

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 1987

[Full Table of Content](#)

ARC, Institute of Arable Crops Research
Rothamsted Experimental Station
Harpenden
Herts
AL5 2JQ
UK
The copyright in this document is owned by the Rothamsted Research Ltd.
This document is published on the condition that its use for any other purpose
without the express written permission of Rothamsted Research is prohibited.
Printed: Rothamsted, Rothamsted 2008

87/R/MA/2 Dazomet and N - Maize

Rothamsted Research

Rothamsted Research (1988) *87/R/MA/2 Dazomet and N - Maize* ; Yields Of The Field Experiments 1987, pp 249 - 251 - DOI: <https://doi.org/10.23637/ERADOC-1-37>

87/R/MA/2

MAIZE

DAZOMET AND N

Object: To study the effects of dazomet, nitrogen rates, sowing dates and polythene covers on the growth, pathogens and yield of maize grown for forage - Long Hoos V 2.

Sponsor: D. Hornby.

Design: 3 randomised blocks of 16 plots.

Whole plot dimensions: 1.6 x 5.2.

Treatments: All combinations of:-

1. DAZOMET Dazomet (kg):

0
450

2. N Nitrogen fertilizer (kg N) as 'Nitro-Chalk':

60
140

3. SOWDATE Dates of sowing:

21 APR 21 April, 1987
13 MAY 13 May

4. COVERS Covers to seedbed after sowing:

NONE None
POLYTHNE Polythene sheet

NOTES: (1) Dazomet was applied by hand on 17 Mar, 1987 for the earlier-sown plots, 31 Mar for the later-sown.

(2) The covers were photo-degradable and were laid by hand, on 23 Apr for the earlier-sown plots, 20 May for the later-sown. They were perforated at about 10 cm intervals over the drill rows to allow seedling emergence.

Basal applications: Weedkiller: Atrazine at 1.7 kg in 220 l.

Seed: Bastille, sown at 100,000 seeds per hectare.

Cultivations, etc.: - Ploughed: 27 Nov, 1986. Spring-tine cultivated: 20 Feb, 1987. Earlier-sown plots disc harrowed, seed sown, atrazine applied: 21 Apr. N applied: 22 Apr. Later-sown plots spring-tine cultivated, seed sown: 13 May. Atrazine applied to later-sown plots: 19 May. Harvested by hand: 19 Oct. Previous crops: Potatoes 1985, sunflowers 1986.

NOTE: Germination counts were made. Growth stages, leaf numbers and heights were measured fortnightly. Cob measurements were made in late summer.

87/R/MA/2

FORAGE TONNES/HECTARE

***** Tables of means *****

	N	60	140	Mean	
DAZOMET					
0		12.50	12.92	12.71	
450		13.86	14.09	13.98	
Mean		13.18	13.50	13.34	
SOWDATE	21 APR	13 MAY		Mean	
DAZOMET					
0		11.49	13.93	12.71	
450		13.16	14.79	13.98	
Mean		12.32	14.36	13.34	
SOWDATE	21 APR	13 MAY		Mean	
N					
60		11.82	14.53	13.18	
140		12.82	14.18	13.50	
Mean		12.32	14.36	13.34	
COVERS	NONE	POLYTHNE		Mean	
DAZOMET					
0		12.39	13.03	12.71	
450		14.36	13.59	13.98	
Mean		13.37	13.31	13.34	
COVERS	NONE	POLYTHNE		Mean	
N					
60		13.35	13.01	13.18	
140		13.40	13.61	13.50	
Mean		13.37	13.31	13.34	
COVERS	NONE	POLYTHNE		Mean	
SOWDATE					
21 APR		13.60	11.05	12.32	
13 MAY		13.15	15.57	14.36	
Mean		13.37	13.31	13.34	
DAZOMET	N	60	140		
0	SOWDATE	21 APR	13 MAY	21 APR	13 MAY
450		10.87	14.13	12.11	13.73
		12.78	14.94	13.54	14.64
DAZOMET	N	60	140		
0	COVERS	NONE	POLYTHNE	NONE	POLYTHNE
450		12.08	12.92	12.69	13.14
		14.63	13.10	14.10	14.08

87/R/MA/2

FORAGE TONNES/HECTARE

***** Tables of means *****

DAZOMET	SOWDATE COVERS	21 APR		13 MAY	
		NONE	POLYTHNE	NONE	POLYTHNE
0		12.44	10.54	12.33	15.52
450		14.76	11.56	13.97	15.62

N	SOWDATE COVERS	21 APR		13 MAY	
		NONE	POLYTHNE	NONE	POLYTHNE
60		13.63	10.02	13.08	15.99
140		13.57	12.07	13.22	15.15

DAZOMET	N	SOWDATE COVERS	21 APR		13 MAY	
			NONE	POLYTHNE	NONE	POLYTHNE
0	60		11.67	10.07	12.48	15.77
	140		13.21	11.01	12.18	15.27
450	60		15.58	9.98	13.67	16.22
	140		13.93	13.14	14.27	15.02

*** Standard errors of differences of means ***

Margins of two factor tables	0.451
Two factor tables	0.638
Three factor tables	0.902
Four factor table	1.276

***** Stratum standard errors and coefficients of variation *****

Stratum	d.f.	s.e.	cv%
BLOCK.WP	30	1.562	11.7

FORAGE MEAN DM% 25.3

PLOT AREA HARVESTED 0.00028