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Trial: 87WH50/4534EX

Title: Selection of subclover cultivars - early maturing

Aim: To select in the field subterranean clover cultivars of early maturity having superior persistence and productivity.

Location: Wongan Hills Research Station, Paddock 2EE

Details: 23 lines selected from the NSCIP, 4 clover cultivars, 1 medic cultivar, 2 nil, 4 replicates. Plots 5 m x 2.5 m.
Old land, Wongan loamy sand.
Sown 21/4, clover 15 kg/ha, medic 12 kg/ha, handbroadcast, harrowed. Medic IP.
Grazed in common with paddock, 1987 and 1988.
Cropped in 1989.

Results: Legume plant re-establishment, No./m², 13/6/89.
Seed yield (clover and medic), kg/ha, 22/11/88, 27/11/89.

Comments:

1. Seed reserves at end of 1988 low except for Dalkeith.
2. Regenerating swards in 1989, prior to being cropped, were sparse averaging less than 400 plants/m².
3. Following cropping seed reserves reduced by 50% to an average of less than 50 kg/ha. Only three lines had reserves greater than 70 kg/ha - 70119, 76S32-1-4-1 and 76S32-123-3.

Table 1. 87WH50 production estimates 1988-89

Line	Clover seed 11-88	Medic seed 11-88	Clover dens. 6-89	Medic dens. 6-89	Clover seed 11-89	Medic seed 11-89
Nungarin	57	0	662	0	61	0
Northam	114	0	847	0	46	0
Geraldton	120	0	346	8	45	0
Dalkeith	324	0	716	0	66	0
70119	89	0	508	0	100	0
83994B	80	0	262	0	18	0
69S26-112-2	95	0	485	0	42	0
69S30-5-4-1	89	0	184	0	29	0
69S32-119-2	96	1	462	0	27	0
75S05-22-3	147	0	393	0	65	0
75S05-108	106	0	338	0	53	0
75S08-104	104	0	192	0	29	3
76S16-9-4-3	49	0	385	0	25	0
76S16-9-5-1-4	95	0	115	0	36	0
76S16-9-5-3-1	87	0	416	0	55	0
76S16-9-5-4-1	63	0	454	0	35	0
76S16-9-5-6-1	62	0	315	0	48	0
76S27-107-2	144	0	285	0	41	0
76S31-108-2	119	0	169	0	16	3
76S32-1-4-1	192	0	785	0	90	2
76S32-1-6-2	101	0	408	0	52	0
76S32-2-4-1	72	0	423	0	60	1
76S32-2-4-2	80	0	161	0	52	0
76S32-122-3	138	0	639	0	34	0
76S32-123-3	111	0	554	0	102	0
8D20-1-2	100	0	231	0	47	1
8B40-2-1-1	36	0	192	0	26	0
Santiago	16	59	269	192	12	38
Nil	28	0	150	0	19	0
	98	2	383	7	45	2

Trial: 87NA77/4534EX

Title: Selection of subclover cultivars - early maturing

Aim: To select in the field subterranean clover cultivars of early maturity having superior persistence and productivity.

Location: R. Lange, Kulin

Details: 23 lines selected from the NSCIP, 4 clover cultivars, 1 medic cultivar, 2 nil, 4 replicates. Plots 5 m x 2.5 m. Old land, grey gritty sand over clay at 20 cm. Sown 14/5, handbroadcast 15 kg/ha, harrowed. Medic IP.
Grazed in common with paddock in 1987, 1988. After germination in 1989, trial strayed to kill legume. Not cultivated.

Results: Legume regeneration, no/m², 8/6/89. Seed yield (clover and medic) 9/12/88, 19/12/89.

Comments:

1. Seed reserves high in 1988, averaged 500 kg/ha. Five lines had over 700 kg : 75S08-104, Dalkeith, Nungarin, 76S32-123-3 and 75S05-108.
2. Seed reserves unexpectedly high in 1989, despite straying out of legumes. Four lines had reserves over 600 kg/ha : Dalkeith, HD20-1-2, 75S05-108 and Nungarin.

