Wheat

Variety Name: N/A

Experimental Designation: XG4112

Varietal Type: ☒ Pure Line ☐ Maintainer ☐ Restorer

1. XG4112 is a Hard Red Winter Wheat developed by Bayer Crop Science.
2. In early generations of XG4112, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.
3. XG4112 is adapted to Hard Red Winter growing regions of the Central and Southern Plains.
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:	Red	16. Glume Color:	White/Amber
4. Juvenile Growth Habit:	Prostrate	17. Glume Length:	Medium
5. Leaf Color at Boot:	Blue-Green	18. Shoulder Shape:	Elevated
6. Flag Leaf at Boot:	Erect, Twisted, Waxed	19. Shoulder Width:	Medium
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:	Inclined	26. Brush Size:	Long
27. Physiological/Biochemical Traits: Click or tap here to enter text.			
28. Variants and Frequency: A variant that is similar to XG4112 but has white seed occurs at a frequency of up to 0.50% (50 out 10,000 seeds). A variant that is similar to XG4112 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: WB4792		
29. Days to 50% Heading:	132	which is	days	the same as check.
30. Plant height (cm):	92	which is	7	cm taller than check.
31. Avg 1,000 kernel wt (g):	38	which is	6	g heavier than check.

6. Recognized classes of XG4112 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 XG4112 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 Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.