Barley

Y007-3 (Exp)

1. Y007-3 is a spring, waxy starch (5-10% amylose), naked caryopsis, six row barley by 21st Century Genetics Corp. for the food barley market.

2. Y007-3 was developed using the pedigree method of breeding with selection for phenotypic similarity to Tamalpais and waxy starch.

3. Y007-3 has been tested under irrigation in central California and dryland North Dakota with primary adaptation for growing conditions and disease tolerances of central California and similar environments.

4 Y007-3 has not been tested for any disease reactions. However, barley yellow dwarf and powdery mildew presence in California in 2017-18 and stripe rust in 2018-19 has allowed selection against diseased plants.

5. Identifying characteristics –

1. Growth Habit:	Spring	16. Plant Height (see below):	56.5 cm
2. Spike:	Six row	17. Spike Shape:	Oblong
3. Coleoptile Color:	Green	18. Spike Density:	Mid-dense
4. Juvenile Growth Habit:	Semi-erect	19. Spike Position at Maturity:	Erect
5. Plant Tillering:	Intermediate	20. Hairiness of Rachis Edge:	Covered
6. Leaf Color at Boot:	Green	21. Rachilla Hair Length:	Short
7. Flag Leaf at Boot:	Erect, Not Twisted, Waxy Bloom	22. Lemma Awns:	Straight
8. Pubescence on Leaf Blade:	No	23. Length of Lemma Awns:	Long
9. Pubescence on Leaf Sheath:	No	24. Lemma Awn Surface:	Rough
10. Auricle Color:	White	25. Glume Hairiness:	None
11.Heading Date (see below):	50 Days After Planting	26. Glume Awn Surface:	Rough
12. Stem Color:	White	27. Glume/Lemma Adherence:	Naked
13. Neck Shape:	Straight	28. Texture (if covered):	
14. Collar Shape:	V-shaped	29. Aleurone Color:	Colorless
15. Spike Exsertion:	Slight	30. Avg 1,000 Kernel Wt (grams):	35

Heading date: 50 days after planting which is: 1 Day(s) (EARLIER) (LATER) than: Tamalpais

Plant height: 56.5 cm, which is 3.2 cm (SHORTER) (TALLER) (SAME AS) Tamalpais

Physiological or Biochemical Traits: Y007-3 has waxy starch as determined by red staining of endosperm at the hard dough stage of seed development

Variants and Frequency: No variants have been observed, but up to 1% tall plants or covered seed or non-waxy seed may be observed in future generations.

6. Recognized classes of Y007-3 are breeder, foundation, registered, and certified. 21st Century Genetics Corp. will maintain the variety by the head-row method to produce breeder seed as needed. Royalty fees or licensing agreements are anticipated.

7. Certified class seed will likely be available for the 2021 growing season, if accepted as eligible.

8. Application for PVP is anticipated with the option that Y007-3 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 certifying agencies.

Date this application was submitted: Jan 05, 2020 Date recommended by the VRB: Apr 06, 2020