

Wheat Variety Characteristics
Varieties Planted in the Texas High Plains Uniform Variety Trials
2018-2019

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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.

2018-2019 Entries:

Croplan by Winfield

CP7869 (Croplan)

New Croplan 2018 release with good standability adapted to the High Plains. Tolerance to stripe, stem, and leaf rust.

Height: Medium

CP7909 (Croplan by Winfield)

New Croplan 2018 release.

Dyna-Gro

Long Branch (Dyna-Gro)

Dyna-Gro 2016 release adapted for both dryland and irrigated acres. Very good straw strength and excellent winter hardiness. Reported to be adapted to heat and moisture stress very well; finishes well in adverse conditions. Moderately resistant to stripe rust. Susceptible to leaf rust and moderately susceptible to stem rust. Excellent winter hardiness and very good straw strength but prone to lodging under excessive irrigation and fertility. Test weights tend to be lower than for other comparable varieties.

Marginal bread-making quality.

Height: Medium-Tall

Heading Maturity: Medium-Late

Limagrain Cereal Seeds

LCS Chrome

Limagrain Cereal Seeds 2016 release that is well adapted to the Great Plains and Rolling Plains regions. Resistant to leaf and stripe rust. Very good drought tolerance and high-tillering ability. Medium coleoptile length. Excellent straw strength. Leaf and stripe rust resistance.

Height: Medium-Tall

Heading Maturity: Medium-Late

Tillering: High

Pedigree: Unavailable

LCS Link (Limagrain)

Limagrain Cereal Seeds 2017 release that was developed with the University of Nebraska. It is well adapted to southern Nebraska and northern Kansas, but it may have good production potential farther south into the Texas Panhandle. Very good drought tolerance. Excellent straw strength and winter-hardiness. Not recommended for grazing. Resistant to barley yellow dwarf. Intermediate resistance to stripe rust and resistant to leaf rust. Marketed for grain quality including milling and baking properties.

Height: Medium-Tall

Heading Maturity: Late

Tillering: Intermediate

Pedigree: LC Experimentals

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.

Height: Medium-Tall

Heading Maturity: Medium

Tillering: Intermediate

Pedigree: Unavailable

LCS Pistol (Limagrain)

Limagrain Cereal Seeds 2015 release that is a winterhardy variety adapted to the Southern Great Plains through the Texas Panhandle for dual purpose production. Moderately susceptible to stripe rust but moderately resistant to leaf rust. Prone to lodge in high yielding environment. It is best adapted to dryland and limited irrigated conditions. Excellent drought tolerance, but variety has a medium-short coleoptile. Poorer baking characteristics than comparable varieties.

Height: Medium

Heading Maturity: Medium-Early

Tillering: Very High

Pedigree: T158 and T157

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 susceptibility 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

Bentley (OSU)

Oklahoma State 2015 release that marketed by Oklahoma Genetics, Inc. Bentley is a dual-purpose variety for dryland acres that performs well under moderate drought stress. Bentley should not be planted early (August to early-September) as germination and seedling stages are sensitive to heat. Moderate resistance to barley yellow dwarf, susceptible to leaf rust, and intermediate resistance to stripe rust. Moderately susceptible to wheat streak mosaic.

Height: Medium-Tall
Heading Maturity: Late first hollow stem but Medium Early
Tillering: Intermediate
Pedigree: TAM 303 and Overlay

Gallagher (OSU)

Oklahoma State University 2012 release marketed by Oklahoma Genetics. Adapted to Oklahoma, southern Kansas and central-eastern Texas Panhandle. Moderately susceptible to wheat streak mosaic virus. Intermediate resistance to barley yellow dwarf. Resistant to both leaf and stripe rust. Good dual-purpose variety that tolerates heavy grazing.

Height: Medium
Heading Maturity: Medium
Tillering: High
Pedigree: Duster and Oklahoma Experimental that includes 2180

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.

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

Showdown (OSU)

Oklahoma State University 2018 release marketed by Oklahoma Genetics. Showdown is marketed for a broad range of environmental conditions.

