



**Deliver area of adaptation**

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# DELIVER

AWNLESS HARD RED  
WINTER WHEAT



L-336

*Graze n Grain*  
*breeding system*



# DELIVER AWNLESS HARD RED WINTER WHEAT

## HISTORY

Oklahoma wheat farmers often need to change management strategies mid-season. Fields that were originally intended for harvest may need to be grazed out or harvested for hay. In these situations, awnless wheat varieties, such as Deliver, hold several advantages over their awned counterparts.

Deliver was released by the Oklahoma State University Wheat Improvement Team in 2004 to provide flexibility for dual-purpose wheat producers. Experimentally tested as OK98690, Deliver was the result of a cross between an OSU experimental line and Karl. Deliver is PVP protected and can only be sold as a certified class of seed.

## YIELD POTENTIAL

Yield potential of Deliver in most Northcentral Oklahoma environments is better than older varieties such as Jagger but less than some of the newest varieties such as Duster. Essentially, Deliver offers good yield potential with great flexibility.

## UNIQUE TRAITS

Previous attempts at awnless hard red winter wheat varieties have generally resulted in varieties that were very good at forage and hay production but lacking in test weight. Deliver breaks this mold by having very good test weight and good milling and baking characteristics.

Deliver is a true tri-purpose wheat variety in that it fits well in a grain only, dual-purpose, or graze-out system. Growers who have to make management decisions mid season due to changing market conditions will appreciate the flexibility that the awnless trait provides.

## DISEASE PACKAGE

Deliver has a very strong foliar disease resistance package. It is resistant to current races of leaf rust, stripe rust, powdery mildew, and resistant to soil-borne mosaic virus. It is moderately susceptible to tan spot. In OSU variety trial fungicide tests, Deliver has shown a moderate yield response to application of foliar fungicides.

## MANAGEMENT

Acid soil tolerance is not one of Deliver's strong points. Yield of Deliver can be negatively impacted when sown into soils with a pH below 5.5. Therefore, it is very important to have a current soil test and know the fertility characteristics of your soil prior to sowing Deliver.

The primary production area for Deliver is Northcentral Oklahoma with a secondary area extending into Southwest Oklahoma. It is late to first hollow stem but medium in overall plant maturity. Straw strength of Deliver is moderate, so it should be actively managed to ensure that lodging does not occur, especially in high-yielding environments.

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

Variety	Grain-only				Dual-purpose		
	<i>Alva</i>	<i>Lamont</i>	<i>Lahoma</i>	<i>Marshall</i>	<i>Marshall</i>	<i>El Reno</i>	<i>Cherokee</i>
Deliver	53	45	59	38	26	51	42
Jagger	52	44	49	27	31	40	43
Doans	52	54	63	43	32	51	46
Duster	56	52	62	48	36	62	50

Current yield data for these and other varieties are available at [www.wheat.okstate.edu](http://www.wheat.okstate.edu)



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