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# Yields of the Field Experiments 1966

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## 66/W/WCW/B/8 Cultivation-weedkiller Rotation

### Rothamsted Research

Rothamsted Research (1967) *66/W/WCW/B/8 Cultivation-weedkiller Rotation ; Yields Of The Field Experiments 1966*, pp 113 - 115 - DOI: <https://doi.org/10.23637/ERADOC-1-158>

66/B/8.3

## SUMMARY OF RESULTS

## POTATOES

|                      | M     | X               | Y     | Mean            |
|----------------------|-------|-----------------|-------|-----------------|
| TOTAL TUBERS         |       |                 |       |                 |
|                      |       | ( $\pm 1.862$ ) |       | ( $\pm 1.075$ ) |
| P                    | 16.92 | 20.25           | 19.11 | 18.76           |
| R                    | 17.57 | 16.46           | 18.52 | 17.52           |
| T                    | 17.45 | 17.87           | 16.19 | 17.17           |
| Mean ( $\pm 1.075$ ) | 17.31 | 18.19           | 17.94 | 17.81           |
| % WARE               |       |                 |       |                 |
| P                    | 94.7  | 93.2            | 95.5  | 94.5            |
| R                    | 95.9  | 95.8            | 92.8  | 94.8            |
| T                    | 94.9  | 93.1            | 92.4  | 93.5            |
| Mean                 | 95.2  | 94.0            | 93.6  | 94.3            |

## BARLEY

## GRAIN

|                     | N1   | N2             | N3   | Mean           |
|---------------------|------|----------------|------|----------------|
|                     |      | ( $\pm 2.31$ ) |      | ( $\pm 1.34$ ) |
| P                   | 21.2 | 27.8           | 34.4 | 27.8           |
| R                   | 17.9 | 30.4           | 34.2 | 27.5           |
| T                   | 24.1 | 31.1           | 35.4 | 30.2           |
| Mean ( $\pm 1.34$ ) | 21.1 | 29.7           | 34.7 | 28.5           |

Mean D.M. %: 83.3

| TABLE 1              |           |           |           |           |
|----------------------|-----------|-----------|-----------|-----------|
| PERCENTAGE OF FISHES |           |           |           |           |
| SPECIES              |           |           |           |           |
| Year                 | 1         | 2         | 3         | 4         |
| PERCENTAGE           |           |           |           |           |
| (1911-12)            | (1913-14) | (1915-16) | (1917-18) | (1919-20) |
| 10.0                 | 11.0      | 10.0      | 10.0      | 10.0      |
| 10.0                 | 10.0      | 10.0      | 10.0      | 10.0      |
| 10.0                 | 10.0      | 10.0      | 10.0      | 10.0      |
| 10.0                 | 10.0      | 10.0      | 10.0      | 10.0      |
| PERCENTAGE           |           |           |           |           |
| Year                 | 1         | 2         | 3         | 4         |
| (1911-12)            | (1913-14) | (1915-16) | (1917-18) | (1919-20) |
| 10.0                 | 10.0      | 10.0      | 10.0      | 10.0      |
| 10.0                 | 10.0      | 10.0      | 10.0      | 10.0      |
| 10.0                 | 10.0      | 10.0      | 10.0      | 10.0      |
| 10.0                 | 10.0      | 10.0      | 10.0      | 10.0      |
| PERCENTAGE           |           |           |           |           |
| Year                 | 1         | 2         | 3         | 4         |
| (1911-12)            | (1913-14) | (1915-16) | (1917-18) | (1919-20) |
| 10.0                 | 10.0      | 10.0      | 10.0      | 10.0      |
| 10.0                 | 10.0      | 10.0      | 10.0      | 10.0      |
| 10.0                 | 10.0      | 10.0      | 10.0      | 10.0      |
| 10.0                 | 10.0      | 10.0      | 10.0      | 10.0      |
| PERCENTAGE           |           |           |           |           |
| Year                 | 1         | 2         | 3         | 4         |
| (1911-12)            | (1913-14) | (1915-16) | (1917-18) | (1919-20) |
| 10.0                 | 10.0      | 10.0      | 10.0      | 10.0      |
| 10.0                 | 10.0      | 10.0      | 10.0      | 10.0      |
| 10.0                 | 10.0      | 10.0      | 10.0      | 10.0      |
| 10.0                 | 10.0      | 10.0      | 10.0      | 10.0      |

U.S. GEOLOGICAL SURVEY

66/B/9.1

## INTENSIVE CEREALS

(WIC)

Woburn Stackyard Classical Site 1966 - the first year

To investigate the growing of continuous winter wheat in comparison with a five course rotation, both with heavy dressings of fertilisers. There is a similar experiment involving spring barley.

These experiments are respectively, wheat on part of the site of the Continuous Wheat Experiment 1877 - 1954 and the barley on part of the site of the continuous barley. As well as crop yields, soil carbon and nitrogen will be studied, and the incidence of soil-borne diseases.

Design: For each cereal: 2 randomised blocks of 6 plots, split for N.

Area of each sub-plot: 0.0103. Area harvested: Wheat and barley - 0.0067, potatoes - 0.0069. Area of each whole plot: 0.0431. Area harvested: Ley - 0.0411.

Treatments: Wheat blocks: All combinations of:-

1. Whole plots: cropping:  
Continuous wheat: Five course rotation, in all phases:  
1 year ley, potatoes, wheat, wheat, wheat.
2. Sub-plots: Nitrogen to wheat:  
0.5 (N1), 1.0 (N2), 1.5 (N3), 2.0 (N4) cwt N as 'Nitro-Chalk' as spring top-dressing.

Treatments: Barley blocks: All combinations of:-

1. Whole plots: cropping:  
Continuous barley: Five course rotation, in all phases:  
1 year ley, potatoes, barley, barley, barley.
2. Sub-plots: Nitrogen to barley:  
0.4 (N1), 0.8 (N2), 1.2 (N3), 1.6 (N4) cwt N as 'Nitro-Chalk' applied in the seedbed.

Varieties: Potatoes: Pentland Dell  
Wheat: Cappelle  
Barley: Maris Badger  
Ley: 1 lb English Italian ryegrass, 2 lb Danish Italian ryegrass, 1.5 lb English Broad Red clover, 0.5 lb Canadian Alsike Clover.  
Mixture sown at 29 lb.

Other applications:

All crops: 1.0 cwt P2O5, 2.0 cwt K2O, half ploughed in, half worked into the seedbed.

Ley: 0.4 cwt N as 'Nitro-Chalk'.

Potatoes: 1.2 cwt N as 'Nitro-Chalk'.