Wheat

Variety Name: N/A

Experimental Designation: XG4301

Varietal Type: ☒ Pure Line ☐ Maintainer ☐ Restorer

1. XG4301 is a Hard Red Winter Wheat developed by Bayer Crop Science.
2. In early generations of XG4301, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.
3. XG4301 is adapted to Hard Red Winter growing regions of the Northwest.
4. No claims are made about pest resistance.
5. **Variety Objective Description**

1. Kind:	Common, Hard Red	14. Awn Type:	Awned
2. Seasonal Growth Habit:	Winter	15. Awn Color:	White
3. Coleoptile Color:	White	16. Glume Color:	White/Amber
4. Juvenile Growth Habit:	Semi-Erect	17. Glume Length:	Medium
5. Leaf Color at Boot:	Blue-Green	18. Shoulder Shape:	Square
6. Flag Leaf at Boot:	Erect, Twisted, Waxed	19. Shoulder Width:	Wide
7. Auricle Color:	White	20. Beak Shape:	Acute
8. Anther Color:	Yellow	21. Beak Length:	Medium
9. Stem Anthocyanin:	Absent	22. Glume Pubescence:	Absent (glabrous)
10. Stem Internodes:	Hollow	23. Seed Color	Red
11. Spike Shape:	Oblong	24. Seed Shape:	Ovate
12. Spike Density:	Mid Dense	25. Cheeks:	Rounded
13. Spike Curvature:	Erect	26. Brush Size:	Short
27. Physiological/Biochemical Traits: Click or tap here to enter text.			
28. Variants and Frequency: A variant that is similar to XG4301 but has white seed occurs at a frequency of up to 0.50% (50 out 10,000 seeds). A variant that is similar to XG4301 but is 15cm to 20cm taller occurs at a frequency of up to 0.2% (20/10,000). A tan/bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).			

Comparison to Check Variety		Name of check variety: WB4303		
29. Days to 50% Heading:	141	which is	1	days earlier than check
30. Plant height (cm):	76	which is	1	cm shorter than check.
31. Avg 1,000 kernel wt (g):	31	which is	9	g lighter than check.

6. Recognized classes of XG4301 are breeder, foundation, registered, and certified. Bayer Crop Science will maintain the variety by the head-row purification method to produce breeder seed as needed and foundation seed. Royalty fees and/ or licensing agreements are anticipated.
7. Commercial seed will likely be ready for sale by the fall of 2024.
8. Application for PVP is anticipated without the option that XG4301 can be sold by variety name only as a class of certified seed.
9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.