

**Wheat Variety Characteristics**  
**Varieties Planted in the Texas High Plains Uniform Variety Trials**  
**2015-2016**

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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. Both state and regional entries are evaluated under irrigated and dryland production. During the 2015-2016 production season, trials were located near:

- Bushland (Potter Co.) – Irrigated, Dryland
- Hereford (Deaf Smith Co.) – Irrigated, Grazed
- Hereford (Deaf Smith Co.) – Dryland
- Dimmitt (Carson Co.) – Irrigated
- Etter (Moore Co.) – Irrigated and Dryland
- Lamesa (Dawson Co.) – Irrigated
- Stratford (Sherman Co.) - Irrigated
- Groom (Carson Co.) – Dryland
- Claude (Armstrong Co.) – Dryland
- Silverton (Briscoe Co.) – Dryland
- Wellington (Collingsworth Co.) - Dryland

**Bentley**

Oklahoma State 2015 release 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.

**Doublestop CL+**

Oklahoma State 2013 release with two Clearfield genes for tolerance to Beyond herbicide. Performs well in central Kansas and western Oklahoma. Very good yield potential, long coleoptile. A high-tillering variety with good straw strength and unlikely to shatter.

Height: Medium-tall

Parentage: Experimentals with lineage to Mason, Jagger, 2174, TAM 110, and Intrada

### **Duster**

Oklahoma State 2006 release; generally above average yields in most Texas Panhandle dryland and irrigated trials. Soilborne mosaic resistance and intermediate leaf and stripe rust resistance. Resistant to Hessian fly. Short coleoptile so Duster should not be planted too deep.

Parentage: Pioneer experimental, Ogallala, Newton, Centurk. Height: Medium-Tall

### **Endurance**

Oklahoma State 2004 release; above average yields in most Texas Panhandle dryland and irrigated trials. Later maturing variety; late to first hollow stem. Intermediate leaf rust resistance, but susceptible to stripe rust. Moderately resistant to soilborne mosaic virus. Long coleoptile allows for deeper planting depth. Good straw strength.

Parentage: 2180, Siouland, TAM 105, Experimental.

Height: Medium

### **Gallagher**

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, but resistant to soilborne mosaic. Resistant to both leaf and stripe rust. Hessian fly resistant. Good dual-purpose variety that tolerates heavy grazing.

Parentage: Duster, Oklahoma experimental that includes 2180

Height: Medium

### **Greer**

AgriPro 2010 release. Average yielder in Panhandle trials. Considered a dual-purpose wheat. Resistant to stripe rust, but susceptible to leaf rust. Very good straw strength and drought tolerance. Moderately susceptible to barley yellow dwarf.

Parentage: Experimentals

Height: Medium

### **Iba**

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. Later maturing variety. Resistant to leaf and stem rusts. Intermediate resistance to stripe rust. Resistant to soilborne mosaic, but susceptible to wheat streak mosaic virus.

Parentage: Duster, Oklahoma experimental that includes Karl 92 and Tomahawk

Height: Medium

### **KanMark**

Kansas State University new 2014 release. Targeted for western and central Kansas. Very good performance under irrigation; it withstands moderate drought. Only tolerates limited grazing. Resistant to stripe and leaf rust. Moderately susceptible to wheat streak mosaic virus. Resistant to soilborne mosaic.

Parentage: CIMMYT spring wheat, West Bred line, Karl 92

**LCS Mint**

Limagrain Cereal Seeds 2012 release that is well adapted to the northern Texas Panhandle, eastern Colorado, western Kansas and Nebraska. Resistant to stripe rust but susceptible to leaf rust. Intermediate wheat streak mosaic virus resistance. Resistant to soilborne mosaic. Prone to lodge with heavy nitrogen fertility under irrigation.

**LCS Wizard**

Limagrain Cereal Seeds 2012 release that is well adapted to the Texas Panhandle, eastern Colorado, Oklahoma, Kansas and southwest Nebraska. Moderately susceptible to stripe and leaf rust. Susceptible to wheat streak mosaic virus resistance. Resistant to soilborne mosaic. Drought tolerant. Performs well under dryland and irrigated conditions. Good straw strength.

