

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 1971

[Full Table of Content](#)



71/W/CS/66 Dazomet and Nitrogen -maize

Rothamsted Research

Rothamsted Research (1972) *71/W/CS/66 Dazomet and Nitrogen -maize* ; Yields Of The Field Experiments 1971, pp 206 - 207 - DOI: <https://doi.org/10.23637/ERADOC-1-97>

71/W/CS/66

DAZOMET AND NITROGEN

Object: To study the effects of dazomet and nitrogen on yield and pathogens of maize - Woburn Butt Furlong.

The first year, maize.

Design: 4 blocks of 2 plots split into 4.

Whole plot dimensions: 2.13 x 16.5. Sub-plot area harvested: 0.00039.

Treatments:

Whole plots: 1. Fumigant: None, 450 kg dazomet.

Sub-plots: 2. Nitrogen rates: 50, 100, 150 kg N at planting.
100 kg N at planting plus 50 kg N at tasselling.

Basal applications: 900 kg (0:14:28).

Cultivations, etc.: Sub-soiled, tines 142 cm apart, 61 cm deep:
8 Sept, 1970. Ploughed: 9 Sept. Dazomet applied, all plots rotary cultivated twice to 10 cm and 15 cm, rolled: 23 Sept. First N applied: 5 Apr, 1971. PK applied: 14 Apr. Power harrowed, seed drilled at 31 kg: 29 Apr. First two blocks redrilled at 31 kg because of bird damage: 9 June. Second N applied to second two blocks only: 28 July. Hand harvested, second two blocks only: 27 Oct. Variety: Pioneer 131. Previous crops: Barley 1969 and 1970.

NOTES: (1) Soil samples were taken in autumn, before dazomet applied and in spring before sowing for counts of ectoparasitic nematodes.
(2) Plant samples were taken for observation of fungal pathogens.
(3) The second two blocks were also damaged by birds. Gaps were filled with transplants, from the same treatments on the first two blocks.

Standard error per sub plot.

Grain, tonnes/hectare: 1.101 or 20.2% (6 d.f.)

71/W/CS/66

SUMMARY OF RESULTS

GRAIN: TONNES/HECTARE

Dazomet: KG/HA	N: KG/HA				Mean
	50	100	150	100+50	
	(± 0.778)*				
0	4.47	4.99	4.84	4.17	4.62
450	5.98	7.06	5.95	6.21	6.30
Mean (± 0.550)	5.22	6.03	5.40	5.19	5.46

Mean D.M. %: 64.5

* For use in horizontal and interaction comparisons only