Table 2. 87NA77 production estimates 1988-89

Line	Clover dens. 6-89	Medic dens. 6-89	Clover seed 12-88	Medic seed 12-88	Clover seed 12-89	Medic seed 12-89
Nungarin	1,656	0	763	1	624	0
Northam	1,499	0	483	0	409	0
Geraldton	1,684	0	606	0	392	0
Dalkeith	981	0	774	0	747	0
70119	694	0	553	0	543	0
83994B	879	0	320	0	187	0
69S26-112-2	1,119	0	518	0	450	0
69S30-5-4-1	1,073	0	295	0	371	0
69S32-119-2	981	0	427	0	134	0
75S05-22-3	749	0	689	0	546	0
75S05-108	934	0	723	1	666	0
75S08-104	1,489	0	854	0	518	1
76S16-9-4-3	1,526	0	405	0	205	0
76S16-9-5-1-4	1,008	0	578	0	368	0
76S16-9-5-3-1	971	0	391	0	381	0
76S16-9-5-4-1	971	0	455	0	470	0
76S16-9-5-6-1	990	0	392	0	380	0
76S27-107-2	814	46	679	0	420	0
76S31-108-2	1,286	0	523	0	359	1
76S32-1-4-1	1,184	0	577	0	459	0
76S32-1-6-2	916	0	443	1	246	0
76S32-2-4-1	768	0	389	0	378	0
76S32-2-4-2	907	0	414	1	439	0
76S32-122-3	1,619	0	620	0	453	0
76S32-123-3	971	0	735	0	514	0
HD20-1-2	1,119	0	622	0	676	0
8B40-2-1-1	1,045	0	413	1	418	0
Santiago	157	759	89	410	50	364
Nil	245	0	170	0	94	0
	1,016	27	502	14	400	12

Trial: 87KA39/4534EX

Title: Selection of subclover cultivars - early maturing

Aim: To select in the field subterranean clover cultivars of early maturity having superior persistence and productivity.

Location: W.W. & L.J. Filmer, Nyabing

Details: 23 lines selected from the NSCIP, 4 clover cultivars, 1 medic cultivar, 2 nil, 4 replicates. Plots 5 m x 2.5 m.
Old land, loamy sand over clay.
Sown 13/5, handbroadcast 15 kg/ha, harrowed. Medic IP.
Grazed in common with paddock in 1987/88. Cropped in 1989, before regeneration measured.

Results: Seed yield (clover and medic) kg/ha 12/88, 13/12/89.

Comments:

1. The site has a high background level of subclover, over 300 kg/ha in the unsown treatment in 1988.
2. Highest seed reserves following cropping in lines 70119, Nungarin and 76S31-108-2.

Table 3. 87KA39 production estimates 1988-89

Line	Clover seed 12-88	Medic seed 12-88	Clover seed 12-89	Medic seed 12-89
Nungarin	711	0	363	0
Northam	580	0	268	0
Geraldton	606	0	279	0
Dalkeith	557	0	294	0
70119	483	0	387	0
83994B	432	0	253	0
69S26-112-2	555	0	298	0
69S30-5-4-1	368	0	204	0
69S32-119-2	125	0	84	0
75S05-22-3	399	0	255	0
75S05-108	544	0	205	0
75S08-104	459	0	222	0
76S16-9-4-3	340	0	138	0
76S16-9-5-1-4	370	1	201	0
76S16-9-5-3-1	397	0	199	0
76S16-9-5-4-1	337	0	164	0
76S16-9-5-6-1	269	0	209	0
76S27-107-2	357	0	271	0
76S31-108-2	563	1	340	0
76S32-1-4-1	508	0	189	0
76S32-1-6-2	389	0	270	0
76S32-2-4-1	447	0	186	0
76S32-2-4-2	414	0	150	0
76S32-122-3	337	1	206	0
76S32-123-3	393	0	179	0
HD20-1-2	399	0	250	0
8B40-2-1-1	366	0	205	0
Santiago	296	53	121	10
Nil	317	0	180	0
	420	2	225	0