

Texas High Plains Wheat Picks Field Report

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The 2017-2018 Wheat Crop

Across the Texas High Plains, much of the early (first half of September) wheat for dual-purpose production was drilled into good soil moisture resulting in good stands and good early forage production. However, rain subsided in October, and much of the late wheat was dry sowed. The drought persisted across the Texas High Plains with the winter of 2017-2018 being one of the driest winters on record. Due to drought, producers pulled cattle off dryland wheat earlier than anticipated due to a lack of forage. Heavy fall forage production depleted soil water and deteriorated wheat conditions especially on dryland acres with many dryland fields not recovering.

With irrigation, many producers maintained forage production as well as grain production. Some producers received rain in April and May, but rain was very localized. Where rainfall was received, it helped carry dryland wheat. In several areas, dry sowed winter wheat did not germinate until April. Spring temperatures were above average especially during pollination and early grain development. Yields of early planted ungrazed dryland wheat that established normally, if harvested, ranged from 10 to 20 bu/ac. Amazingly, a few yields on dryland wheat topped 30 bu/ac even though in-season rainfall was at best 2". This is a testament to the value of deep soil moisture that carried the crop. Irrigated wheat ranged 50 to 100 bu/ac depending on irrigation capacity.

2018-2019 Wheat Grain Picks

Texas A&M AgriLife is finalizing wheat variety grain Picks for the Texas High Plains in early August. Our "Picks List" normally changes little from one year to the next. [Access our forthcoming Picks at https://amarillo.tamu.edu/amarillo-center-programs/agronomy/wheat-publications/](https://amarillo.tamu.edu/amarillo-center-programs/agronomy/wheat-publications/) or <http://varietytesting.tamu.edu/wheat>

As noted before, our ongoing Picks criteria includes a minimum of three years of grain data in Texas A&M AgriLife High Plains wheat trials across several locations. A "Pick" variety means this: Given the data these are the varieties we would choose to include and emphasize on our farm. Picks are not necessarily top numerical average yielders as important disease resistance traits (leaf and stripe rust, wheat streak mosaic virus),

insect tolerance, and standability enable a producer to better manage potential risks. We look for consistency in yields, wheat varieties that are consistently in the top 25% of yields at each location. Our data shows that Pick wheat varieties yield 7 to 11% higher as a group than non-Pick wheat varieties over time. If you have a wheat variety that you like, we don't discourage you from continued planting, but consider a Pick variety that might complement your preferred wheat, especially for disease resistance.

Here are our tentative Picks for 2018-2019 pending our final assessment of the 2018 harvest data.

High Plains Picks List		
Dryland	Lim. Irrigation	Full Irrigation
TAM 112	TAM 112	TAM 304§
TAM 113	TAM 113	TAM 113
TAM 114	TAM 114	TAM 114
T158	T158	
WB 4721	Winterhawk	Winterhawk
LCS Mint	lba	lba

High Plains Watch List		
Dryland	Lim. Irrigation	Full Irrigation
PlainsGold Avery Long Branch		

#Full irrigation in the Texas High Plains reflects a production system that also is oriented to ample nitrogen fertilizer applications and likely fungicide application, in particular for leaf rust and stripe rust even when infection is minimal or perhaps even not evident (preventive applications).

&Leaf rust/stripe rust resistance ratings: R, Resistant; MR, moderately resistant; MS, moderately susceptible; S, susceptible

Two & three-year 'Watch List.' Denali (S/MS) is a variety of interest, a good irrigated performer for the Texas Panhandle (but not the South Plains).

Special Notes on Selected Varieties.

- TAM 304 is no longer a Pick for our typical limited irrigation category (insufficient yields, low test weight), but we believe TAM 304 remains a viable choice for high-input production systems (strong irrigation, high nitrogen) targeting 100+ bu/ac.

- TAM 111 remains the most widely planted wheat variety in the Texas High Plains, but it was removed from our Picks list for 2017 plantings. We observed increased inconsistent performance. It is still outstanding in some cases but poor in others, and we report TAM 111 underperformance in some irrigated trials as much as 20% below trial averages. The reduction in TAM 111 consistency and performance we believe is in great part due to lack of any meaningful resistance or tolerance to leaf and especially stripe rust. Where TAM 111 continues to perform well is in high management systems (not necessarily high irrigation), namely the near automatic use of fungicide to control/prevent stripe rust.

Is it OK to still plant TAM 111? Yes. There is a lot of saved seed and many producers will still purchase TAM 111 for the 2018-2019 cropping season. But be aware that TAM 111 success relative to other varieties and varieties may likely depend on drier conditions (less potential for rusts) and use of a fungicide even if infection levels are light or even simply as preventative (which we wouldn't recommend for a moderately resistant or resistant variety). We recommend you budget a fungicide application for TAM 111 on both irrigated and dryland. Given these concerns AgriLife urges producers to at least consider reducing any high percentage of your overall acres of this one variety. TAM 113 and TAM 114 are logical alternatives with good resistance to leaf and stripe rust.