



# Wheat Variety Characteristics Varieties Planted in the Texas High Plains Uniform Variety Trials 2019-2020

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Variety selection is a critical decision that can significantly affect yield potential, disease, insect pressure, and seed quality. The Texas A&M AgriLife uniform variety trials are a coordinated effort between AgriLife Research and AgriLife Extension, providing unbiased yield comparisons over multiple environments and growing conditions. Each location consists of at least 30 entries composed of both state and regional entries. The composite data is the foundation of our annual "Pick" wheat varieties. Entries are replicated 3 or more times and evaluated under irrigated and dryland production.

#### 2019-2020 Entries:

## Croplan by Winfield

# **CP7869 (Croplan by Winfield)**

Croplan 2018 release with good resistance to leaf, stem, and stripe rust. Very well adapted for both High Plains irrigated and dryland acres. Very good straw strength provides excellent standability. Moderate yield response to increased population due to adequate tillering.

Height: Medium

Heading Maturity: Late Coleoptile Length: Medium Winterhardiness: Excellent

## **CP7010 (Croplan by Winfield)**

# **CP7017AX (Croplan by Winfield)**

A CoAXium wheat variety with strong yield potential and ability to handle stress with strong drought tolerance, tolerates acid soils and resistant to Soilborne Mosaic.

Height: Medium

Heading Maturity: Medium Coleoptile Length: Medium-Long

Winterhardiness: Excellent

# **CP7050AX (Croplan by Winfield)**

A new CoAXium wheat variety with excellent yield potential in an early maturity product. Strong straw, test weight, tolerance to acid soils with resistance to Strip Rust and Soilborne Mosaic.

Height: Medium

Heading Maturity: Early

Coleoptile Length: Medium-Long

Winterhardiness: Excellent

\*AX – Axiom herbicide tolerant. Axiom controls many grass and small-seeded broadleaf weeds in CoAXium winter wheat systems.

# **Limagrain Cereal Seeds**

## **LCS Valiant**

Limagrain Cereal Seeds 2018 release that was developed for Central Great Plains. Excellent winter hardiness and high tillering potential. Intermediate resistance to leaf and stripe rust. Susceptible to wheat streak mosaic.

Height: Medium

Heading Maturity: Medium

Tillering: High

Pedigree: Unavailable

#### **LCS Mint**

Limagrain Cereal Seeds 2012 release that is well adapted to the Southern Great Plains through the Texas Panhandle. Excellent drought tolerance and medium—long coleoptile. Tolerates limited grazing. Moderately susceptible to barley yellow dwarf. Intermediate resistance to stripe rust but susceptible to leaf rust. Marketed for grain quality including milling and baking properties. Prone to lodge with heavy nitrogen fertility under irrigation. Maturity varies due to strong photoperiodism. Only in 2019-2020 dryland trials.

Height: Medium-Tall

Heading Maturity: Medium Tillering: Intermediate Pedigree: Unavailable

# T158

Limagrain Cereal Seeds variety 2009 release that is well adapted to the Texas Panhandle, eastern Colorado, Oklahoma, Kansas and Nebraska. Moderately resistant to stripe rust but moderately susceptible to leaf rust. Intermediate susceptibly to wheat streak mosaic virus. Drought tolerant. Only tolerates limited grazing. Very good shattering resistance. Very good straw strength.

Height: Medium

Heading Maturity: Medium-Early

Tillering: Very High

Pedigree: T81, KS93U206 experimental

## **OSU**

# Baker's Ann (OSU)

Oklahoma State 2018 release that marketed by Oklahoma Genetics, Inc. with stripe rust resistance but is susceptible to leaf rust, high yield potential, and excellent baking properties.

