

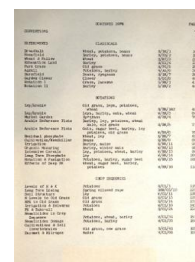
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## Yields of the Field Experiments 1976

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### 76/R/MA/1 Nitrification Inhibitors - Maize

#### Rothamsted Research

Rothamsted Research (1977) *76/R/MA/1 Nitrification Inhibitors - Maize ; Yields Of The Field Experiments 1976*, pp 346 - 346 - DOI: <https://doi.org/10.23637/ERADOC-1-15>

76/R/MA/1

MAIZE

NITRIFICATION INHIBITORS

Object: To study the effects of adding nitrification inhibitors to aqueous urea/ammonium nitrate on the yield and nitrogen uptake of maize grown for forage - Hoosfield.

Sponsors: J. Ashworth, A.J. Barnard.

Design: 3 randomised blocks of 10 plots split systematically into 2.

Whole plot dimensions: 4.57 x 13.4.

Treatments: All combinations of:-

Whole plots

1. N TREAT Nitrogen forms, rates and nitrification inhibitors:

Aqueous urea/ammonium nitrate injected to seedbed (26 Apr) at 120 kg N:-

|          |                                         |
|----------|-----------------------------------------|
| AQ3 -    | Alone                                   |
| AQ3 ATC1 | With ammonium trithiocarbonate at 10 kg |
| AQ3 ATC2 | With ammonium trithiocarbonate at 25 kg |
| AQ3 NIT1 | With nitrapyrin ('N-Serve') at 1.25 kg  |
| AQ3 NIT2 | With nitrapyrin at 2.5 kg               |

'Nitro-chalk' applied to seedbed (27 Apr) (kg N):-

|     |     |
|-----|-----|
| NC1 | 40  |
| NC2 | 80  |
| NC3 | 120 |
| NC4 | 160 |

'Nitro-Chalk' dressing divided (kg N):-

NC1+1+1 40 to seedbed (27 Apr), 40 in July (13 July), 40 at tasselling (6 Aug)

Sub plots

2. POPULATN Plant population:

|        |         |
|--------|---------|
| 100000 | 100,000 |
| 150000 | 150,000 |

Basal applications: Manures: (0:20:20) at 450 kg. Weedkiller: Atrazine at 1.7 kg in 220 l, harrowed in. Insecticide: Dimethoate at 0.07 kg in 450 l. Irrigation: 25 mm.

Seed: Caldera 535.