Smith's Gold (OSU)

Oklahoma State University 2017 release marketed by Oklahoma Genetics. Showdown is a dual-purpose variety with good grain potential that tolerates heavy grazing. Intermediate susceptibility to barley yellow dwarf. Moderately resistant to leaf rust and resistant to stripe rust. Good winterhardiness. Susceptible to sprouting if not harvested on time.

Height: Medium
Heading Maturity: Medium
Tillering: High
Pedigree: Gallagher and Oklahoma experimental that includes TAM110

Plains Gold (Colorado Wheat Research Foundation - CWRF)

Plains Gold Avery (CSU)

Colorado State University 2016 release marketed by Plains Gold. A white chaffed, awned wheat with a medium-long coleoptile. Avery has performed well under irrigated and dryland conditions. It is noted for having excellent winterhardiness and drought tolerance. Resistant to the wheat curl mite and greenbug biotype E. Moderately resistant to wheat streak mosaic virus. Intermediate to wheat streak mosaic virus. Susceptible to stripe rust and stem rust. Resistant to leaf rust. Good milling and baking qualities.

Height: Medium-Tall

Heading Maturity: Medium Late

Tillering: Very High

Pedigree: TAM 112 and Byrd

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. Very good stripe and stem rust resistance. It also has very good wheat streak mosaic virus. It is noted for excellent test weight and milling/baking quality.

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)

SY Flint (AgriPro)

AgriPro (Syngenta) 2015 dual-purpose variety tolerant of heavy grazing with good grain yield potential. Intermediate resistance to stripe rust and moderately susceptible to leaf rust. Good straw strength and shattering resistance.

Height: Medium

Heading Maturity: Medium-early

Tillering: High

Pedigree: Experimental, Jagalene and Duster

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, green bug and wheat curl mite. A few days later to first hollow stem. Excellent drought tolerance. Excellent bread-making 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 high test weights. Excellent bread-making quality.

Height: Medium

Heading Maturity: Medium
Tillering: High
Pedigree: X05A650 and RonL

TAM 304

Texas A&M AgriLife 2007 release marketed by Scott Seed. Consistently high yield potential; well positioned for the Texas High Plains, Kansas and Oklahoma. Moderately susceptible to wheat streak mosaic virus. Resistant to leaf rust and moderately susceptible to stripe rust. Good straw strength makes it suitable for high-input systems. Tolerates heavy grazing.

Height: Medium
Heading Maturity: Medium
Tillering: Low
Pedigree: Pioneer germplasm and Arkansas Experimentals

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. Moderately tolerant to stripe and leaf rust. Good grain quality.

Height: Medium
Heading Maturity: Medium-Early
Tillering: Intermediate
Pedigree: CIMMYT (HV9W10-100)

WB4418

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 fall growth and winter hardiness, but it only tolerates limited grazing. Excellent test weights. Moderately resistant to stripe and leaf rusts. Not well suited for areas with low pH.

Height: Medium-Short
Heading Maturity: Medium-Early
Tillering: Intermediate

WB4721 (initially tested as HV9W10-0129)

Westbred (Bayer) 2017 release that is adapted to the Great Plains, but the ideal production region is western Kansas. A good variety for dryland production. Very good fall growth and winter hardiness. Excellent test weights. Moderately resistant to stripe and leaf rust. Intermediate to barley yellow dwarf. Only tolerates limited grazing.

Height: Medium-Tall
Heading Maturity: Medium-Late
Tillering: Very Good
Pedigree: Overly and Overland

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

WB-Grainfield

Westbred (Bayer) 2012 release positioned for the western central Great Plains (Texas Panhandle and west of I-35). Late maturing variety with very good yield potential and good grazing potential. Good drought tolerance. Moderately resistant to stripe and leaf rust. Moderately susceptible to wheat streak mosaic virus. Good straw strength and shattering reputation.

Height: Medium Tall

Heading Maturity: Medium-Long

Pedigree: Westbred and K-State experimentals

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. 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>
- <http://www.texasinsects.org/small-grains.html>
- <https://wheatfreezeinjury.tamu.edu/>
- <https://texaswheatupdates.tamu.edu/>