# Iba (OSU)

Oklahoma State University 2012 release marketed by Oklahoma Genetics. A dual-purpose variety that performs very well in Kansas and Oklahoma. Good grain yield potential. Marketed as later to first hollow stem. Resistant to leaf and stem rusts. Intermediate resistance to stripe rust. Susceptible to wheat streak mosaic virus. Moderate resistance to barley yellow dwarf. 2019-2020 Irrigated Trials

Height: Medium

Heading Maturity: Medium

Tillering: High

Pedigree: Duster and Oklahoma experimental that includes Karl 92 and Tomahawk

# Lonerider (OSU)

Oklahoma State University 2017 release marketed by Oklahoma Genetics. Lonerider is a dual-purpose variety with good grain potential that is well adapted for the western High Plains. Moderately susceptible to barley yellow dwarf. Intermediate resistance to leaf and stripe rusts. Noted for rapid stand establishment in the fall under ideal conditions, but it does not recover from heavy grazing. Susceptible to sprouting if not harvested on time.

Height: Short

Heading Maturity: Early Tillering: Intermediate

Pedigree: Billings and Oklahoma experimental that includes Duster and OK101

## **OK Corral (OSU)**

Oklahoma State University 2019 release marketed by Oklahoma Genetics. A beardless wheat variety for grain-only, dual-purpose and graze-out or hay production.

## Showdown (OSU)

Oklahoma State University 2018 release marketed by Oklahoma Genetics. Showdown a variety resistant to stripe rust but moderately susceptible to leaf rust. is marketed for a broad range of environmental conditions. High tillering potential with average straw strength. Variety needs to be planted at a higher seeding rate to compensate for lower fall ground cover potential. Good drought tolerance.

Height: Tall semidwarf

Heading Maturity: Moderately late

Tillering: High

Pedigree: OK Rising and AgriPro experimentals

#### Spirit Rider (OSU)

An Oklahoma State University 2017 release marketed by Oklahoma Genetics. A dual-purpose variety with good straw strength, standability, and yield potential. Good drought tolerance and intermediate release from winter dormancy (spring greenup). Very good straw strength It also has good disease resistance. Height: Medium-Short to Medium

Heading Maturity: Medium Tillering: Intermediate to low

Pedigree: OK Bullet and experimentals

# Plains Gold (Colorado Wheat Research Foundation - CWRF)

# Plains Gold Canvas (CSU)

Colorado State University 2018 release marketed by Plains Gold (CWRF). Canvas is a high yielding hard red winter wheat with medium maturity and a strong straw. Responds well in high input systems. Very good stripe and stem rust resistance but is susceptible to leaf rust. It also has very good wheat streak mosaic virus. It is noted for excellent test weight and milling/baking quality.

Height: Medium Maturity: Medium

Pedigree: Denali, Antero, and Byrd

# Plains Gold Guardian (CSU)

Colorado State University 2019 release marketed by Plains Gold (CWRF). Resistant to Wheat Streak Mosaic Virus (wsm-2) and wheat curl mite which transmits WSMV, wheat mosaic virus, and triticum mosaic virus. Guardian also carries resistance to all three predominant rusts (Stripe, Leaf, and Stem). High yield potential and test weight. Fair straw strength. **Certified Seed Only, no saved seed allowed.** 

Height: Medium Maturity: Medium

# Plains Gold Langin (CSU)

Colorado State University 2018 release marketed by Plains Gold (CWRF). Langin is an early semi-dwarf variety for grain only production. It is noted for having excellent winterhardiness and drought tolerance. Resistant to the wheat curl mite. Noted as having moderate susceptibility to wheat streak mosaic virus. Susceptible to leaf rust, but moderately resistant to stripe rust.

Height: Short

Heading Maturity: Early

Pedigree: Byrd and Colorado Experimental that includes Byrd

# AgriPro (Syngenta)

# **AP EverRock**

AgriPro (Syngenta) 2019 release. Very good straw strength and leaf disease package. Very good milling and baking properties. Good forage production. Good winter hardiness. Not suited to dryland in the Texas Panhandle.

Height: Medium

Heading Maturity: Medium Early

## SY Grit (AgriPro)

AgriPro (Syngenta) 2017 release. A medium early dual-maturity variety that is adapted to the Southern Great Plains. Noted for drought tolerance and straw strength with a good disease package. Moderately susceptible to leaf rust and intermediate tolerance to stripe rust.

