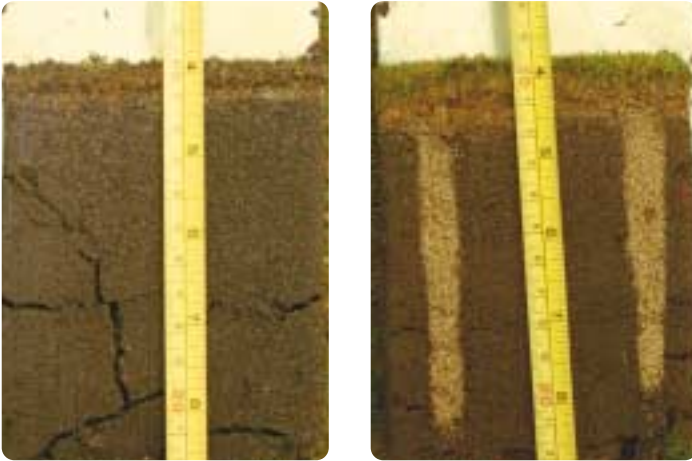


BENTGRASS VARIETY TRIALS



As we come to the end of a long hot and dry summer in the southern states, we have accumulated considerable data from the AGCSA's various bentgrass trials. At the Kingston Heath GC site we have undertaken wear trials to gather data on summer wear tolerance, the Glenelg GC site has provided good information on the effects of dry patch and at Barwon Heads GC the first data has been collected in comparing the response of bentgrass and *Poa annua* when irrigated with either high salinity effluent or potable water.

The wear trials have demonstrated the on-going superior performance of Penn A1, Penn A4 and Penn G2, whereas Pennlinks and Penncross are the worst performers. SR 7200 has at times been very good, however, towards the end of summer it suffered severely from dry patch and thatch collapse disease.

Thatch depth measurements at Kingston Heath GC demonstrated no significant difference between cultivars, however, the newer bentgrass cultivars continue to have a greater tendency to produce excessive thatch. Towards the end of summer, when the trial was placed under moisture stress, the thatchy varieties developed more dry patch.

At the Glenelg GC site, the trial was subjected to moisture stress and there was a significant difference in the susceptibility of the cultivars to develop dry patch. Penn A1 and A4 were amongst the worst affected with Penn G2 amongst the least affected. Again the presence of dry patch appears to be in part related to the depth of thatch and further reinforces the need for a satisfactory thatch control program when introducing the new bentgrass cultivars.

At Barwon Heads GC the first irrigation season was completed and there was no water quality effect on turf quality. This site is constructed on well drained sand and salt accumulation has not been a problem. Any differences in turf quality relate to cultivar differences.

These trials are on-going and in future issues we will present the soils and water data collected from the Barwon Heads GC effluent reuse trials.

These trials are all funded with the assistance of Horticulture Australia. 🇺🇸



ABOVE LEFT: Thatch depth / Left - SR7200 / Right - L93

ABOVE: Dry patch damage at Glenelg GC

Plot36 - Penn G2
Plot - 37 Penn A1
Plot 38 - Dominant

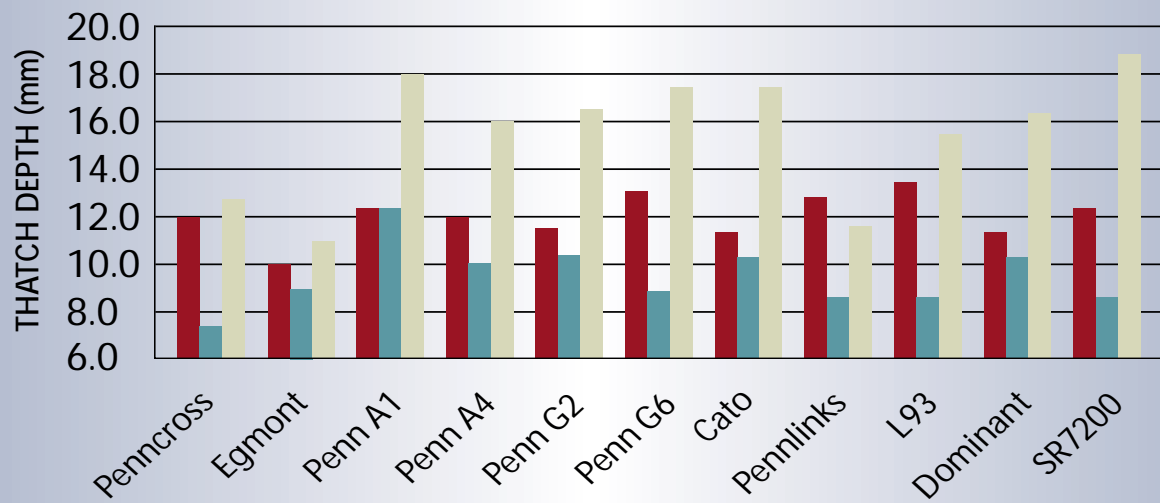
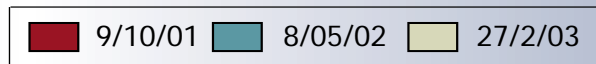


