

Shade Tolerance and Performance of Bentgrass Varieties for Putting Greens in Southern California

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Objectives: Evaluate performance of 19 creeping bentgrass varieties and one velvet variety on a sand-based putting green under non-limiting and limiting light.

Location: UCR Turf Facility

Soil: Sand-based root zone

Mowing Heights: 1/4" at Field Day, 1/10" by initiation of experiment

Experimental Design: Strip-plot with 4 replications per treatment combination; bentgrass varieties represent main plots; half of each plot receives Primo Maxx at a rate of 0.125 oz./1000 ft²/wk beginning on August 18, 2008.

Plot Size: 5' by 11'

Establishment: Varieties were seeded at a rate of 1 lb/1000 ft² on July 11, 2008

Fertility: 1 lb N/1000 ft² at planting; 0.5 lb N/1000 ft²/wk thereafter

Data Collection: Turf quality, color, density, leaf firing/wilting, and rooting will be evaluated periodically throughout the study. Physiological measurements to include carbohydrate content, photosynthesis, chlorophyll fluorescence, soil respiration.

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North

	Primo	Primo		Primo		Primo			Primo
Tyee		Penn A-4		Penn G-6		Declaration		T-1	
Shark		007		MacKenzie		SR 1150		Brighton	
L-93		LS-44		Alpha		Independence		Mariner	
Seaside II		Dominant Plus		Dominant Xtreme7		Penncross		Legendary Velvet	
Alpha		Tyee		Shark		Independence		SR 1150	
Legendary Velvet		T-1		Seaside II		Brighton		Penn G-6	
Penncross		Dominant Xtreme7		L-93		007		Penn A-4	
Declaration		Mariner		MacKenzie		LS-44		Dominant Plus	
SR 1150		Declaration		T-1		LS-44		Alpha	
Mariner		Brighton		Penn A-4		L-93		Dominant Plus	
Tyee		Penn G-6		Penncross		Dominant Xtreme7		007	
Seaside II		MacKenzie		Legendary Velvet		Independence		Shark	
Mariner		SR 1150		Seaside II		Declaration		MacKenzie	
007		Dominant Plus		Alpha		Penn G-6		Dominant Xtreme7	
Penn A-4		T-1		Tyee		Legendary Velvet		L-93	
LS-44		Shark		Independence		Penncross		Brighton	
	Primo	Primo		Primo		Primo			Primo