

Disease and Insect:

Stripe Rust

Both field and greenhouse tests conducted by the USDA-ARS indicate that Kelse has durable, non-race specific high-temperature, adult-plant (HTAP) resistance to current predominate races of stripe rust found in the Pacific Northwest (PNW). This represents the first hard red spring wheat developed for the PNW with this durable resistance.

Hessian Fly

Based on controlled environment insect screening trials conducted at the University of Idaho, Kelse is resistant (100%) to local biotypes of Hessian fly.

Quality

The USDA-ARS Western Wheat Quality Lab has evaluated Kelse since 2001 for milling and baking properties. Kelse displays good grain, milling and end-use quality, essentially equivalent to good quality check varieties such as Scarlet, Hollis and Tara 2002.

In 2008 Kelse was evaluated by the Pacific Northwest Wheat Quality Council, where commercial millers and bakers concluded that Kelse has acceptable milling, dough handling, and baking properties and is comparable to other hard red spring wheat varieties that are currently in production in the PNW.

Availability

Foundation seed of Kelse will be maintained by the Washington State Crop Improvement Association For seed inquiries please call (509)335-4365.

U.S. Plant Variety Protection status for this cultivar is pending.



Our appreciation is extend to the dedicated personnel from Washington State University, University of Idaho and USDA-ARS for their assistance during the development of Kelse. We are grateful to the Washington State Grain Alliance and the Washington State Agriculture Research Center for providing funds for this research.

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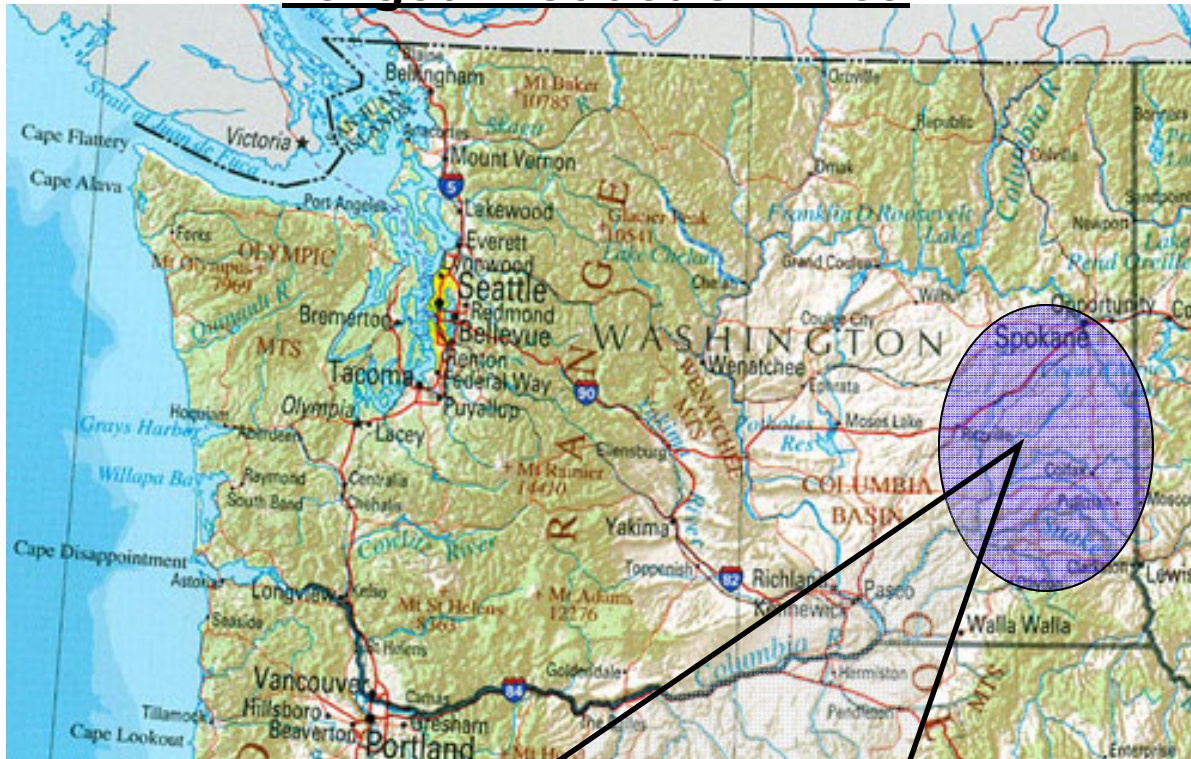


'Kelse' is a new hard red spring wheat developed and released in 2008 by the Agricultural Research Center of Washington State University. Kelse was named in honor of Dr. Kidwell's niece, Kelsey L. Kidwell-Yonan.

Kelse is an awned, common, semidwarf variety with mid-season maturity and high yield potential in the intermediate to high precipitation areas (>12 inch average annual rainfall) of eastern Washington.

Kelse is best adapted in regions where Tara 2002, WestBred 926 and Hank are commonly grown. Kelse has high levels of Hessian fly and stripe rust resistance which would be beneficial in direct seed production environments.

Target Production Area



Disease Ratings

	Stripe Rust	Hessian Fly	Mildew
Kelse	MR	R	MR
Tara 2002	MS	R	S
WestBred 926	MR	R	R
Hank	MS	R	R

R= resistant; MR= moderately resistant; MS= moderately susceptible; S= susceptible

Source: USDA Wheat Genetics, Quality, Physiology, and Disease Research Unit, Pullman, WA; WSU, Department of Plant Pathology, U of I Plant, Soil and Entomological Sciences.

Average Forty-five Site Years >12 inch Rainfall Zone Data

	Heading Date	Plant Height (inches)	Test Weight (lbs/bu)	Yield (bu/A)	Grain Protein Content (%)
Kelse	June 19	31	59.6	52	15.2
Tara 2002	June 14	31	59.4	54	14.8
WestBred 926	June 14	29	58.6	53	15.2
Hank	June 16	28	58.3	54	14.7

Source: WSU Uniform Extension Variety Testing Program.