

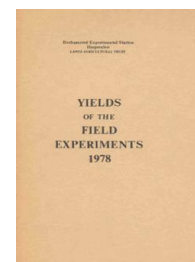
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# Yields of the Field Experiments 1978

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

### Rothamsted Research

Rothamsted Research (1979) *78/W/CS/66 Dazomet and Nitrogen - Maize* ; Yields Of The Field Experiments 1978, pp 162 - 163 - DOI: <https://doi.org/10.23637/ERADOC-1-30>

78/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 eighth year, maize.

For previous years see 71/W/CS/66(t), 72/W/CS/66(t) and 73-77/W/CS/66.

Design: 4 blocks of 2 plots split into 4.

Whole plot dimensions: 2.13 x 16.5.

Treatments: All combinations of:-

Whole plots

1. DAZOMET                      Dazomet (kg per annum) cumulative 1971-78:

0  
450

Sub plots

2. N                              Nitrogen fertiliser (kg N as 'Nitro-Chalk 34') cumulative 1971-78:

|        |                                                                                                                                 |
|--------|---------------------------------------------------------------------------------------------------------------------------------|
| 50     | 50 to seedbed                                                                                                                   |
| 100    | 100 to seedbed                                                                                                                  |
| 150    | 150 to seedbed                                                                                                                  |
| 100+50 | 100 to seedbed, 50 five weeks before sowing (before 1978 this treatment received 100 to seedbed, 50 five weeks after emergence) |

Basal applications: Manures: Magnesian limestone at 7.5 tonnes, (0:14:28) at 860 kg. Weedkiller: Atrazine at 1.1 kg in 340 l.

Seed: Fronica, sown at 103,300 seeds per ha.

Cultivations, etc.: - Magnesian limestone applied: 18 Nov, 1977. Ploughed: 21 Nov. Spring-tine cultivated with crumbler attached, early N applied, dazomet applied, rotary cultivated twice: 3 Apr, 1978. PK applied, spring-tine cultivated with crumbler attached, seed sown: 12 May. Seedbed N applied: 19 May. Weedkiller applied: 23 May. Hand harvested: 11 Oct.

NOTES: (1) Soil samples were taken before sowing and after harvest for counts of ectoparasitic nematodes.  
(2) Counts were made of common smut (*Ustilago maydis*) and stalk rots (*Fusarium* spp.).

78/W/CS/66

FORAGE DRY MATTER TONNES/HECTARE

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

|         | N | 50    | 100   | 150   | 100+50 | MEAN  |
|---------|---|-------|-------|-------|--------|-------|
| DAZOMET |   |       |       |       |        |       |
| 0       |   | 8.56  | 9.89  | 11.26 | 11.49  | 10.30 |
| 450     |   | 10.61 | 11.99 | 13.51 | 13.70  | 12.45 |
| MEAN    |   | 9.59  | 10.94 | 12.38 | 12.60  | 11.38 |

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

| TABLE | N     | DAZOMET* |
|-------|-------|----------|
|       |       | N        |
| ----- | ----- | -----    |
| SED   | 0.683 | 0.966    |

\* WITHIN THE SAME LEVEL OF DAZOMET ONLY

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

| STRATUM     | DF | SE    | CV%  |
|-------------|----|-------|------|
| BLOCK.WP.SP | 18 | 1.366 | 12.0 |

FORAGE MEAN DM% 25.0

SUB PLOT AREA HARVESTED 0.00039