

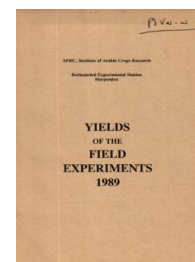
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED  
RESEARCH

## Yields of the Field Experiments 1989

[Full Table of Content](#)



### 89/R/P/13 Fungicides With the Seed - Potatoes

#### Rothamsted Research

Rothamsted Research (1990) *89/R/P/13 Fungicides With the Seed - Potatoes* ; Yields Of The Field Experiments 1989, pp 201 - 202 - DOI: <https://doi.org/10.23637/ERADOC-1-40>

89/R/P/13

POTATOES

FUNGICIDES WITH THE SEED

**Object:** To study the effects of fungicides applied with the seed at planting on the yield and tuber diseases of potatoes - Great Harpenden II.

**Sponsors:** R. Moffitt, G.A. Hide.

**Design:** 4 randomised blocks of 8 plots.

**Whole plot dimensions:** 1.5 x 6.10.

**Treatments:** All combinations of:-

1. **VARIETY** Varieties:

DESIREE

ESTIMA

2. **SOILFUNG** Fungicides, per t of seed, applied in the ridge at planting:

NONE

None

THIA+IMA

Thiabendazole at 30 g plus imazalil at 10 g

TOLC MET

Tolclofos methyl at 250 g

plus two extra treatments with fungicides, applied to the seed of Estima only, before planting:

**SD FN ES**

THIA+IMA

Thiabendazole at 30 g plus imazalil at 10 g per t of seed

TOLC MET

Tolclofos methyl at 125 g per t of seed

**NOTES:** (1) SOILFUNG applications were made with a powder applicator placing the fungicide alongside the potatoes at planting.  
(2) SD FN ES treatments were applied to tubers by electrostatic sprayer in 0.44 l of water per tonne of seed on 10 Apr, 1989.  
(3) Irrigation was applied on 14 June (12mm), 15 June (12mm), 22 June (25mm), 29 June (25mm).

**Basal applications:** Manures: (0:18:36) at 920 kg. FYM at 60 t. (13:13:20) at 1510 kg. Weedkiller: Linuron at 1.6 kg in 400 l. Fungicides: Mancozeb at 1.4 kg in 200 l on three occasions and at 1.0 kg in 200 l on a fourth occasion. Fentin hydroxide at 0.27 kg in 260 l.

**Cultivations, etc.:-** PK applied: 27 Sept, 1988. FYM applied: 23 Nov - 7 Dec. Ploughed: 12 Dec. NPK applied: 31 Mar, 1989. Rotary harrowed, potatoes planted: 3 May. Ridged: 24 May. Linuron applied: 28 May. Mancozeb applied: 3 July, 17 July, 28 July, 14 Aug. Fentin hydroxide applied: 30 Aug. Haulm mechanically destroyed: 18 Sept. Lifted: 13 Oct. Previous crops: W. barley 1987 and 1988.

89/R/P/13

**NOTE:** Tubers were examined at harvest for blemishing diseases and some were stored to observe disease development.

**TOTAL TUBERS TONNES/HECTARE**

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

| SOILFUNG VARIETY | NONE | THIA+IMA | TOLC MET | Mean |
|------------------|------|----------|----------|------|
| DESIREE          | 56.0 | 56.9     | 51.8     | 54.9 |
| ESTIMA           | 56.4 | 54.6     | 52.5     | 54.5 |
| Mean             | 56.2 | 55.8     | 52.2     | 54.7 |

| SD FN ES | THIA+IMA | TOLC MET | Mean |
|----------|----------|----------|------|
|          | 44.3     | 46.0     | 45.2 |

GRAND MEAN 52.3

\*\*\* Standard errors of differences of means \*\*\*

| VARIETY | SOILFUNG | VARIETY SOILFUNG & SD FN ES |
|---------|----------|-----------------------------|
| 1.87    | 2.29     | 3.24                        |

\*\*\*\*\* Stratum standard errors and coefficients of variation \*\*\*\*\*

| Stratum  | d.f. | s.e. | cv% |
|----------|------|------|-----|
| BLOCK.WP | 21   | 4.58 | 8.8 |

**PERCENTAGE WARE 3.81 CM (1.5 INCH) RIDDLE**

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

| SOILFUNG VARIETY | NONE | THIA+IMA | TOLC MET | Mean |
|------------------|------|----------|----------|------|
| DESIREE          | 97.0 | 96.6     | 96.8     | 96.8 |
| ESTIMA           | 95.9 | 96.6     | 96.9     | 96.5 |
| Mean             | 96.4 | 96.6     | 96.9     | 96.7 |

| SD FN ES | THIA+IMA | TOLC MET | Mean |
|----------|----------|----------|------|
|          | 96.9     | 96.8     | 96.9 |

GRAND MEAN 96.7

PLOT AREA HARVESTED 0.00091