

# Wheat

## WB9411

1. WB9411 is a hard red spring wheat developed by the Monsanto LLC.
2. In early generations of WB9411, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.
3. WB9411 is adapted to the hard spring wheat growing regions of the Pacific Northwest, including parts of Washington, Oregon, and Idaho.
4. Preliminary data indicates that WB9411 may be moderately resistant Stripe Rust.
5. Identifying characteristics – insert the descriptive term from the Objective Description (pages 3-5) except where indicated:

1. Kind:	<u>Hard Red Spring</u>		
If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)			
2. Seasonal Growth Habit:	<u>Spring</u>	16. Awn Type:	<u>Awned</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>Tan</u>
4. Juvenile Growth Habit:	<u>Semi-Erect</u>	18. Glume Color:	<u>Tan</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Medium</u>
6. Flag Leaf at Boot:	<u>Recurved, Twisted, Waxy</u>	20. Shoulder Shape:	<u>Oblique</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Medium</u>
8. Days to 50% Heading:	<u>183</u>	22. Beak Shape:	<u>Acuminate</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>Medium</u>
10. Anthocyanin:	<u>Absent</u>	24. Glume Pubescence:	<u>Absent</u>
11. Plant Height (cm):	<u>81.3</u>	25. Seed Color:	<u>Red</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Ovate</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks:	<u>Angular</u>
14. Spike Density:	<u>Mid Dense</u>	28. Brush Size (S,M,L.):	<u>Long</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g):	<u>38</u>

### 30. Physiological/biochemical Traits:

Variants and frequency: A variant similar to WB9411 (BZ908-418) but is 10-15 cm taller occurs at a frequency of .2% (20 plants per 10,000). A white seed variant may occur at a frequency of up to .3% (30 seeds per 10,000). An awnless variant may occur at a frequency of .02% (2 plants per 10,000). A bronze head variant may occur at a frequency of .01% (1/10,000). Otherwise, this variety has been uniform and stable in appearance and performance across several generations (F6 –F10) and environments.

6. Recognized classes of WB9411 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.
7. Commercial seed of WB9411 will likely be ready for commercial sale by the spring of 2015.
8. Application for a Utility Patent and PVP is anticipated for WB9411 and the Title V option will not be taken.
9. Application of certified seed production acreage cannot be published.

Date this application was submitted: Jan 10, 2015

Date recommended by the VRB: May 04, 2015

