

Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1982

[Full Table of Content](#)



82/R/CS/280 *Rhizobium* Strains - Lucerne, *Melilotus alba*

Rothamsted Research

Rothamsted Research (1983) *82/R/CS/280 Rhizobium Strains - Lucerne, Melilotus alba* ; Yields Of The Field Experiments 1982, pp 181 - 182 - DOI: <https://doi.org/10.23637/ERADOC-1-33>

82/R/CS/280

RHIZOBIUM STRAINS

Object: To compare the effectiveness of five strains of *Rhizobium meliloti* in fixing nitrogen with lucerne and *Melilotus alba* - Claycroft.

Sponsor: A. Fyson.

The first year, lucerne and *Melilotus alba*.

Design: 4 randomised blocks of 2 plots split into 6.

Whole plot area: 7.0 x 39.0.

Treatments: All combinations of:-

Whole plots

1. SPECIES	Species:
LUCERNE	Lucerne, Vertus
MEL ALBA	<i>Melilotus alba</i>

Sub plots

2. RM STRN	Strain of <i>Rhizobium meliloti</i> :
RCR 2001	RCR 2001
MEL 5	MEL 5
MEL 10	MEL 10
MEL 16	MEL 16
MEL 17	MEL 17
MIXTURE	Mixture of all above strains

Basal applications: Manures: (0:18:36) at 250 kg.

Seed: Both species sown at 10 kg.

Cultivations, etc.: - Ploughed: 27 Nov, 1981. PK applied: 20 Apr, 1982.
Power harrowed, seed sown: 21 Apr. Cut by hand: 23 July, 7 Sept.
Discards cut by machine: 1 Dec. Previous crops: W. wheat 1980, w. wheat 1981.

NOTE: Yields were recorded only from the harvest on 23 July. Nodules were sampled in July and September for identification of *Rhizobium* strains.

82/R/CS/280

1ST CUT (23/7/82) DRY MATTER TONNES/HECTARE

***** TABLES OF MEANS *****

SPECIES	LUCERNE	MEL ALBA	MEAN
RM STRN			
RCR 2001	4.30	10.57	7.43
MEL 5	4.67	7.00	5.83
MEL 10	4.83	7.87	6.35
MEL 16	4.60	10.67	7.63
MEL 17	5.23	9.47	7.35
MIXTURE	4.00	10.70	7.35
MEAN	4.61	9.38	6.99

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	SPECIES	RM STRN	SPECIES RM STRN
-----	-----	-----	-----
SED	0.574	0.979	1.388
EXCEPT WHEN COMPARING MEANS WITH SAME LEVEL(S) OF: SPECIES			1.385

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP.SP	30	1.959	28.0
PLOT AREA HARVESTED	0.00001		