Creeping Bentgrass Cultivars — Report Card

SEED RESEARCH OF OREGON

Bentgrass Type	Cultivar	Experimental Number	Company	Color	Leaf Texture	Bentgrass Bloat- Scalp	Summer Stress Tolerance	Dollar Spot Resistance	Brown Patch Resistance	Winter-Active Growth	Uniformity	Establishment
Ultra —Very High Density Greens, Tees	**Tyee**	**SRX 1GD**	**Seed Research**	**v. dark green**	**very fine**	**none**	**very high**	**high**	**very high**	**excellent**	**very high**	**very rapid**
	Penn G-1		Pickseed	dark green	fine	slight	high	high	moderate	good	high	moderate
	Penn A-2		John Deere	v. dark green	fine	low	moderate	high	moderate	moderate	high	slow
	Penn A-4		Tee 2 Green	dark green	fine	slight	high	moderate	low	good	high	moderate
	Penn A-1		Scotts Turf	v. dark green	very fine	slight	high	high	moderate	low	moderate	slow
	Penn G-6		Tee 2 Green	dark green	mod.fine	moderate	moderate	high	high	low	low	slow
	Penn G-2		Tee 2 Green	dark green	fine	moderate	moderate	high	moderate	low	moderate	slow
	Authority	"235050"	LESCO	dark blue green	very fine	low	high	high	moderate	good	high	rapid
	Declaration		Lebanon	dark green	fine	high	moderate	very high	high	excellent	high	moderate
	T-1		Simplot/Jacklin	v. dark blue green	fine	low	high	low	moderate	moderate	high	rapid
	Shark	23R	Mountain View	dark blue green	very fine	low	high	low	moderate	moderate	high	rapid
		CY-2	Snow Brand	dark green	fine	slight	very high	very high	moderate	excellent	high	rapid
Versatile – High Density Greens, Tees, Fairways	**OO7**	**DSB**	**Seed Research**	**v. dark green**	**very fine**	**none**	**very high**	**very high**	**very high**	**excellent**	**very high**	**very rapid**
	MacKenzie	**SRX 1GPD**	**SRO/Pickseed**	**dark bright green**	**very fine**	**slight**	**very high**	**high**	**very high**	**excellent**	**very high**	**rapid**
	Memorial	A03-EDI	Scotts Turf	medium green	medium	slight	high	very high	moderate	good	high	rapid
	Kingpin	"9200"	ProSeeds	dark blue green	mod. Fine	slight	moderate	high	moderate	moderate	moderate	slow
Improved – Moderate High Density Greens, Tees Fairways	**SR 1150**	**SRX 1PDH**	**Seed Research**	**dark bright green**	**fine**	**low**	**very high**	**very high**	**high**	**excellent**	**very high**	**very rapid**
	SR 1119	**SRX 1119**	**Seed Research**	**v. dark green**	**mod. fine**	**none**	**high**	**high**	**high**	**excellent**	**high**	**very rapid**
	Brighton	**SRX 1120**	**Seed Research**	**v. dark green**	**mod.fine**	**slight**	**very high**	**high**	**high**	**excellent**	**high**	**rapid**
	Sandhill	**SRX 1BPAA**	**Seed Research**	**v. dark green**	**mod. fine**	**slight**	**very high**	**high**	**very high**	**excellent**	**high**	**rapid**
	Ninety-six two	Syn 96-2	Pickseed	dark green	fine	moderate	very high	low	high	moderate	good	rapid
	L-93		Simplot/Jacklin	dark green	mod. fine	slight	moderate	high	high	good	high	rapid
	LS-44		Links Seed	medium green	mod.fine	low	moderate	moderrate	moderate	good	high	rapid
