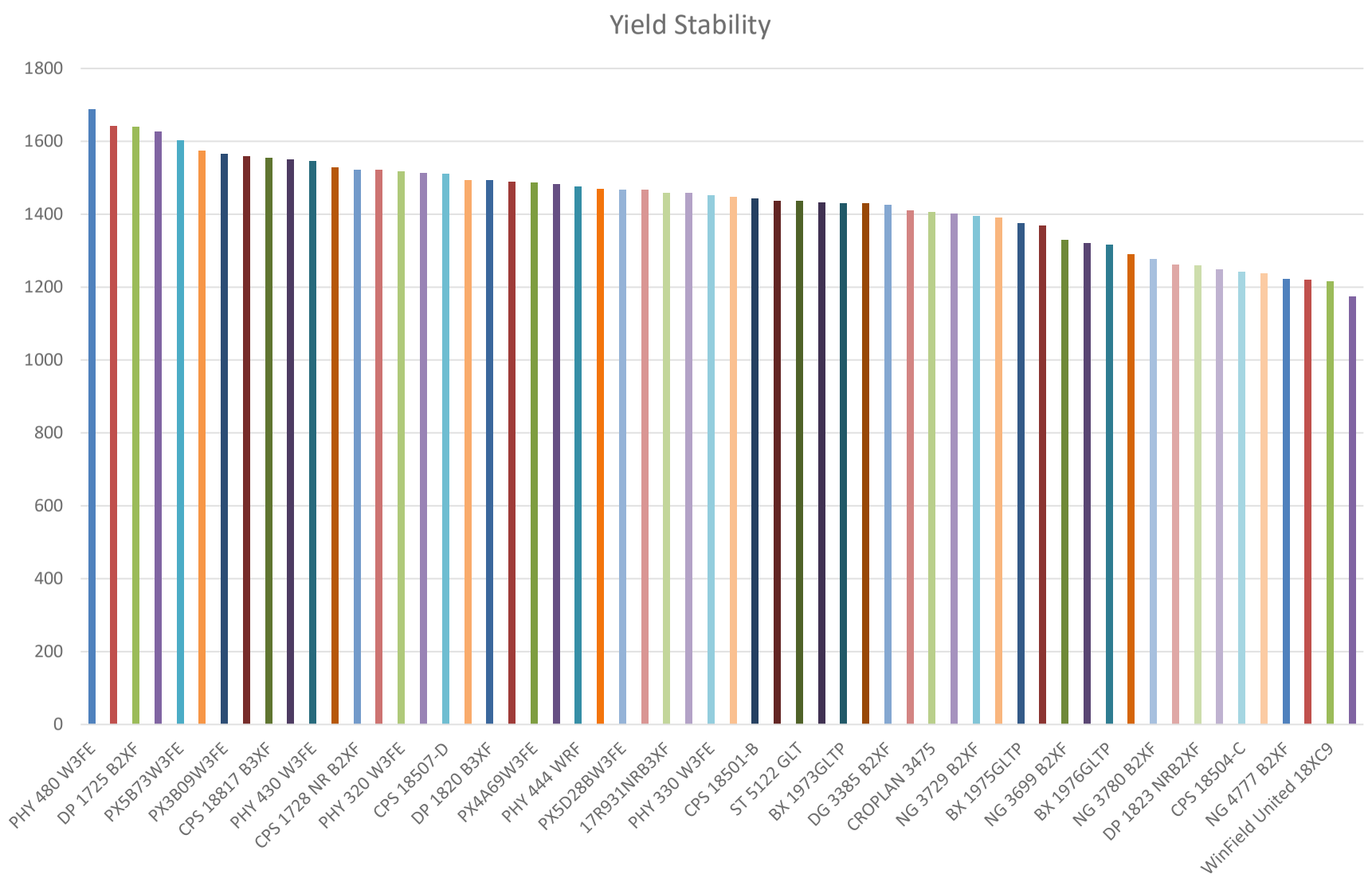

Figure 1. Yield stability (lint yield is lbs/acre) across all environments in Missouri for 2018. Values are pooled across locations and are means ± standard error (n =18).