Height: Medium

Heading Maturity: Medium-Early

Tillering: High

# SY Monument (AgriPro)

AgriPro (Syngenta) 2014 release. Resistant to stripe and leaf rust. Very good drought tolerance. Tolerant of limited grazing. Average straw strength. Excellent milling and baking properties.

Height: Medium-Tall

Heading Maturity: Medium-Early

Tillering: Very High

Pedigree: AgriPro Experimentals

# SY Rugged (AgriPro)

AgriPro (Syngenta) new 2017 release. Certified seed available beginning in 2018. Rugged is adapted to the western High Plains and suitable for dryland. Dual purpose variety with good grain yield potential. Tolerates heavy grazing. Resistant to stripe rust and moderately resistant to leaf rust. Very good drought tolerance and winterhardiness.

Height: Short

Heading Maturity: Medium-Early

Tillering: Good

Pedigree: Greer and Doans

# **SY Wolverine (AgriPro)**

AgriPro new 2019 release, certified seed will be available in the fall of 2020. Fits both Irrigated and dryland in the western high plains. SY Wolverine is half SY Wolf but is a medium early maturity. Like Wolf, it has good disease tolerance including improved tolerance to Wheat Streak Mosaic Virus. Excellent straw strength under irrigation, high tillering and good drought tolerance. Over three years of testing, Wolverine has consistently been a top yielding variety in irrigated and dryland regional variety trials. Silage yield testing is ongoing.

Height: Medium

Heading Maturity: Medium-Early

Tillering: Very Good

Pedigree: Everest/Platte//SY Wolf

# Texas A&M AgriLife

## **TAM W-101**

Texas A&M 1971 release. Used in trials as a historical check. This variety has long been surpassed by newer genetics, and it should not be planted for commercial grain production

## **TAM 111**

Texas A&M AgriLife 2003 release. Marketed by AgriPro. Susceptible to stripe and leaf rusts. Good straw strength and unlikely to shatter. Good overall variety for the Panhandle but only tolerates limited grazing. Medium-long coleoptile. Later to first hollow stem.

Height: Medium-Tall

Heading Maturity: Medium-Late

Tillering: Intermediate

Pedigree: TAM 107, Centurk, and others

#### **TAM 112**

Texas A&M AgriLife 2005 release marketed by Watley Seed. Very consistent dual-purpose high-yielding variety under dryland and limited irrigated conditions. Straw strength and lodging may be questionable under full irrigation. Recovers well from heavy grazing. Greenbug and wheat curl mite resistant. Some tolerance to wheat streak mosaic virus. Susceptible to stripe and leaf rust. Unlikely to shatter. Good overall variety for the Texas High Plains. Medium-long coleoptile. Good quality. Good fall grazing potential. Early first hollow stem.

Height: Medium-Tall Heading Maturity: Early Tillering: Very High

Pedigree: TAM 110 sib, TAM 200, WGRC experimental

#### **TAM 113**

Texas A&M AgriLife 2011 release marketed by Adaptive Genetics. Very good dual-purpose variety that provides good fall forage. Positioned for Texas and Oklahoma Panhandles, western Kansas and eastern Colorado. Moderately susceptible to wheat streak mosaic virus. Moderately resistant to stripe and leaf rust. Emerges well under stressful conditions. Very good shattering reputation. Below average straw strength. Medium-short coleoptile. Good quality grain with excellent milling and baking qualities. A common choice for organic production. Good fall grazing potential. Early first hollow stem.

Height: Medium

Heading Maturity: Medium

Tillering: High

Pedigree: TAM 200, TAM 202, TAM 105, and WGRC experimental

#### **TAM 114**

Texas A&M AgriLife 2014 release marketed by Adaptive Genetics. Positioned for the Texas High Plains, western Kansas and eastern Colorado. Good for dual-purpose systems; tolerates heavy grazing pressure and maintains grain yield. Similar to TAM 111 but higher yield potential and improved leaf disease resistance. Moderately susceptible to wheat streak mosaic virus. Resistant to stripe and leaf rust. Good straw strength. Excellent bread-making quality.