	Alpha		Simplot/Jacklin	v. dark blue green	mod. fine	none	moderate	low	moderate	low	high	moderate
	Independence		Lebanon	dark green	mod. fine	low	high	very low	moderate	moderate	good	rapid
	Bengal	BAR AS 8FUS2	Barenbrug	dark green	medium	none	high	moderate	moderate	high	high	moderate
	Penneagle II		Tee 2 Green	dark green	mod. fine	slight	moderate	high	high	moderate	high	rapid
	Pennlinks II	PST-OVN	Tee 2 Green	medium green	medium	slight	moderate	very high	low	moderate	high	moderate
	Benchmark DSR		TMI	dark blue green	fine	low	moderate	high	low	moderate	good	slow
	13-M		Pennington	dark green	mod. fine	low	moderate	high	moderate	good	good	moderate
Improved – Moderate Density Greens, Tees, Fairways	**Providence**	**SR 1019**	**Seed Research**	**dark green**	**mod. fine**	**slight**	**moderate**	**moderate**	**moderate**	**good**	**moderate**	**moderate**
	SR 1020		**Seed Research**	**dark green**	**mod. fine**	**moderate**	**very high**	**low**	**moderate**	**moderate**	**moderate**	**very rapid**
	Cato		Pickseed	medium green	medium	slight	moderate	moderate	moderate	moderate	high	moderate
	Mariner	Syn-1-88	Pickseed	medium green	mod. coarse	high	moderate	moderate	low	low	moderate	rapid
	Cobra		DLF-International	medium green	mod. coarse	moderate	low	moderate	low	moderate	low	moderate
	Regent		Barenbrug	blue green	mod. coarse	high	low	moderate	low	moderate	high	rapid
	Grandprix	LCB-103	LESCO	blue green	mod. coarse	slight	low	moderate	high	low	moderate	moderate
	Princeville		LESCO	medium green	course	slight	moderate	moderate	low	moderate	low	rapid
	Century	Syn 92-1	ProSeeds	blue green	mod. fine	moderate	low	very low	moderate	moderate	low	moderate
	Crenshaw		ProSeeds	dark blue green	medium	none	high	low	moderate	very low	low	very rapid
	Imperial	Syn 92-5	ProSeeds	dark green	mod. fine	slight	high	low	moderate	moderate	low	rapid
	ProCup		Scotts/Landmark	blue green	mod. coarse	moderate	low	low	low	moderate	low	modeate
	Putter		SimplotJacklin	medium green	mod. coarse	moderate	very low	moderate	low	low	moderate	moderate
	Southshore		Simplot/Jacklin	medium green	medium	low	moderate	moderate	low	good	low	rapid
	Seaside II	DF-1	Tee 2 Green	medium green	medium	moderate	moderate	high	low	low	moderate	rapid
	Backspin	Syn 92-2	TMI	blue green	medium	moderate	moderate	low	moderate	moderate	low	rapid
	Trueline		TMI	blue green	mod. coarse	slight	low	moderate	low	low	moderate	moderate
	Viper		DLF-International	blue green	medium	low	high	moderate	moderate	low	low	slow
	18th Green		ProSeeds/Johnson	v. dark blue green	mod. coarse	slight	low	very low	moderate	very low	low	slow
Standard – Lower Density Greens (0ld Courses), Tees Fairways	Penneagle		Tee 2 Green	medium green	mod. coarse	slight	moderate	moderate	moderate	low	low	rapid
	Pennlinks		Tee 2 Green	light green	mod. coarse	moderate	low	high	moderate	moderate	high	moderate
	Seaside		standard	light green	very coarse	high	low	moderate	very low	low	very low	very rapid
	Penncross		Tee 2 Green	medium green	coarse	slight	very low	moderate	low	low	very low	very rapid