Parentage: Pioneer germplasm

**Long Branch** (tested as experimental HRX162)

Dyna-Gro 2016 release adapted for both dryland and irrigated acres. A medium maturity wheat that is medium-tall with 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.

**Plains Gold Avery**

Colorado State University 2016 release marketed by Plains Gold (CWRF). A medium-tall white chaffed wheat with a medium-long coleoptile that is a cross between TAM 112 and Byrd. Performs very well in 2015 irrigated and dryland and limited irrigated conditions due to excellent drought tolerance. Resistant to the wheat curl mite. Susceptible to leaf rust and stem rust. Moderately susceptible to stripe rust. Good milling and baking qualities.

**Plains Gold Brawl CL Plus**

Colorado State University 2011 release marketed by Plains Gold (CWRF). A two-gene Clearfield wheat for tolerance to Beyond herbicide. Early maturing variety with excellent straw strength. Good straw strength. Moderately susceptible to stripe and leaf rusts.

**Plains Gold Byrd**

Colorado State University 2013 release marketed by Plains Gold (CWRF). Adapted for both dryland and irrigated conditions. Shows good drought tolerance. Moderately susceptible to stripe and leaf rust. Average straw strength.

**Plains Gold Denali**

Colorado State University 2011 release marketed by Plains Gold (CWRF). Adapted to Colorado, Kansas and Nebraska for both dryland and irrigated conditions. Shows good drought tolerance. Moderately susceptible to stripe and leaf rust. Late maturing, average straw strength. Susceptible to wheat streak mosaic virus.

**Ruby Lee**

Oklahoma State 2011 release marketed by Oklahoma Genetics that is a dual-purpose variety tolerant of heavy grazing. Breaks dormancy early. Susceptible to stripe rust and intermediate tolerance to leaf rust. Resistant to soilborne mosaic and moderately susceptible to wheat streak mosaic. Medium-long coleoptile. Good drought tolerance. Poor straw strength.

Parentage: Endurance and USDA experimental Height: Tall

**SY Drifter** (tested as AP09T7631)

AgriPro (Syngenta) release. Medium maturity, very good straw strength. Poor tolerance to stripe rust, moderately resistant to stem and leaf rust.

**SY Llano** (tested as APH09T9614)

AgriPro (Syngenta) 2014 release. Very early maturing and high tillering variety tolerant of heavy fall grazing. Resistant to stripe rust. Moderately susceptible to leaf rust. Moderately susceptible to wheat streak mosaic but resistant to soilborne mosaic.

Parentage: AgriPro experimentals

**SY Monument** (tested as 04BC574-2)

AgriPro (Syngenta) 2014 release. Late maturing variety with resistance to stripe and leaf rust.

**SY Southwind**

AgriPro (Syngenta) medium, early maturing short release well positioned for the Rolling Plains. Highly tolerant of stripe and stem rust. Moderately tolerant of leaf rust. Good straw strength.

**T158**

Limagrain Cereals 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. Resistant to soilborne mosaic. Drought tolerant. Only tolerates limited grazing. Very good shattering resistance. Very good straw strength. Parentage: T81, KS93U206 experimental

**TAM W-101**

Texas A&M 1971 release. Used in trials as a historical check. Not recommended in this region.

**TAM 111**

Texas A&M AgriLife 2003 release. Marketed by AgriPro (Syngenta). Consistent high-yielding variety under dryland and irrigated conditions if managed for leaf disease. Susceptible to stripe and leaf rusts. Good straw strength and unlikely to shatter. Good overall variety for the Panhandle. Medium-long coleoptile. Late first hollow stem.

Parentage: TAM 107, Centurk, and others.

Maturity: Medium

Height: Medium-Tall

**TAM 112**

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

Parentage: TAM 110 sib, TAM 200, WGRC experimental.

Maturity: Medium

Height: Medium-Tall

**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. Susceptible to soilborne mosaic. 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. Good fall grazing potential. Early first hollow stem.

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

Maturity: Medium

Height: Medium

**TAM 114 (tested as TX07A001505)**

New 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. 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. Intermediate resistance to Hessian fly. Good straw strength. Excellent bread-making quality.

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

Maturity: Medium

Height: Medium

**TAM 204 (tested as TX06V7266)**

New 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. Resistant to soilborne mosaic and tolerant to acid soils. Moderately resistant to stripe rust and moderately susceptible to leaf rust.

