

TECHNICAL TURF DATA

FEATURES

- High turf quality: greens, tees and fairways
- · Stress tolerant germplasm
- · High density: all seasons
- Bright medium green color
- Fine leaf texture
- · Reduced fertilizer requirement
- Winter-active growth
- High resistance to Dollar Spot, Brown Patch and Fusarium Patch

BENEFITS

- Excellent performance: Year around
- Uniform putting surface
- Excellent wear tolerance
- Excellent summer performance
- · Reduced fugicide requirements
- Reduced ball marks

SEEDING RATES

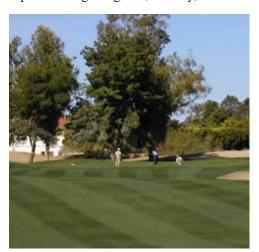
- Seeds/lb: 6,000,000
- New turf: 1–1.5 lbs/sq ft 45–65 lbs/acre 5–7.5 gr/m² 50–75 kg/hectare
- Overseeding/Interseeding: 2-3 lbs/1,000 sq ft 90-135 lbs/acre 10-15 gr/m² 100-150 kg/hectare

ESTABLISHMENT

- Germination: 3-5 days (6-10 days in cooler weather)
- First mowing: approximately 21 days depending on usage
- First limited use: approximately 6–8 weeks depending on condition



MacKenzie Creeping Bentgrass – Alistair Mackenzie golf designs are recognized as classics that demand performance for nearly every shot. MacKenziewas developed in line with the demands faced by the modern superintendent who has to blend the classical aspects of the game with the contemporary surface. Whatever a golf course demands for bentgrass performance, Mackenzie will deliver a superior bentgrass green, fairway, or tee.



Mackenzie's broad genetic base provides performance insurance regardless of the environment or the maintenance regime. Mackenzie is the result of years of experience in breeding superior bentgrasses that meet the needs of superintendents for a superior surface, in balance with standard maintenance practices. Only a bentgrass that forms the highest quality greens, tees and fairways deserves to be named for the master and Mackenzie is that bentgrass.

History

Mackenzie was developed from bentgrass clones selected from high stress environments. In turf trials under reduced fertility, low air movement, reduced fungicides and heat stress the progeny from three clones stood out. These progeny were then placed as spaced plants and the plants that demonstrated aggressive lateral spread, with high density were moved from the block and formed the basis for Mackenzie.

Turf Quality

Mackenzie has the density required for low heights of cut on greens, especially at the reduced fertility often utilized, with the more aggressive lateral growth needed for fairways. Mackenzie will withstand wear in all seasons with excellent ball mark revcovery. It has high resistance to dollar spot, brown patch and Fusarium patch. Mackenzie has high summer performance and a winter-active growth so it is a superior choice no matter where your course is or the time of year of your heaviest play.



2003 NTEP – Putting Green Leaf Texture Ratings of Creeping Bentgrass Cultivars Grown on a Green Mean of 11 Locations 2004 Data

Leaf Texture Ra	tings 1-9;	9=Very	Fine
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Cultivars	Mean	Shark	6.7	Kingpin	6.3	LSD Value	1.4
Tyee	7.1	T-1	6.7	Memorial	6.1		
Mackenzie	7.0	Penn A-1	6.5	Pennlinks II	5.7		
Declaration	6.7	Benchmark DSR	6.4	Penncross	5.3		

2003 NTEP Trial Density of Creeping Bentgrass Cultivars in Greens Trials 2004 Data

Turfgrass Density Ratings 1-9; 9=Highest Density

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Cultivar	Spring Density	Summer Density	Fall Density	Cultivar	Spring Density	Summer Density	Fall Density
Tyee	7.3	7.3	7.8	Memorial	7.0	6.7	7.0
Mackenzie	6.6	7.2	7.7	Alpha	6.8	6.8	6.8
Shark	6.8	7.4	7.6	Benchmark DSR	6.9	6.8	6.8
Penn A-1	6.9	7.3	7.4	Kingpin	6.8	6.9	6.7
T-1	7.2	7.1	7.3	Pennlinks II	6.7	6.3	6.2
007	6.8	7.3	7.2	Penncross	6.6	5.4	5.7
Declaration	7.3	7.3	7.1	LSD @ 5%	0.5	0.3	0.4

Performance of Creeping Bentgrass Cultivars in Greens Trials Seeded 2003 at Rutgers University, NJ 2003 and 2004 Data

Turfgrass Quality Ratings 1-9; 9=Ideal Turf

Cultivar	2003-04 Avg. Quality	2003 Avg. Quality	2004 Avg. Quality	Cultivar	2003-04 Avg. Quality	2003 Avg. Quality	2004 Avg. Quality
007 (DSB)	7.0	7.0	7.0	Sandhill	4.8	5.4	4.2
Declaration	6.4	6.8	5.9	Pennlinks II	4.8	5.6	4.1
Mackenzie	6.2	6.0	6.4	Penneagle	4.5	4.8	4.2
Tyee (SRX 1GD)	6.2	5.6	6.7	Penn A-4	4.3	4.7	4.0
Benchmark	5.9	6.3	5.6	L-93	3.9	4.5	3.5
Kingpin	5.5	5.6	5.4	Pennlinks	3.6	4.0	3.2
Penn A-1	5.3	5.7	4.9	Penncross	3.5	4.1	2.9
Penn G-1	5.1	5.2	5.1	Trueline	3.2	4.1	2.3
Penn A-4	4.9	4.9	4.8	LSD @ 5%	0.6	0.7	0.8

To determine whether a cultivar's performance is different from another, subtract one entry's mean from another entry's mean. If this value is larger than the LSD value, the observed difference in cultivar performance is significant and did not happen by chance. Complete tables are available upon request.