Wheat

Variety Name: MT Cash

Experimental Designation: MTF20189

Varietal Type: ☒ Pure Line ☐ Maintainer ☐ Restorer

1. MT Cash is a hard red awnletted forage winter wheat variety developed by Montana State University
2. MT Cash was bred through a pedigree breeding scheme with bulk selection in segregating generations for agronomic characteristics and disease resistance. It was selected for its exceptional forage yield which along with winter hardiness, good seed yield, straw strength, and stripe rust resistance.
3. MT Cash was tested in Winter Cereal Forage trials across locations in Montana and was also part of Intrastate trials conducted across 8 locations in Montana and 1 location in Williston, ND. It has shown adaptation in central Montana for forage yield and with good stripe rust resistance and straw strength may be suitable for northwest Montana as well.
4. MT Cash has good resistance to stripe rust. Being a hollow line, high rate of sawfly cutting was observed in locations where wheat sawfly was present. Data not available for leaf or stem rust resistance

5. Variety Objective Description

1. Kind:	Common, Hard Red	14. Awn Type:	Awnletted
2. Seasonal Growth Habit:	Winter	15. Awn Color:	Tan
3. Coleoptile Color:	White	16. Glume Color:	White/Amber
4. Juvenile Growth Habit:	Semi-Erect	17. Glume Length:	Medium
5. Leaf Color at Boot:	Green	18. Shoulder Shape:	Rounded
6. Flag Leaf at Boot:	Re-curved, Twisted, Not-Waxed	19. Shoulder Width:	Medium
7. Auricle Color:	White	20. Beak Shape:	Acuminate
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:	Elliptical
12. Spike Density:	Mid Dense	25. Cheeks:	Rounded
13. Spike Curvature:	Erect	26. Brush Size:	Medium
27. Physiological/Biochemical Traits:			
28. Variants and Frequency: Height variability due to tallness and tillering. Awned variants at 5/10000 spikes. Dark chaff variants at 2/10000 spikes.			

Comparison to Check Variety		Name of check variety: Willowcreek		
29. Days to 50% Heading:	170	which is	7	days earlier than check
30. Plant height (cm):	42.2	which is	0.6	cm shorter than check.
31. Avg 1,000 kernel wt (g):	37	which is	4	g heavier than check.

6. Recognized classes of MT Cash are breeder, foundation, registered and certified seed. Seed of MT Cash will be maintained by the Montana State University Foundation Seed Program who will also collect Royalty feeds for all seed sales.
7. MT Cash certified seed is expected to be available for planting in Fall of 2024
8. Application of PVP and Title V will be submitted whereby it can only be sold by its variety name and as a class of certified seed
9. Certified seed production acreage can be published by AOSCA and individual certifying agencies.