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## Yields of the Field Experiments 1974

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### 74/W/CS/66 Dazomet and Nitrogen - Maize

74/W/CS/66 *Dazomet and Nitrogen - Maize* , Rothamsted Research (1975) Yields Of The Field Experiments 1974, pp 205 - 206 - DOI: <https://doi.org/10.23637/ERADOC-1-119>

74/W/CS/66

# DAZOMET AND NITROGEN

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

Sponsors: A.J. Barnard, D. Hornby.

The fourth year, maize.

For previous years see 71/W/CS/66(t), 72/W/CS/66(t) and 73/W/CS/66.

Design: 4 blocks of 2 plots split into 4.

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

Treatments: All combinations of:-

Whole plots: 1. Dazomet (kg per annum) cumulative 1971-74: DAZOMET

|     |     |
|-----|-----|
| 0   | 0   |
| 450 | 450 |

Sub plots: 2. Nitrogen fertiliser (kg N per annum)  
cumulative 1971-74: N

|                                                    |        |
|----------------------------------------------------|--------|
| 50 to seedbed                                      | 50     |
| 100 to seedbed                                     | 100    |
| 150 to seedbed                                     | 150    |
| 100 to seedbed, 50 five weeks after<br>germination | 100+50 |

Basal applications: Manures: (0:14:28) at 860 kg. Weedkiller: Atrazine at 1.1 kg in 280 l.

Seed: Pioneer 131, sown at 31 kg.

Cultivations, etc.: Ploughed: 20 Nov, 1973. Spring-tine cultivated, dazomet applied, all plots rotary cultivated twice: 21 Nov. Ploughed: 2 Jan, 1974 Spring-tine cultivated: 1 Apr. PK applied: 16 Apr. Spring-tine cultivate weedkiller applied, power harrowed: 29 Apr. Rolled: 30 Apr. Seedbed N applied, sown by hand: 1 May. Late N applied: 10 July. Harvested by hand 25 Nov.

- NOTES: (1) Soil samples were taken in spring before sowing and again after harvest for counts of ectoparasitic nematodes.  
(2) Plant samples were taken in September to assess incidence of stem and leaf pathogens.

Standard error per sub plot.

Grain, tonnes/hectare: 0.366 or 11.7% (18 d.f.)

74/W/CS/66

TABLES OF MEANS

GRAIN: TONNES/HECTARE

|         | N    |      |      |        |      |
|---------|------|------|------|--------|------|
|         | 50   | 100  | 150  | 100+50 | Mean |
| DAZOMET |      |      |      |        |      |
| 0       | 1.89 | 3.21 | 2.86 | 3.36   | 2.83 |
| 450     | 3.38 | 3.47 | 3.58 | 3.26   | 3.42 |
| Mean    | 2.64 | 3.34 | 3.22 | 3.31   | 3.13 |

STANDARD ERRORS OF DIFFERENCES

| N     | DAZOMET* |
|-------|----------|
| N     |          |
| 0.183 | 0.259    |

\* Within the same level of DAZOMET only

Mean D.M. % 93.3