Parentage: TAM 112, Pecos, Jagger, Mason

Maturity: Medium-Late

Height: Medium-Short

**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 resistant to stripe rust. Intermediate resistance to Hessian fly. Good straw strength makes it suitable for high-input systems.

Parentage: Pioneer germplasm Maturity: Medium

Height: Medium

**TAM 305**

Texas A&M AgriLife release marketed by Scott Seed. An awned semi-dwarf variety that is well positioned for the wheat producing regions of Texas. High yield potential across multiple environments. Well positioned for irrigated and dual-purpose wheat production systems; early season vigor and good forage production. Strong straw strength and resistant to shattering. Resistant to leaf rust and stripe rust.

Maturity: Early-Medium Early

Height: Short

**TAM 401**

Texas A&M AgriLife release marketed by AgriPro. An awnless semi-dwarf variety well adapted to the central Great Plains wheat producing regions; particularly the Rolling Plains, Blacklands, and South Central Texas. Excellent forage and grain yield potential. Resistant to leaf and stripe rust. Good early fall forage and improved grain producing abilities than other awnless wheat varieties.

**Underwood**

Dyna-Gro well positioned for high input systems. Good standability under full irrigation. Not recommended for dryland environments. Moderately resistant to leaf and stripe rust.

**WB-4458**

Westbred (Monsanto) 2013 release. Adapted to the central Great Plains, but yields are optimized in Kansas and Oklahoma. Drought tolerant, but it does not perform well under extreme dryland conditions. Yields carried by test weight more than seed number. Excellent straw strength. Only tolerates limited grazing. Intermediate stripe and leaf rust resistance. Moderately susceptible to wheat streak mosaic virus.

Parentage: Overly, Westbred experimentals

Height: Medium

**WB-Cedar**

Westbred (Monsanto) 2011 release positioned for the central Great Plains, but yields are greatest in eastern Kansas and northern Oklahoma. High yield potential. Not well suited for fall grazing; it needs to establish tillers in the fall. Moderately resistant to stripe and leaf rust. Moderately susceptible to wheat streak mosaic virus. Resistant to soilborne mosaic. Excellent straw strength. Good drought tolerance, but can be short under tough dryland conditions.

Parentage: TAM 302, experimentals with 2180

Height: Short

**WB-Grainfield**

Westbred (Monsanto) 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. Resistant to soilborne mosaic. Good straw strength and shattering reputation.

Parentage: Westbred and K-State experimentals

Height: Medium-tall

**WB Redhawk**

Westbred (Monsanto) 2013 release positioned for the Central Great Plains, but it does very well in central-to-eastern Oklahoma, Kansas and Nebraska. Early maturing variety with very good yield potential but limited grazing potential. Good drought tolerance. Susceptible to stripe rust but resistant to leaf rust. Moderately susceptible to wheat streak mosaic virus. Resistant to soilborne mosaic. Good straw strength with average shattering reputation.

Parentage: CIMMYT and K-State experimentals

Height: Medium

**WeatherMaster 135**

Medium maturity beardless variety. Release date and developer unknown/hand selection of beardless wheat. Resistance to disease not known.

**Winterhawk**

Westbred (Monsanto) 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. Resistant to soilborne mosaic. Good straw strength with good resistance to shattering.

