

Texas A&M AgriLife "Texas Row Crops Newsletter"

Submitted by

Dr. Calvin Trostle, Extension Agronomy, Lubbock, 806-746-6101, ctrostle@ag.tamu.edu; Dr. Clark Neely, State Extension Small Grains specialist, College Station, 979-862-1412,

cneely@ag.tamu.edu

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Texas Wheat Variety "Picks" for Grain

Continuing a long-time High Plains practice, Texas A&M AgriLife has extended our wheat "Picks" suggestions for Texas wheat producers across the state. Texas A&M AgriLife's sister agencies for Research and Extension collaborate by region across the state to conduct extensive wheat variety testing in both research settings and on-farm sites.

Our ongoing Picks criteria include a minimum of three years of data in AgriLife wheat variety trials across numerous annual locations. A "Pick" variety means this: given the data these are the varieties we would choose to include and emphasize on our farm for wheat grain production. Picks are not necessarily the numerical top yielders as important disease resistance traits (leaf or stripe rust, wheat streak mosaic virus), insect tolerance (greenbugs, Hessian fly), or standability can also be important varietal traits that enable a producer to better manage single-variety potential risk using a "mix and match" approach to variety selection to cover basic defensive traits on your farm.

While in some years we make no changes to our annual Picks, for 2015-2016 we have made some deletions and additions for the four Texas regions where AgriLife wheat variety testing is conducted. Much of the data used in discussion below is published in "Texas Wheat Variety Trial Results—2015," (SCS-2015-06), available at http://varietytesting.tamu.edu/wheat/index.htm In addition, we also offer an early indication of potential desirable varieties based on two or more years of data, hence our 'Watch List' of promising varieties.

Leaf Rust and Stripe Rust Resistance Ratings in Texas Wheat

Because these two fungal diseases have a significant potential impact across Texas, particularly when spring production conditions are wet and humid, **we have included current resistance ratings for both**. These ratings are noted as R, Resistant; MR, moderately resistant; MS, moderately susceptible; and S, susceptible. For example, a variety designated (R/MR) is resistant to leaf rust and moderately resistant to stripe rust (e.g., TAM 304). For further information on wheat variety characteristics see pages 5 (hard winter wheat) and 6 (soft winter wheat) in the above document.

Texas High Plains

• Picks—Full Irrigation: TAM 113 (R/R), TAM 304 (R/MR), Iba (R/R), Winterhawk (MS/MR)

- **Picks**—Limited Irrigation: TAM 111 (S/S), TAM 112 (S/S), TAM 113, Iba, T158 (MS/MR), Winterhawk
- Picks—Dryland: TAM 111, TAM 112, TAM 113, Iba, T158, Winterhawk
- Watch list: Byrd, Denali, Gallagher, SY Monument, WB-Grainfield
- A special note about TAM 114 (formerly tested as TX07A001505): This new variety (good resistance to rusts, good straw strength, desirable milling and baking qualities, moderately resistant to some biotypes of Hessian fly) has in essence has moved off our "Watch List" to Pick, but 2015 planting seed is essentially limited to seed blocks.

Changes to 2015-2016 High Plains Picks:

<u>Deletions</u>: We removed <u>TAM 111</u> as a full irrigation Pick in part due to trouble this variety experienced with stripe rust in 2015. This is the first year of significant underperformance for TAM 111 in our many years of trials, but stripe rust issues and moist conditions—which may be compounded in full irrigation—raise this caution. We have also deleted <u>Duster</u> and <u>Hatcher</u>. Though the long-term performance of these varieties has been solid overall as a Pick for all production conditions, their continued yield has become somewhat marginal relative to newer lines that are available.

<u>Additions</u>: <u>T158</u> (Limagrain) is now a Pick for dryland and limited irrigation Texas High Plains wheat production. Part of T158's performance is tolerance to stripe rust.

For further discussion of wheat Pick varieties in the Texas High Plains consult "Pick Wheat Grain Varieties for the Texas High Plains & Eastern New Mexico" available at http://lubbock.tamu.edu/

Texas Rolling Plains

- Picks: TAM 304 (R/MR), TAM 305 (R/R), Gallagher (MR/R), Greer (S/MR)
- Watch List: WB 4458, WB Cedar, WB Grainfield, SY Monument, SY Llano

Changes to 2015-2016 Rolling Plains Picks:

<u>Deletions</u>: <u>Duster</u> and <u>Jackpot</u> slipped considerably in the rankings this year, partially due to heavy stripe rust infection.

<u>Additions</u>: <u>TAM 114</u> (as noted in the High Plains discussion above, not yet available other than seed blocks) and <u>Gallagher</u> have risen near the top of the list now that we have 3 years of data, both of which showed moderate to strong stripe and leaf rust resistance.

Texas Blacklands

1) Hard Red Winter Wheat

- Picks: TAM 304 (R/MR), Gallagher (MR/R), Greer (S/MR), Iba (R/R), WB Cedar (R/MR)
- Watch List: TAM 114, SY Monument, WB 4458. (On average, TAM 114 yielded nearly identical to TAM 304, but possesses higher test weight, which TAM 304 is often lacking. SY Monument and WB 4458 are potential up-and-coming varieties that have done well the past two years.
- Another variety worth noting is Billings, which has been a consistently good yielding variety, but due to its early maturity and sprouting susceptibility, growers often shy away from it.

Changes to 2015-2016 Blacklands Picks:

<u>Deletions</u>: <u>Armour</u> fell significantly in the yield rankings due in part to reduced rust resistance

which significantly hurt its yield in 2015.

Additions: WB Cedar has consistent high yields and solid disease resistance.

2) Soft Red Winter Wheat

• **Picks**: Coker 9553 (MR/MR), Pioneer 25R40 (MS/S), TV 8525 (MR/R), USG 3201 (MR/MR)

• Watch List: Dyna-Gro 9012

Changes to 2015-2016 Blacklands Picks:

<u>Deletions</u>: USG 3555, TV 8861. USG 3555 yields well, but has issues with shattering and its early maturity makes it more susceptible to late spring freezes. TV 8861 was dropped mainly because of its poor rust resistance.

Additions: None.

South Texas

The South Texas Picks in 2015-2016 added no new varieties due to lack of sufficient new data. Excessive spring rains prevented harvest from three of the main testing locations.

- Picks: TAM 304 (R/MR), TAM 305 (R/R), Duster (R/MS), Billings (MR/MR).
- Watch List: TAM 114, Gallagher, WB Cedar

Changes to 2015-2016 Blacklands Picks:

<u>Deletions</u>: <u>Armour</u> was dropped due to a complete breakdown of stripe rust resistance. (Similarly, Duster has done well in the past, and stripe rust resistance began to break down in this variety as well, though not as severely as with Armour, so it remains a Pick.).

Additions: None.

Lower Rio Grande Valley

Hard Spring Wheat

Winter wheat cannot be successfully grown here, but limited AgriLife data suggests that Expresso and Rockland have been the most consistent yielding hard red spring wheats in the LRGV.