



PBR INFORMATION

Cynodon dactylon
Green Couch Grass, Bermuda Grass
'Oz-E-Green' (marketed as Oz Tuff Green)
Application No: 2004/035 Accepted: 10 Feb 2004.
Applicant: Oz Tuff Turf, Childers, QLD.

Characteristics Plant: habit creeping, type mat-forming, height very short, longevity perennial, spreading laterally by stolons and rhizomes. Stolon: compound nodes with up to 3 leaves, internode length short, internode thickness medium, colour grey-brown (RHS N199B) when exposed to sunlight. Culms: length very short. Leaf blade: shape linear-triangular, length medium-short, width medium, colour dark green (RHS N138B). Ligule: dense row of short white hairs. Inflorescence: digitate with (3-)4 short spicate racemes, peduncles short. (All RHS colour chart numbers refer to 2001 edition.)

Origin and Breeding: Spontaneous mutation or chance seedling: discovered in 2001 as a superior plant growing among "Common" green couch on the breeder's turf farm at Berries Road, Childers. A selected piece of sod was removed and broken into vegetative sprigs to propagate a larger area of this variety elsewhere on the breeder's property. The original plant has now been multiplied vegetatively three times without showing any discernible off types. Selection criteria: dense prostrate habit and limited inflorescence production (giving a low mowing requirement), high turf quality, dark green colour. Propagation: vegetative. Breeder: Robert William Morrow, Childers, QLD.

Choice of Comparators: The grouping characteristic used in identifying the most similar varieties of common knowledge was – Plant: habit creeping, type mat-forming, height very short. 'Plateau'A, 'TL1' and 'Riley's Super Sport'A are lower growing than other C. dactylon cultivars and therefore the most similar varieties of common knowledge. The putative parent "Common" green couch was excluded because it is readily distinguishable from 'Oz-E-Green' by its coarser, more open and erect growth, and lighter green leaves.

Comparative Trial Location: Cleveland, QLD (Latitude 27°32' South, Longitude 153°15' East, elevation 25 masl); 24 Aug 2003 – 16 Mar 2004; krasnozem soil). Conditions: for Diameter of Spread measurements (21 Nov 2003), for Stolon Leaf and Internode measurements (17-18 Dec 2003), for Shoot and Inflorescence measurements (18 Dec 2003 – 12 Jan 2004) and for Leaf and Stolon Colour (16 Mar 2004) on spaced plants, 5 cm cores planted on a 1 m x 1 m spacing on 24 Aug 2003; plants not defoliated; weed control by pre-emergence oxadiazon, nutrition maintained with slow release fertilisers. Experimental design: 30 plants per variety, 5 plants per plot in 6 randomised blocks, two measurements per plant.

Prior Applications and Sales nil.

Description: D.S. Loch and M.B. Roche, QDPI&F Redlands Park, Cleveland, QLD.

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Table *Cynodon* varieties

	'Oz-E-Green'	*'Plateau' ^A	*'TL1'	*'Riley's Super Sport' ^A
MEAN PLANT DIAMETER OF SPACED PLANTS AFTER 89 DAYS (cm)				
mean	70.9	95.3	39.6	134.2
std deviation	29.7	26.5	11.6	37.1
LSD/sig	24.9	ns	P≤0.01	P≤0.01
FIRST STOLON NODE WITH SECOND LATERAL BRANCH (mm)				
mean	0.98	0.92	1.27	0.75
std deviation	0.29	0.38	0.48	0.44
LSD/sig	0.163	ns	P≤0.01	P≤0.01
LENGTH OF FOURTH INTERNODE FROM STOLON TIP (mm)				
mean	31.7	37.6	19.4	52.1
std deviation	5.1	3.7	3.5	6.5
LSD/sig	2.7	P≤0.01	P≤0.01	P≤0.01
DIAMETER OF FOURTH INTERNODE FROM STOLON TIP (mm)				
mean	1.69	1.77	1.69	1.84
std deviation	0.16	0.16	0.10	0.18
LSD/sig	0.08	P≤0.01	ns	P≤0.01
LENGTH OF LEAF SHEATH ON FOURTH VISIBLE NODE FROM STOLON TIP (mm)				
mean	7.7	10.4	5.7	13.0
std deviation	1.1	1.6	0.9	1.4
LSD/sig	0.9	P≤0.01	P≤0.01	P≤0.01
LENGTH OF LEAF BLADE ON FOURTH VISIBLE NODE FROM STOLON TIP (mm)				
mean	8.6	7.2	6.6	9.1
std deviation	3.0	1.5	1.6	3.0
LSD/sig	1.9	ns	P≤0.01	ns
WIDTH OF LEAF BLADE ON FOURTH VISIBLE NODE FROM STOLON TIP (mm)				
mean	2.30	2.66	3.14	2.21
std deviation	0.31	0.27	0.33	0.36
LSD/sig	0.22	P≤0.01	P≤0.01	ns
LENGTH:WIDTH RATIO OF LEAF BLADE ON FOURTH VISIBLE NODE FROM STOLON TIP				
mean	3.69	2.70	2.12	4.07
std deviation	0.99	0.51	0.53	1.02
LSD/sig	0.59	P≤0.01	P≤0.01	ns
LENGTH OF SHEATH ON FLAG LEAF ON FLOWERING TILLERS (mm)				
mean	35.6	36.1	31.4	42.6
std deviation	7.1	7.7	5.0	5.4
LSD/sig	4.9	ns	ns	P≤0.01

