

# Barley

## Oreana

1. Oreana (TR12735) two-rowed spring barley, was developed by WestBred/a Unit of Monsanto, from the cross Champion/YU501-312. (Ownership of all barley germplasm has been transferred from WestBred/Monsanto to Highland Specialty Grain).
2. Agronomically desired rows were selected, harvested, and given permanent numbers. One such selected row was given the experimental designation, BZ509-448, and later TR12735.
3. Seed from Bozeman plot was harvested in September 2010 and used to plant replicated (F6) yield trial plots near Bozeman and 5 location in Alberta, Saskatchewan and Manitoba in May, 2011. Continued yield testing of F7-F9 seed was performed in 2012-2013 in the provinces of Alberta, Saskatchewan, and Manitoba against known check varieties. Oreana has shown good adaptation to these areas.
4. Oreana has a similar reaction as Xena and is moderately resistant to moderately susceptible to common root rot. Oreana is Moderately resistant to intermediate to the surface borne smuts, it is resistant to all strains except for U. nuda but shows better reaction than Xena. Oreana has the RPG1 gene for Stem Rust resistance.
5. Identifying characteristics – insert the descriptive term from the Objective Description (pages 3-5) except where indicated:

1. Growth Habit:	<u>Spring</u>	16. Plant Height (see below):	_____
2. Spike:	<u>2 Row</u>	17. Spike Shape:	<u>Oblong</u>
3. Coleoptile Color:	<u>Green</u>	18. Spike Density:	<u>Dense</u>
4. Juvenile Growth Habit:	<u>Semi-erect</u>	19. Spike Position at Maturity:	<u>Inclined</u>
5. Plant Tillering:	<u>High</u>	20. Hairiness of Rachis Edge:	<u>Lacking</u>
6. Leaf Color at Boot:	<u>Green</u>	21. Rachilla Hair Length:	<u>Long</u>
7. Flag Leaf at Boot:	<u>Erect, No Twist, Not Waxy</u>	22. Lemma Awns:	<u>Straight</u>
8. Pubescence on Leaf Blade:	<u>None</u>	23. Length of Lemma Awns:	<u>Long</u>
9. Pubescence on Leaf Sheath:	<u>None</u>	24. Lemma Awn Surface:	<u>Rough</u>
10.: Auricle Color:	<u>White</u>	25. Glume Hairiness:	<u>Covered</u>
11. Heading Date (see below):	_____	26. Glume Awn Surface:	<u>Rough</u>
12. Stem Color:	<u>White</u>	27. Glume/Lemma Adherence:	<u>Covered</u>
13. Neck Shape:	<u>Straight</u>	28. Texture (if covered):	<u>Slightly Wrinkled</u>
14. Collar Shape:	<u>V-Shape</u>	29. Aleurone Color:	<u>Colorless</u>
15. Spike Exertion:	<u>Intermediate</u>	30. Avg 1,000 Kernel Wt (g):	<u>46.1</u>

Heading date: July, 1 which is: 2 days (**LATER**) than: Xena

Plant height: 71 cm cm, which is 12.2 cm (**SHORTER**) than: Xena

Physiological or biochemical traits:

Variants and there frequency: "TR12735", 2 row barley is a stable and uniform variety in appearance and performance which has been observed over F6 to F10 generations. Oreana may contain a tall variant (4-8 inches taller) at a frequency of up to 4/10000 seed. (0.04%). No other variants are known to occur.

6. Highland Specialty Grain and Crop Production Services (CPS) of Canada will maintain Breeder seed by planting head rows when necessary. The certified classes of seed shall be: Select, Foundation, Registered and Certified.
7. Certified Seed will possibly be sold in the Spring of 2016.
8. Application will be made for protection in the United States of America under the Plant Variety Protection Act and in Canada under the Plant Breeder Rights Act.
9. Certified seed production acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Feb 11, 2015

Date recommended by the VRB: Apr 15, 2015