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Kingston Heath GC Bentgrass Cultivar Trials - Thatch Depth

9/10/01 LSD (<0.05) = NS
 8/5/02 LSD (<0.05) = 2.5
 27/2/02 LSD (<0.05) = NS





Kingston Heath GC – Turf Quality during summer wear

VARIETY	13/1/03	17/1/03	20/1/03	23/1/03	4/2/03	7/2/03	AVG
Penncross	5.8	5.8	5.8	6.0	5.7	5.8	5.8
Egmont	6.3	6.3	6.3	5.3	5.5	6.2	6.0
PENN A1	7.8	7.3	7.3	7.3	7.3	7.2	7.4
PENN A4	6.8	7.2	7.2	6.3	6.5	6.7	6.8
PENN G2	7.0	6.8	6.8	6.8	7.0	7.2	6.9
PENN G6	6.7	6.5	6.5	6.8	6.3	6.7	6.6
Cato	7.2	6.5	6.5	6.8	6.5	6.5	6.7
Pennlinks	5.3	5.5	5.5	5.8	5.3	5.5	5.5
L93	7.0	6.7	6.7	6.7	6.3	6.7	6.7
Dominant	6.5	6.0	6.0	6.7	6.2	6.5	6.3
SR7200	7.2	6.8	6.8	6.7	6.8	6.8	6.9
LSD (P<0.05)	1.0	0.9	0.9	NS	0.5	0.9	

0 = worst 9 = best

Kingston Heath GC – Turf Density during summer wear

VARIETY	13/1/03	17/1/03	20/1/03	23/1/03	4/2/03	7/2/03	AVG
Penncross	6.5	6.2	6.2	6.0	6.2	6.0	6.2
Egmont	7.0	6.7	6.7	6.5	6.3	6.7	6.6
PENN A1	8.2	7.7	7.7	7.7	7.5	7.5	7.7
PENN A4	7.3	7.2	7.2	7.0	6.7	6.8	7.0
PENN G2	7.5	7.0	7.0	7.0	6.7	7.0	7.0
PENN G6	7.0	6.5	6.5	6.7	6.7	6.7	6.7
Cato	7.3	6.8	6.8	6.8	6.8	7.0	6.9
Pennlinks	5.8	5.8	5.8	6.0	5.8	5.7	5.8
L93	7.3	6.8	6.8	6.2	6.3	6.7	6.7
Dominant	6.8	6.3	6.3	7.0	6.5	6.5	6.6
SR7200	8.5	8.0	8.0	8.2	8.0	8.0	8.1
LSD (P<0.05)	0.9	0.7	0.7	0.8	0.9	0.8	

0 = worst 9 = best

Glenelg GC – Dry patch (% area affected)

VARIETY	1/11/02	1/01/03	1/02/03	1/03/03
Penncross	23.3	21.7	17.3	11.7
Egmont	*	*	*	*
Penn A1	45.3	56.7	50.0	25.0
Penn A4	83.3	78.3	78.3	56.7
Penn G2	6.7	15.0	7.0	1.7
Mix	38.3	35.0	35.0	23.3
Cato	31.7	55.0	51.7	35.7
Pennlinks	23.3	16.7	8.3	3.3
L93	41.7	26.7	23.3	5.0
Dominant	46.7	18.3	10.0	1.7
RA1	50.0	36.7	36.7	10.0
RA2	70.0	36.7	36.7	11.7
Mariner	5.0	12.5	3.0	5.0
LSD (P<0.05)	32.0	28.0	30.0	28.0

Treatment	Turf Quality 4/04/03
PSU poa-EW	6.3
BHGC-EW	ND
Grand Prix-EW	5.7
Mariner-EW	4.8
Penn-G2-EW	6.5
Seaside II-EW	5.2
PSU poa-PW	6.5
BHGC-PW	ND
Grand Prix-PW	5.7
Mariner-PW	5.3
Penn-G2-PW	6.5
Seaside II-PW	5.8
LSD <0.05	0.7

EW = effluent water

PW = potable water

Note:

BHGC had not fully established at the time of assessment.