

Fine Fescue No-Mow Grasses and Consumer Mixtures

By Andrew Hollman, Senior Scientist - Turfgrass Science

Introduction

Consumers of grass seed, whether they are homeowners or professionals, can often be overwhelmed with information when trying to figure out what they should plant. Even if they have an idea on what species or mixture they would like to plant, the correct rate can vary depending on the specific site use. Two demonstration plots were planted at the University of Minnesota Turfgrass Research, Outreach and Education Center. One shows consumers what some of the commercially available mixtures look like when managed at lawn height. The other plot demonstrates seeding rates of 5 fine fescue species along with mixtures of these species.

Materials and Methods

The consumer mixture study was seeded on June 11, 2014. Twenty mixtures were planted in 5 x 10 foot plots. These mixtures were readily available and purchased from big box stores, garden stores or over the web. Seeding rates for each mixture was based off of what the packaging recommended. All plots received 1 lb. of P2O5 from a starter fertilizer, were covered with a Futerra germination blankets and were irrigated until established. Plots are mowed at 2.5 inches and receive 2 fertilizer applications annually in the spring and fall.

Plot	Company	Mixture Name	lbs./1000ft ²		Cost (\$)	
			Product	Seed	Lb. of seed	1000ft ²
1	Telebrands	Grassology	4.01	1.92	13.90	26.69
2	Performance Seed	Easy Green	5.01	4.83	1.45	6.99
3	Pennington Seed	Dense Shade	4.01	3.44	5.55	19.13
4	The Scotts Company	Midwest Mix	2.31	1.11	10.40	11.53
5	Barenbrug	Sun and Shade	3.00	2.69	3.72	9.99
6	Barenbrug	High Traffic	3.00	2.92	3.43	9.99
7	Barenbrug	Pebble Beach Fairway	5.01	4.17	2.40	9.98
8	Performance Seed	Shade Grass	4.01	3.84	2.43	9.32
9	Encap, LLC	Grass Repair Kit	14.64	2.86	12.22	34.97
10	The Scotts Company	Tall Fescue	4.01	1.96	5.25	10.29
11	Performance Seed	Northern Blend	5.01	4.81	2.39	11.51
12	Performance Seed	Thick 'N Hardy	5.01	4.81	2.70	13.01
13	Organic Grass Seed & Supply	Cutting Edge	4.01	3.85	8.33	32.04
14	Amturf	Dog Patch	34.88	3.45	40.39	139.32
15	Twin City Seed	Beisswenger's Dense Shade	6.68	6.52	5.45	35.54
16	Twin City Seed	Beisswenger's Low Grow	6.68	6.68	6.99	46.66
17	JRK Seed & Turf Supply	Gerten's Soft Drink Eco Mix	4.01	3.93	5.59	21.99
18	JRK Seed & Turf Supply	JRK Ultra Dense Shade Mix	7.61	7.48	8.13	60.81
19	JRK Seed & Turf Supply	Gerten's Cabin Mix	6.01	5.91	5.07	29.98
20	JRK Seed & Turf Supply	JRK Honey Bee Mix	5.01	4.90	5.61	27.49

The fine fescue seeding rate demo was seeded August 12, 2015. For each of the five species of fine fescue a single cultivar was used. The seeding rate was based on pure live seed (PLS) per area to limit the impact variation in seed size might play in density. Six rates (0.125, 0.25, 0.5, 1.0, 2.0 & 3.0 PLS/cm²) for a single cultivar of each of the fine fescue species was seeded into 10x12ft plots. Two rates (0.25 & 0.5 PLS/cm²) were used for 10 possible three-way mixtures of the 5 species. Plots were stripped with three different starter fertilizers (Andersons 12-24-8, Anderson 12-24-8 +Tupersan, Scotts Starter w/weed control). Plots were covered with Futerra blankets and irrigated until established. Biomass was removed July 26, 2016 with a John Deere Deck mower with a Goosen vac attachment.

Plot Numbers for Fine Fescue Single Species at Six Seeding Rates

Species	Cultivar	Seeding Rate (Pure Live Seeds per cm ²)					
		0.125	0.25	0.5	1	2	3
Chf	Compass	805	801	1005	703	502	802
Hdf	Beacon	904	505	503	705	1003	101
Shf	Marco Polo	1004	704	401	905	301	1001
Slf	Seabreeze GT	701	302	804	201	104	903
stf	Navigator II	303	202	404	803	601	902

Plot Numbers for Fine Fescue Mixtures at Two Seeding Rates

Mixture	Species Components			Seeding Rate (Pure Live Seeds per cm ²)	
				0.25	0.5
1	CHF	HDF	SHF	501	605
2	CHF	HDF	SLCRF	1002	901
3	CHF	HDF	STCRF	203	402
4	CHF	SHF	SLCRF	504	305
5	CHF	SHF	STCRF	702	304
6	CHF	SLCRF	STCRF	103	403
7	HDF	SHF	SLCRF	603	105
8	HDF	SHF	STCRF	204	205
9	HDF	SLCRF	STCRF	604	602
10	SHF	SLCRF	STCRF	102	405

Discussion

The consumer mixture plots shows that while some of the species in a mixture may germinate quickly, their aesthetic often do not mix well with the other species in the mixture. This demo also shows the variation in price between different products when going with the recommended seeding rate.

The fine fescue demo had very little weed pressure in the areas that were stripped with Scotts starter fertilizer that contained mesotrione. This product produced a slight thinning of the germinating stand. The highest seeding rates of the single species also had fewer weeds than the lower rates. This high seeding rate also produced turf stands that had few seedheads. This large amount of seedheads from the low seeding rate led to plots that were completely lodged. The high seeding rates produced the cleanest stands of fine fescue with, limited seedhead production and lodging the following year. This leads to less biomass that needs to be removed in order to maintain an aesthetically pleasing stand, but might still be too dense for an in play area on a golf course.