

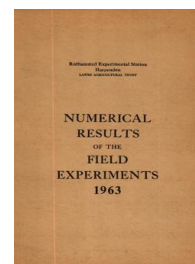
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## Yields of the Field Experiments 1963

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### 63/R/RP301/DD/2 Potatoes - Time of Burning Off Haulm

#### Rothamsted Research

Rothamsted Research (1964) *63/R/RP301/DD/2 Potatoes - Time of Burning Off Haulm* ; Yields Of The Field Experiments 1963, pp 171 - 172 - DOI: <https://doi.org/10.23637/ERADOC-1-183>

63/Dd/2.1

## POTATOES

(RP 301)

Time of burning off haulm - Great Knott II 1963.

Design: 4 randomised blocks of 10 plots each.

Area of each plot: 0.0848 acres. Area harvested: 0.0141 acres.

Treatments. All combinations of:-

Fungicide sprays: None (O), sprayed on 3 occasions, the first with mancozeb\*, the second and third with commercial copper oxychloride wettable powder\*\* (Cu).

Burning off haulm\*\*\*: None (O), haulm burnt off when mean destruction on sprayed plots was 2.5% (A), when haulm on sprayed plots was 20% destroyed by blight and almost all dead (B) - 2 plots per block.

In addition two plots per block (Cu 2B, MB) were sprayed as follows:-

Cu 2B: As 'Cu', but all sprays applied later (first and second on dates of second and third sprayings of 'Cu' plots).

MB: As 'Cu', but all sprayings with mancozeb.

Both were burnt off at date B.

\* 1.5 lb fungicide, containing 80% mancozeb, in 20 gallons per acre.

\*\* At 2.3 lb Cu in 20 gallons per acre.

\*\*\* With undiluted BOV at 16 gallons per acre.

Basal dressing: 8 cwt per acre compound fertiliser (17% N, 11% P<sub>2</sub>O<sub>5</sub>, 22% K<sub>2</sub>O).

Cultivations, etc.: Sprayed with dalapon at 7.4 lb in 40 gallons per acre: Oct 18, 1962, and again at 3.7 lb in 40 gallons per acre: Oct 30. Ploughed: Mar 28 - Apr 10, 1963. Basal dressing applied: part Apr 30, part May 8. Rotary cultivated: May 9. Potatoes machine planted: May 10. Earthed up: July 3. Cu and MB plots sprayed with mancozeb: July 9. Cu plots sprayed with copper oxychloride, MB and Cu 2B plots with mancozeb: July 22. Cu, Cu 2B plots sprayed with copper oxychloride, MB plots with mancozeb: Aug 13. Cu 2B plots sprayed with copper oxychloride: Sept 3. A plots sprayed with BOV: Sept 7. B plots sprayed with BOV: Sept 23. Lifted: Oct 29. Variety: King Edward. Previous crops: Barley 1961, spring beans 1962.

Note: (1) Periodic samples were taken for the weight of tubers, and an assessment of blight on foliage and in tubers was made weekly.

(2) The almost complete death of the haulm by late September resulted mostly from a massive infestation of aphids commencing in late July.

Standard error per plot.

Total tubers: 0.813 tons per acre or 9.0% (29 d.f.)

63/Dd/2.2

Erratum to 'The Numerical Results of the Field Experiments' 1962 page 62/Dd/2.2.

Date of burning off. The next 4 lines should read:-

O = None

A = Haulm burnt off when 1-5% blighted on Cu plots

B = Haulm burnt off when 10-20% blighted on Cu plots

C = Haulm burnt off when 50% blighted on Cu plots.

### Summary of Results

|                                    | Date of burning off              |      |                         |                         |
|------------------------------------|----------------------------------|------|-------------------------|-------------------------|
| Spray                              | O                                | A    | B                       | Mean                    |
| <u>Total tubers: tons per acre</u> |                                  |      |                         |                         |
|                                    | ( $\pm 0.406$ )                  |      | ( $\pm 0.287$ )         | ( $\pm 0.203$ )         |
| O                                  | 9.05                             | 9.10 | 9.29                    | 9.18                    |
| Cu                                 | 8.24                             | 7.89 | 9.11                    | 8.59                    |
| Mean ( $\pm 0.287$ )               | 8.64                             | 8.50 | 9.20<br>( $\pm 0.203$ ) | 8.88<br>( $\pm 0.144$ ) |
|                                    | Cu 2B<br>9.66<br>( $\pm 0.418$ ) |      | MB<br>9.65              |                         |

General mean: 9.04

### Percentage ware (1.5 inch riddle)

| O    | Cu            |      |            |      |  |
|------|---------------|------|------------|------|--|
|      |               |      |            |      |  |
|      | 92.2          | 92.3 | 92.0       | 92.1 |  |
|      | 91.7          | 89.4 | 90.2       | 90.4 |  |
| Mean | 92.0          | 90.8 | 91.1       | 91.2 |  |
|      | Cu 2B<br>91.9 |      | MB<br>92.9 |      |  |

General mean: 91.5

For explanation of treatment symbols see 63/Dd/2.1.