Grass
Kellargreen
HT-1 (Exp)

1. Variety name: Kellargreen Kind: Ryegrass, Perennial
Genus: Lolium Species: perenne L.
Experimental designation (s): HT-1
Date submitted: January 2, 2022 Ploidy Level: Diploid

2. HT-1 was developed by McCarthy Research Farm LLC beginning with the selection of plots with superior turf quality, darkest green color with fine leaf texture from plots in Pipersville, Pennsylvania. Parent lines of selected plots were derived from the following varieties: Darklink, Fiji II, ASP0113, Pennant III and Fireball. Turf performance was evaluated using plots at Verboort, Oregon, Subsequently, five cycles of selections for turf quality and high seed yield were conducted to produce the first breeder seed in 2018.

3. HT-1 has been tested in Western Oregon. It is adapted to perennial ryegrass growing areas with similar climatic conditions.

4. Growth & Morphology Traits	Heading Date (DOY) Verboort OR		Plant Height (cm) Verboort OR		Flag Leaf Length (cm) Verboort OR	
	2019	2020	2019	2020	2019	2020
HT-1	**134.0**	**134.5**	**56.3**	**56.0**	**15.7**	**14.4**
Linn	124.3	112.1	69.1	61.7	22.7	20.8
Pinnacle	135.2	126.3	39.7	44.4	14.5	12.7
Manhattan	145.7	142.6	59.9	49.5	21.0	13.9
LSD @ 0.05	2.2	1.9	2.5	2.3	0.7	1.0
CV (%)	1.9	1.8	5.7	5.3	5.6	8.3

Variants to be expected and frequency: None were observed

5. Turf Use	Turf Quality (1-9) Verboort, OR		Genetic Color (1-9) Verboort, OR		Leaf Density (1-9) Verboort, OR		Leaf Texture (1-9) Verboort, OR	
	2019	2020	2019	2020	2019	2020	2019	2020
HT-1	**7.8**	**7.5**	**8.3**	**7.9**	**8.3**	**8.0**	**8.1**	**7.7**
Virte	7.4	7.3	7.7	7.8	7.7	7.5	7.8	7.4
Pinnacle	4.4	4.0	3.5	3.4	3.7	3.5	4.6	3.5
Manhattan II	3.1	2.4	4.8	4.0	3.4	2.7	4.7	4.0
Linn	2.4	2.0	1.9	1.7	1.6	1.4	1.8	1.4
LSD @ 0.05	0.6	0.3	0.4	0.3	0.3	0.3	0.5	0.4
CV (%)	5.5	6.8	6.8	6.6	6.7	6.5	9.4	9.8

6. **Breeder seed of HT-1 first produced in 2018. Breeder seed will be kept in cold storage at McCarthy Research Farm LLC located in Verboort, Oregon. Breeder seed will be the source of regenerating additional seed stock by the breeder. Length of stand is limited to: 2 years for the Foundation generation 10 years for the Certified generation. Certified seed can be produced from Breeder or Foundation seed. Field eligibility may be extended by McCarthy Research Farm LLC.**

7. **Certified seed is anticipated to be available in the fall of 2022. PVP may be sought with the certification option.**

Date this application was submitted: 1.3.22 Date recommended to the VRB: 5.23.22