

FRONTIER PERENNIAL RYEGRASS



- Darkest color on the market
- Mixes well with other grasses
- Resists leaf spot and rust
- Dense growth, establishes quickly
- Endophyte enhanced, naturally reduces insect damage

Frontier was developed using five cycles of phenotypic recurrent selection. The germplasm used to develop Frontier was from the varieties Excel, Radiant, Divine, Wilmington, Pennant II and Wizard. In all cycles, the primary selection criteria were for dark-green color and maximum turf density. Breeder seed of Frontier was first produced in 2004.

Frontier was tested for turf performance under lawn conditions near Forest Grove, Oregon and Lewisburg, Pennsylvania. The turf quality of Frontier (7.4 to 8.1 on 1-9: 9=ideal turf) is superior to Mach I (6.8 to 7.3) and Applaud (7.0 to 7.1). The genetic color of Frontier (8.2 on 1-9: 9=darkest green) is darker than Wind Dance 2 (7.0) and Mach I (6.5 to 6.9). The turf density of Frontier (8.3 to 8.4 on 1-9: 9=very dense) is denser than Applaud (6.5 to 6.7). Both the Forest Grove, Oregon and the Lewisburg, Pennsylvania trials were sown in the fall of 2005 and maintained at a cutting height of one inch. Trials received five pounds of Nitrogen per year and were irrigated to prevent stress.

Frontier has also been extensively tested under sod growing conditions in the non-irrigated turf plots in Haymarket, Virginia and has been the best performing perennial ryegrass in severe drought. Frontier Perennial Ryegrass was planted in Virginia in September 2006 and is still being evaluated in our test plots today.

Variety	TURF QUALITY			COLOR			TEXTURE			DENSITY		
	Forest Grove OR	Lewisburg PA	average	Forest Grove OR	Lewisburg PA	average	Forest Grove OR	Lewisburg PA	average	Forest Grove OR	Lewisburg PA	average
Frontier	8.1	7.4	7.7	8.2	8.2	8.2	6.7	7.0	6.8	8.3	8.4	8.4
Wind Dance 2	7.3	7.1	7.2	7.0	7.0	7.0	6.9	6.9	6.9	6.7	6.3	6.5
Applaud	7.1	7.0	7.0	6.1	6.4	6.2	6.2	6.7	6.5	6.5	7.0	6.8
Mach I	6.8	7.3	7.0	6.5	6.9	6.7	6.6	6.8	6.7	6.9	6.5	6.7
Palmer	6.1	5.5	5.8	5.5	5.8	5.6	5.2	5.2	5.2	4.9	5.5	5.2
Premier	4.3	4.3	4.3	4.8	4.4	4.6	4.5	4.9	4.7	4.2	4.2	4.2
Pinnacle	4.2	4.1	4.1	3.9	4.1	4.0	4.9	4.3	4.6	4.4	4.1	4.2
Panther	4.1	3.8	3.9	3.8	4.6	4.2	4.1	5.5	4.8	4.4	4.7	4.5
Manhattan	3.7	4.0	3.9	3.8	4.6	4.2	3.5	3.5	3.5	3.1	2.7	2.9
Linn	1.5	1.2	1.4	1.1	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0

Turf Quality ratings 1 - 9 (9 = ideal turf) Color ratings 1 - 9 (9 = darkest green) Texture Quality ratings 1 - 9 (9 = very fine) Density ratings 1 - 9 (9 = most dense)



In unirrigated test plots on a sod farm in northern VA, Frontier survives an extended drought which occurred from the date that the plots were planted on Sept. 6 until mid Nov. This photo taken on June 3, 2008 shows that most of the other perennial ryegrasses being tested succumbed to this stress but not Frontier which still looked great.



Frontier Perennial Ryegrass grown for sod in Dixon, California, next to the standard perennial rye mixture this sod farmer had been growing.



Jonathan Green's Research and Production Company in Oregon.