

Evaluation of legumes seeded in tilled rangeland. (R-1-81). Glennville, Ca.

Plot size: 4 ft. X 4 ft. with 4 ft. tilled borders on two sides.

Elevation:

Winter annual rainfall:

*preliminary eval.  
we have a later  
evaluation;  
not done  
or  
paper  
yet*

Sequence of experiment: On 12-11-80, approximately one week after a first winter annual rain, established annual rangeland was tilled with a garden mulcher to prepare a seedbed for the legumes. One oz. aliquots of seeds of 22 different legumes, previously inoculated with rhizobia and stored in a refrigerator, were seeded in three 4 ft. X 4 ft. tilled plots. The seeds were lightly raked in.

Legume name	Legume Response	
	visual stand/ground cover <sup>1/</sup> 3-24-81	individual width (inches) 3-24-81
A. Cicer milk vetch	1.2	1
B. Daliak (sub) *	2.3	1.8
C. Howard (sub)	3.0	1.8
D. Hamnaford Barrel Medic	1.0	1.3
E. Nungarin (sub)	3.0	1.8
F. Mt. Barker *sub)	2.0	1.9
G. Serradella (grass)	.4	.8
H. Harbinger Barrel Medic	2.7	1.5
J. Seaton Park (sub)	3.3	2.3
K. Kondinin (Rose) **	.8	1.0
L. Trikkala (sub)	3.0	2.2
M. Northam (sub)	3.3	2.0
N. Yarloop (sub)	1.8	2.5
P. Crimson clover	3.3	2.3
Q. Bur clover	1.0	1.2
R. Cyprus Barrel Medic	.8	.8
S. Geraldton (sub)	3.7	1.8
T. Woogenellup (sub)	3.0	2.5
U. Jemalong Barrel Medic	4.0	1.8
V. Wilton (Rose)	0	.3
W. Hyken (Rose)	4.3	2.3
X. Dinninup (sub)	3.0	2.3
Y. Black Medic	1.8	1.2

\* (sub) = subclovers      \*\* (Rose) = Rose clovers

<sup>1/</sup> Stand/ground cover rating 0-10: 0 = no ground cover/stand; 10 = complete ground coverage.

Comments: Germination of all legumes was delayed by lack of mid-winter rains. Emergence of legumes was estimated to be February 1, 1981, after some rainfall occurred. Those legumes showing the most stand/ground coverage of 3-24-81 were Seaton Park (sub), Northam (sub), Crimson clover, Geraldton (sub), Jemalong Barrel Medic, and Hyken (Rose) clover. The rototilled check did include a legume native in this rangeland. It was not distinguished from the other legumes, and may appear as the only legume present as in the Serradella plots, which is a grass.