Blending Bentgrasses — Match density, color, texture. Select other characteristics based on importance, on NTEP data, additional trials and observations by Dr. Leah Brilman and others

Bentgrass Conversion – It Can Work!

Bentgrass conversion can refer to changing from one bentgrass cultivar to another, or converting from *Poa annua* or perennial ryegrass to bentgrass. This can be done on greens, tees and fairways but the success depends on the climate zone of the course, the acceptable amount of disruption of the playing surface, timing of conversion and amount of perseverance.

Key Concepts

- Bentgrass seedlings are very small and initially weak. Some varieties such as **Tyee, 007, SR 1150, MacKenzie** and **SR 1119** have greater seedling vigor and can greatly increase your chances of success.
- In competition for critical resources including light, water and nutrients the established plant always has an advantage over the seedlings.
- Timing the overseeding to correspond with favorable growing conditions is extremely important. In some regions this may be an early fall application, whereas in other regions it may be in the late spring or early summer.
- The existing plants must be weakened to give the seedlings a chance to compete.
- The new seedlings must be kept moist, which may make the existing playing surface softer and slower.

Bentgrass to Bentgrass or *Poa annua* to Bentgrass

1. Apply a growth regulator such as Primo®
2. **Do not apply a preemergent herbicide before seeding.**
3. Reduce height of cut on existing turf (scalp <0.115 or lower).
4. Verticut heavily to reduce any thatch and further weaken existing turf (this can also be done after core aerifying)
5. Core aerify with largest acceptable tines to create holes in canopy. Solid tines may also be used. The aim is to allow seedlings time to establish before competition returns and to assure seed to soil contact. Topdress or drag in cores to fill holes.
6. Best times for conversion are late spring, through the summer until late summer. *Pythium* control is very important – Allegiance® treatment of the seed will give you 14–17 days of *Pythium* control. Seed as late in the spring or early in the Fall as you can and still maintain acceptable playing conditions. Seeding dates of June 19, July 1, August 17 and 20 were most successful in New Jersey. August seeding dates were also better at Purdue.
7. Seed with **Tyee, 007, SR 1150, SR 1119, MacKenzie, Brighton, Sandhill, Providence, SR 1020, Dominant, Dominant Plus, Dominant X-treme, Royal Links or Dominant X-treme 7** at 1-3 lbs./1000 ft^2 and topdress or drag seed in.
8. Keep surface moist – Stay on the dry side if converting from *Poa annua*.
9. Fertilize lightly after seeds germinate with quick release nitrogen.
10. Keep height of cut low to enable more light to seedlings and reduce competition.
11. Dimension® may be applied 14–21 days after seedling emergence to limit *Poa annua*.
12. Repeat Spring and Fall for at least two years. Results are generally seen in the third year. (*References and Full Article at* www.sroseed.com*)*

The information in this brochure is not to be used for any form of publication.

How to Select the Best Creeping Bentgrass Varieties for Greens

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Based upon university test data reported by the 2003 National Turfgrass Evaluation Program (NTEP.org) for Putting Green Trials (from twenty two university testing sites).

1. Many new creeping bentgrass varieties are now performing well for overall putting green turf quality ratings (mean, twenty two university sites) including **MacKenzie, 007, Tyee**, Authority, Delcaration, Shark, Memorial and T-1.
2. We know genetic diversity (in a variety) provides greater stability and lessens the chance of a catastrophic disease epidemic. Some creeping bentgrass varieties with the least genetic diversity include the A's and G's. The greatest varietal genetic diversity is with varieties such as **007, Tyee**, **MacKenzie**, Authority, Declaration, Shark, Benchmark DSR, and Memorial.
3. Penn A-1 is no longer the highest rated bentgrass variety. Many new creeping bentgrass varieties have tested to be equal or better for overall turf quality compared to the Penn A's and G's.
4. NOT all new varieties have the same disease resistance (e.g., Independence, Shark, Bengal, Alpha, and T-1 are all more susceptible to dollar spot than many other new bentgrass varieties).
5. When selecting varieties for leaf color keep in mind that "mottling" may occur after seeding a blend consisting of two or more varieties. Select varieties for blending that have been reported to have a similar leaf color.
6. Select varieties for use with compatible leaf texture (i.e., fine textured = **007, Tyee or MacKenzie,** A-1 or Authority; or medium textured = Memorial, Pennlinks II, and Alpha; or course textured = Penncross and Pennlinks).
7. The varieties Penncross / Pennlinks II did not perform well in the greens turf quality rankings and may be the least desirable varieties for seeding putting greens at this time.
8. When selecting varieties for turf density match compatible qualities (i.e., most density = **MacKenzie**, **Tyee**, **007**, Shark, Authority, Independence, T-1; or least density = Penncross and Pennlinks).
9. Some varieties are more prone to "bentgrass bloat" which may occur in June after high humidity / rainfall causes the thatch / crowns to elevate with subsequent mower scalping. Although possible with any creeping bentgrass, this phenomenon has been observed to do significant damage to the variety Declaration if not maintained properly.
10. Summary conclusions include: The A and G varieties are no longer the highest rated for overall turfgrass quality. Best recommendations at this time for low cut / high-density putting greens include **Tyee, MacKenzie, 007**, Shark, or Authority. For all-purpose putting greens, select the varieties **007, MacKenzie**, Independence, T-1, or Memorial.

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