Parentage: Westbred experimentals

Height: Medium tall

**Texas 2015 Hard Wheat Characteristics<sup>1</sup>**

Variety	Developer	First Year Sold	Maturity Group	Height (inches) <sup>2</sup>	Leaf Rust	Stripe Rust	Stem Rust	Septoria Leaf Blotch	Powdery Mildew	Wheat Streak Mosaic	Barley Yellow Dwarf	Green-bug	Hessian Fly
Armour	Monsanto	2008	Med Early	25	MR	MS	R	MR	R	S	MS	S	MS
Billings	OSU	2009	Early	25	MR	MR	R	MR	MS	S	MR	S	MS
CJ	Syngenta	2011	Medium	30	S	R	R	-	-	-	-	-	-
Coronado	Syngenta	1994	Medium	28	S	MR	R	-	MS	-	-	S	MR
Doans	Syngenta	2007	Medium	27	MR	R	R	MR	MR	-	-	S	S
Duster	OSU	2006	Med Early	26	R	MR	R	MS	MR	S	MR	S	R
Endurance	OSU	2004	Medium	27	MS	MS	R	MS	MR	S	MR	S	MS
Everest	KSU	2010	Early	25	R	MS	R	-	MR	-	-	-	-
Fannin	Syngenta	2005	Early	27	MS	R	R	-	R	-	-	S	S
Gallagher	OSU	2013	Medium	28	MR	R	R	-	MR	-	-	-	-
Garrison	OSU	2013	Medium	26	MS	S	R	-	MR	-	-	-	-
Greer	Syngenta	2010	Medium	27	S	MR	R	-	MS	-	-	-	-
Iba	OSU	2013	Medium	26	R	R	R	-	MR	-	-	-	-
Jackpot	Syngenta	2008	Medium	26	S	MR	R	-	MS	-	MS	S	S
LCS Mint	Limagrain	2012	Med Late	29	S	MR	MS	-	MS	-	-	-	-
LCS Wizard	Limagrain	2012	Med Late	27	R	MR	-	-	R	-	-	-	-
PlainsGold Brawl CL Plus	CWRF	2011	Medium	28	MS	MS	MS	-	MS	-	-	-	-
PlainsGold Byrd	CSU	2011	Medium	28	S	S	S	-	MR	-	-	-	-
PlainsGold Denali	CSU	2011	Medium	28	S	MR	R	-	MS	-	-	-	-
PlainsGold Hatcher	CSU	2004	Medium	26	S	MS	R	-	MS	-	-	-	-
Razor	Syngenta	2014	Medium	30	R	R	-	-	R	-	-	-	-
Ruby Lee	OSU	2011	Medium	28	S	MS	R	-	MS	-	-	-	-
SY Llano*	Syngenta	2015	Early	-	MS	MR	-	-	MS	-	-	-	-
SY Monument*	Syngenta	2015	Med Late	-	MR	MR	-	-	MS	-	MR	-	-
T153	Limagrain	2012	Medium	25	MS	MR	R	-	R	-	-	-	-
T158	Limagrain	2009	Medium	25	S	MR	S	-	MR	-	-	-	-
TAM 111	TAMU	2003	Medium	28	S	MR	R	MR	MR	MS	MS	S	MS
TAM 112	TAMU	2005	Med Early	27	S	S	R	MR	R	MR	MS	MR	S
TAM 113	TAMU	2012	Medium	26	R	R	R	-	MS	MS	-	-	-
TAM 114	TAMU	2014	Medium	27	R	R	R	-	R	MS	-	S	MR
TAM 204	TAMU	2014	Medium	27	MS	MR	R	-	MR	MR	-	MR	R
TAM 304	TAMU	2007	Med Early	25	R	MR	R	-	MR	MS	MS	S	S
TAM 305	TAMU	2013	Med Early	25	R	R	R	-	MR	-	-	-	-
TAM 401	TAMU	2008	Early	27	MR	R	R	-	MR	MS	-	S	S
TAM W-101	TAMU	1971	Med Late	27	MS	MR	R	-	S	-	-	-	-
WB-Cedar	Monsanto	2011	Early	24	R	MR	R	-	R	-	-	-	-
WB-Grainfield	Monsanto	2013	Medium	29	MS	R	R	-	MS	-	-	-	-
WB-Redhawk	Monsanto	2013	Medium	28	R	MS	R	-	MS	-	-	-	-
WB4458	Monsanto	2013	Med Early	28	MS	MR	R	-	MS	-	-	-	-
Weathermaster 135	Unknown	Unknown	Medium	27	MR	MS	S	-	MS	-	-	-	-
Winterhawk	Monsanto	2007	Medium	28	S	MS	S	-	MS	-	-	-	-

<sup>1</sup>S-Susceptible, MS-Moderately Susceptible, MR-Moderately Resistant, and R-Resistant. ALL ratings are subject to change as re-evaluation occurs.

<sup>2</sup>Heights are an average across the Texas Panhandle in 2014.

\*Indicates Ratings taken from Developer website. NOT NECESSARILY observed in Texas.