ROTHAMSTED RESEARCH

Yields of the Field Experiments 1987

Full Table of Content

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 measurments were made in late summer.

https://doi.org/10.23637/ERADOC-1-37

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

N	60		140	
DAZOMET SOWDATE	21 APR	13 MAY	21 APR	13 MAY
0	10.87	14.13	12.11	13.73
450	12.78	14.94	13.54	14.64

N	60		140	
DAZOMET COVERS	NONE	POLYTHNE	NONE	POLYTHNE
0	12.08	12.92	12.69	13.14
450	14.63	13.10	14.10	14.08

https://doi.org/10.23637/ERADOC-1-37

87/R/MA/2

FORAGE TONNES/HECTARE

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

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

N	SOWDATE COVERS	21 APR NONE	21 APR POLYTHNE	13 MAY NONE	13 MAY 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 NONE	21 APR POLYTHNE	13 MAY NONE	13 MAY 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

https://doi.org/10.23637/ERADOC-1-37