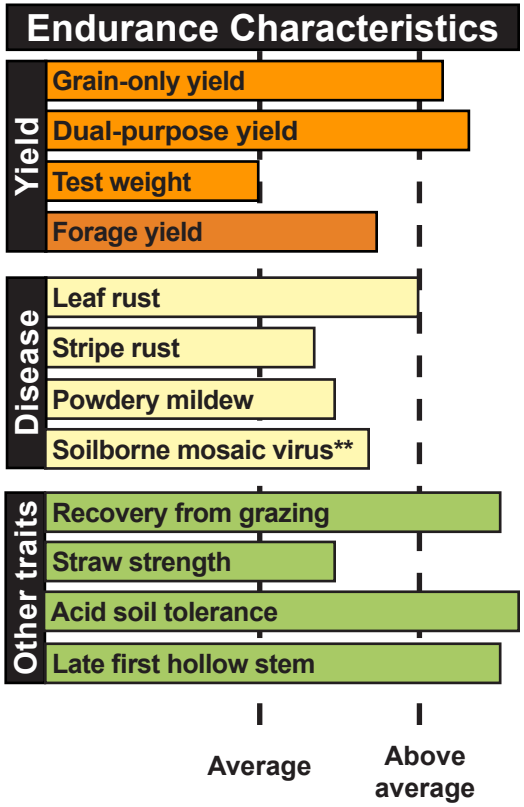
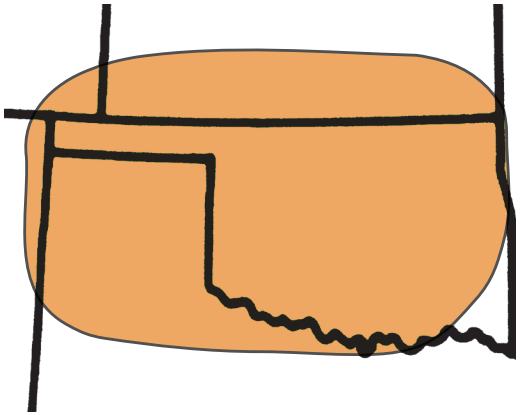


**Endurance is resistant to soilborne mosaic virus but moderately susceptible to wheat spindle streak mosaic virus



Endurance area of adaptation

FOR MORE INFORMATION ON ENDURANCE CONTACT

Oklahoma Foundation
Seed Stocks
2902 West 6th Ave.
Stillwater, OK 74074
(405) 744-7741
http://www.ofssinc.com

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ENDURANCE

HARD RED WINTER WHEAT

OKLAHOMA STATE UNIVERSITY AGRICULTURE

L-335

Endurance hard red winter wheat

History

Endurance was released by the Oklahoma State University Wheat Improvement Team in 2004 to serve the unique needs of dual-purpose wheat producers. Experimentally tested as OK94P549-11, Endurance has parentage that includes TAM 105, Siouxland, and 2180. Endurance is PVP protected and can only be sold as a certified class of seed.

Yield Potential

Endurance has performed well in dual-purpose and grain-only systems throughout the state of Oklahoma (Table 1). Since Endurance is a late-maturing variety, it benefits from moderate temperatures during May. Years of yield data, however, indicate that Endurance has ability to maintain good yield potential in stressed environments as well. Test weight of Endurance is average.

Unique Traits

Acid soil tolerance is one of Endurance's greatest strengths, and Endurance is one of the most tolerant varieties currently available to farmers. Even

Unique Traits (cont'd)

though Endurance tolerates low soil pH well, growers are still advised to lime according to soil-test recommendations.

Endurance reaches first hollow stem as much as two weeks later than Jagger, which allows for an extended grazing window in the spring. This trait combined with very good regrowth following grazing makes Endurance a very good dual-purpose wheat variety.

Disease Package

Endurance is moderately resistant to leaf rust and stripe rust as an adult plant. It is moderately susceptible to powdery mildew. Yield data from fungicide-treated plots at Lahoma and Apache, OK show that yield of Endurance can be improved with the use of foliar fungicides in years with moderate to heavy disease pressure.

Management

Endurance is a moderately tall variety with good straw strength. So, lodging is possible with Endurance but not likely if fertility and planting density are managed properly.

Management (cont'd)

As mentioned previously, Endurance is a late to first hollow stem variety. While this trait extends the grazing window in the spring, it does not mean that Endurance is more tolerant of grazing past first hollow stem than other varieties. Growers should still monitor first hollow stem in fields of Endurance and manage accordingly.

Endurance has a wide area of adaptation and is a good fit for dual-purpose and grain-only systems in Oklahoma and surrounding areas. The later maturity of Endurance is a good way to balance out acreage of early-maturing varieties and hedge against spring freeze injury. Planting a later-maturity variety will not make producers immune to spring freeze injury, but if a late spring freeze occurs, damage in later-maturing varieties is frequently less than in earlier-maturing varieties.

Table 1. Two-year average yield (bu/ac) for Oklahoma variety trials in 2008 & 2009

	Grain-only				Dual-purpose		
Variety	*Elk City*	*Buffalo*	*Lahoma*	*Marshall*	*Marshall*	*El Reno*	*Cherokee*
Endurance	28	69	64	46	34	58	51
Jagger	23	52	49	27	31	40	43
Doans	26	62	63	43	32	51	46
Duster	25	67	62	48	36	62	50

Current yield data for these and other varieties are available at *www.wheat.okstate.edu*

Partial financial support for the development of Endurance was provided by the Oklahoma Wheat Commission

Updated 04/12/2010