LENGTH OF BLADE ON FLAG LEAF ON FLOWERING TILLERS (mm)

mean	16.1	8.5	5.0	14.9
std deviation	6.7	4.4	2.6	5.4
LSD/sig	3.1	P≤0.01	P≤0.01	ns

WIDTH OF BLADE ON FLAG LEAF ON FLOWERING TILLERS (mm)

mean	1.79	1.40	1.20	1.50
std deviation	0.29	0.37	0.34	0.31
LSD/sig	0.21	P≤0.01	P≤0.01	P≤0.01

LENGTH:WIDTH RATIO OF FLAG LEAF BLADE ON FLOWERING TILLERS

mean	8.84	5.82	4.06	9.89
std deviation	3.02	1.90	1.40	2.75
LSD/sig	1.74	P≤0.01	P≤0.01	ns

LENGTH OF SHEATH ON FOURTH LEAF ON FLOWERING TILLERS (mm)

mean	10.29	10.18	10.40	12.47
std deviation	1.85	2.40	2.03	2.64
LSD/sig	1.742	ns	ns	P≤0.01

LENGTH OF BLADE ON FOURTH LEAF ON FLOWERING TILLERS (mm)

mean	28.2	20.7	17.7	31.1
std deviation	6.3	6.9	6.4	6.7
LSD/sig	5.5	P≤0.01	P≤0.01	ns

WIDTH OF BLADE ON FOURTH LEAF ON FLOWERING TILLERS (mm)

mean	2.09	2.32	2.09	2.07
std deviation	0.28	0.34	0.36	0.21
LSD/sig	0.249	ns	ns	ns

LENGTH:WIDTH RATIO OF FOURTH LEAF BLADE ON FLOWERING TILLERS

mean	13.59	8.84	8.49	15.17
std deviation	3.14	2.47	2.84	3.53
LSD/sig	2.17	P≤0.01	P≤0.01	ns

LENGTH OF PEDUNCLE ON FLOWERING TILLERS (mm)

mean	65.6	41.9	36.2	51.6
std deviation	14.4	8.7	6.9	9.8
LSD/sig	12.3	P≤0.01	P≤0.01	P≤0.01

DIAMETER OF PEDUNCLE ON FLOWERING TILLERS (mm)

mean	0.51	0.52	0.51	0.53
std deviation	0.06	0.09	0.07	0.09
LSD/sig	0.06	ns	ns	ns

AVERAGE LENGTH OF SPIKES (mm)

mean	25.2	26.5	21.9	33.0
std deviation	2.9	5.4	3.1	5.2
LSD/sig	3.3	ns	P≤0.01	P≤0.01



NUMBER OF SPIKES PER INFLORESCENCE

mean	3.60	3.90	4.08	3.95
std deviation	0.50	0.57	0.33	0.29
LSD/sig	0.30	P≤0.01	P≤0.01	P≤0.01

MAXIMUM NUMBER OF SPIKES PER INFLORESCENCE

4	5	5	5
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STOLON COLOUR EXPOSED TO SUNLIGHT (RHS, 2001)

N199B	N199B	N199A	N199A
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LEAF COLOUR (RHS, 2001)

N138B	147A	147A	N138B
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