Height: Medium

Heading Maturity: Medium

Tillering: Very High

Pedigree: TAM 111, TAM 200, Texas and Nebraska experimentals

# **TAM 115**

New Texas A&M AgriLife 2019 release previously tested under TX12A001295. A dual-purpose variety positioned for the Texas High Plains. Resistant to leaf rust, stripe rust, stem rust, greenbug, and wheat curl mite. A few days later to first hollow stem. Excellent drought tolerance, very good milling and baking quality.

Height: Medium

Heading Maturity: Medium Tillering: Intermediate-High

Pedigree: TAM 112 and TX02U2508

## **TAM 204**

Texas A&M AgriLife 2014 release marketed by Watley Seed. Positioned for the Texas High Plains, Oklahoma, and southern Kansas. A beardless wheat positioned for heavy grazing and graze-out conditions. Produces good fall ground cover. Not ideal for grain production due to low test weights. Resistant to Hessian fly, wheat curl mite and greenbugs. Moderately resistant to wheat streak mosaic virus. Tolerant to acid soils. Moderately resistant to stripe rust, resistant to stem rust and moderately susceptible to leaf rust.

Height: Medium short

Heading Maturity: Medium late Tillering: Intermediate-High

Pedigree: TAM 112, Pecos, Mason, Jagger

#### **TAM 205**

New Texas A&M AgriLife 2019 release previously tested under TX12V7415. A dual-purpose variety positioned for the Texas High Plains and Rolling Plains with good fall forage production. Resistant to leaf rust, stripe rust, and stem rust. It is also resistant to the wheat curl mite and wheat streak mosaic virus. It has large seeds and high test weights. Very good milling and baking quality.

Height: Medium

Heading Maturity: Medium

Tillering: High

Pedigree: X05A650 and RonL

# Westbred (Bayer)

#### **WB4303**

Westbred (Bayer) 2017 release that is well adapted to the eastern Southern Great Plains, but it also performs well under irrigated conditions in the Texas High Plains and southwestern Kansas. Very good yield potential and straw strength. Very good fall growth and winter hardiness, but it only tolerates limited grazing. Excellent test weights. Intermediate stripe and leaf rust tolerance. Resistant to stem rust. Good grain quality.

Height: Medium

Heading Maturity: Medium-Early

Tillering: Intermediate

Pedigree: CIMMYT (HV9W10-100)

### **WB4595**

Westbred (Bayer) 2019 release that is well adapted to a broad region across the Southern Great Plains. Very good tillering, yield potential, and straw strength. Moderately resistant to stripe rust and intermediate resistance to leaf rust.

Height: Medium-Tall

Heading Maturity: Medium Tillering: Medium-High Pedigree: Undisclosed

## WB4792

Westbred (Bayer) 2018 release that is well adapted to a broad region across the Southern Great Plains. Very good yield potential and straw strength. Good winter hardiness. Moderately tolerant to stripe and leaf rusts.

Height: Medium

Heading Maturity: Medium-Late

Tillering: Intermediate

#### Winterhawk

Westbred (Bayer) 2007 release well adapted for the western regions of the Great Plains. Excellent drought tolerance. Well suited for dual-purpose systems with heavy grazing. Produces good fall forage. Intermediate stripe rust resistance but susceptible to leaf rust and stem rust. Moderately susceptible to wheat streak mosaic virus. Good straw strength with good resistance to shattering.

Height: Medium Tall

Heading Maturity: Medium

Pedigree: Westbred experimentals

For further information about wheat production and management in Texas, including our annual High Plains wheat Picks, consult the following websites:

- http://varietytesting.tamu.edu/wheat/
- http://amarillo.tamu.edu/amarillo-center-programs/agronomy/wheat-publications/
- http://lubbock.tamu.edu/programs/crops/wheat/
- http://sickcrops.tamu.edu
- <a href="http://www.texasinsects.org/small-grains.html">http://www.texasinsects.org/small-grains.html</a>
- https://wheatfreezeinjury.tamu.edu/
- <a href="https://texaswheatupdates.tamu.edu/">https://texaswheatupdates.tamu.edu/</a>