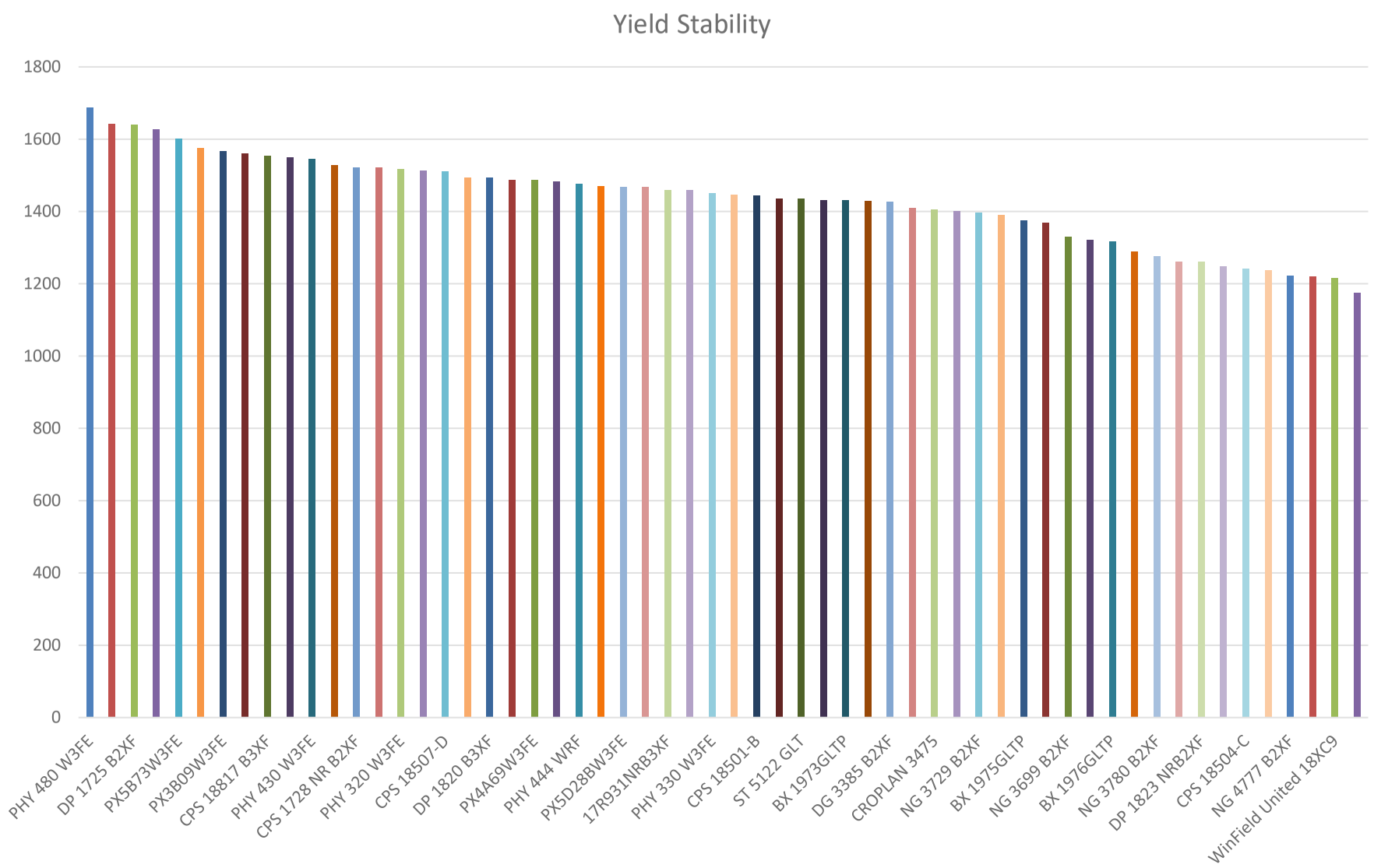

Figure 2. Yield stability (lint yield is lbs/acre) across irrigated environments in Missouri for 2018. Values are pooled across locations and are means ± standard error (n =18).