Wheat

TA20FS001
F21Q3x03555.XAHCMSt (Exp)

1. TA20FS001 is a male-sterile hard red spring wheat A-Line developed by BASF for use in the production of commercial hybrid seed.

2. TA20FS001 was selected for its adaptation to the hard red spring wheat region of the US and for its expression of yield heterosis when hybridized to the appropriate R-Line male. TA20FS001 was developed using a backcrossing process

3. The first cross in the development of TA20FS001 was between its B-Line maintainer and a regionally adapted hard red spring wheat breeding line with the *Triticum timopheevii* cytoplasm. Subsequent generations were produced by backcrossing the recurrent B-Line male with the male-sterile progeny produced in the prior generation.

4. No claims about the disease/pest resistance are made at this time

5. Identifying characteristics –

1. Kind:	Common, Hard Red Spring Wheat		
2. Seasonal Growth Habit:	Spring	16. Awn Type:	Awned
3. Coleoptile Color:	White	17. Awn Color:	Tan
4. Juvenile Growth Habit:	Semi-Erect	18. Glume Color:	Tan
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Recurved, Not Twisted, Not Waxed	20. Shoulder Shape:	Rounded
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Day(s) to 50% Heading:	50.5	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S,M,L,VL):	S
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	79.5	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Oval
13. Spike Shape:	Oblong	27. Cheeks:	Angular
14. Spike Density:	Mid Dense	28. Brush Size (S,M,L.):	M
15. Spike Curvature:	Erect	29. Avg 1,000 Kernel Wt (grams):	34

30. Other Physiological/Biochemical Traits: – Expresses cytoplasmic male-sterility (CMS)

31. Variants and Frequency: True variants that may occur are white wheat seed at a frequency up to 0.04%, talls, chaff color, sterile heads, and awnless, all together, up to 1%.

6. Recognized classes of TA20FS001 are Breeder, Foundation, and Certified seed. Certified seed will be grown from Foundation seed by designated BASF associates utilizing appropriately isolated A and B-Line field production blocks to maintain genetic integrity and purity, and seedlots will be separately maintained to prevent commingling of B-Line with A-Line seed after harvest and during seed processing. No royalty fees or licensing agreements are anticipated.

7. Certified seed of TA20FS001 will likely be available for planting no earlier than fall of 2024

8. Application for PVP is anticipated with the option that TA20FS001 can be sold by variety name only as a class of Certified seed.

9. Seed certification acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 4, 2022 Date recommended by the VRB: Jun 9, 2022