

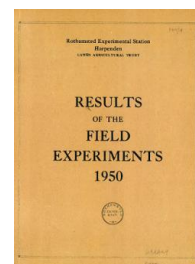
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50/BF/2 Market Garden - Woburn Second Crops

Rothamsted Research

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50/Bf/2.1

WOBURN MARKET GARDEN EXPERIMENT

Leeks and Winter Cabbages 2nd Crops of 9th year.

Organic manures and sulphate of ammonia - Lansome 1950-51.

System of replication: 2 series, one for each crop, each consisting of 4 randomized blocks of 10 plots, certain interactions being confounded with block differences.

Area of each plot: 0.0125 acre.

Treatments:

Organic manures applied to previous crops: Dung, sewage sludge compost, sewage sludge (West Middlesex), and vegetable compost, each of 15 and 30 tons per acre.

Sulphate of ammonia: None, 0.4 cwt N per acre on organic manure plots. None, 0.4, 0.8, 1.2 cwt N per acre on plots not receiving organic manures.

Basal manuring: None.

Cultivations, etc.:

Series B. Leeks.

Ploughed and harrowed: July 12. Sulphate of ammonia applied, plots having 0.8 and 1.2 cwt N receiving only half their dressings: July 13. Leeks planted and watered in: July 13-18. Cultivated: July 27. Hoed: July 31-Aug 2, Aug 9, 10, 12-16. 25-30, Sept 1-2, 4-8 and 11. Replanted where necessary: Aug 21 and Sept 1. Second dressing of sulphate of ammonia applied to plots having 0.8 and 1.2 cwt N: Nov 17. Lifted: Feb 13-Mar 28. Variety: Musselburgh. Previous crop: Peas.

Series A. Winter Cabbages.

Ploughed: July 27. Harrowed, rolled, sulphate of ammonia applied, plots having 0.8 and 1.2 cwt N receiving only half their dressings July 28. Cabbages planted and watered in: July 28-29. Replanted where necessary: Aug 8-9, 21 and Sept 21. Hoed: Aug 9-10 and Sept 2-4. Second dressing of sulphate of ammonia applied to plots having 0.8 and 1.2 cwt N: Nov 17. Lifted: Feb 23-Apr 10. Variety: January King. Previous crop: Globe Beet.

Standard errors per plot:

| | | |
|------------------|--------------------|--------------------------------------|
| Leeks, | total weight | 9.40 cwt per acre or 8.8% (17 d.f.) |
| | plant number: | 0.560 thousands per acre or 1.3% (") |
| Winter Cabbages, | marketable weight: | 0.662 tons per acre or 8.3% (") |
| | plant number: | 1.01 thousands per acre or 6.7% (") |

50/Bf/2.2

Summary of Results

Leeks

| Organic manures | Level of manuring tons per acre | Sulphate of Ammonia cwt N per acre | | | | Mean |
|-----------------|---------------------------------|------------------------------------|-----|-----|-----|------|
| | | None | 0.4 | 0.8 | 1.2 | |

Total weight: cwt per acre

| | | (±6.64) | | | | (±4.70) |
|-------------------|----|---------|-------|------|-------|---------|
| None | | 64.2 | 89.6 | 94.4 | 104.8 | 77.0* |
| Dung | 15 | 96.8 | 105.2 | | | 101.0 |
| | 30 | 104.8 | 119.4 | | | 112.1 |
| Sludge compost | 15 | 96.3 | 123.1 | | | 109.7 |
| | 30 | 117.9 | 117.9 | | | 117.9 |
| Sludge | 15 | 112.2 | 114.4 | | | 113.3 |
| | 30 | 129.4 | 129.9 | | | 129.6 |
| Vegetable compost | 15 | 93.2 | 115.2 | | | 104.2 |
| | 30 | 96.2 | 107.4 | | | 101.8 |

Plant number: thousands per acre

| | | (±0.40) | | | | (±0.28) |
|-------------------|----|---------|------|------|------|---------|
| None | | 43.2 | 42.5 | 42.4 | 42.8 | 42.8* |
| Dung | 15 | 42.6 | 43.4 | | | 43.0 |
| | 30 | 43.0 | 42.2 | | | 42.6 |
| Sludge compost | 15 | 42.3 | 42.8 | | | 42.6 |
| | 30 | 43.6 | 41.9 | | | 42.8 |
| Sludge | 15 | 43.0 | 42.8 | | | 42.9 |
| | 30 | 42.4 | 42.4 | | | 42.4 |
| Vegetable compost | 15 | 42.8 | 42.9 | | | 42.9 |
| | 30 | 42.6 | 43.0 | | | 42.8 |

* Mean over None and 0.4 cwt N per acre only.

50/Bf/2.3

Winter Cabbages

| Organic manures | Level of manuring tons per acre | Sulphate of Ammonia cwt N per acre | | | | Mean |
|-------------------|---------------------------------|------------------------------------|-------|------|------|-------------------|
| | | None | 0.4 | 0.8 | 1.2 | |
| | | Marketable weight: tons per acre | | | | |
| | | (± 0.468) | | | | (± 0.331) |
| None | | 3.70 | 5.90 | 7.47 | 8.15 | 4.80 [*] |
| Dung | 15 | 6.30 | 7.80 | | | 7.05 |
| | 30 | 8.02 | 9.24 | | | 8.63 |
| Sludge compost | 15 | 6.26 | 7.06 | | | 6.66 |
| | 30 | 7.52 | 10.64 | | | 9.08 |
| Sludge | 15 | 8.16 | 10.30 | | | 9.23 |
| | 30 | 11.57 | 10.67 | | | 11.12 |
| Vegetable compost | 15 | 5.60 | 7.71 | | | 6.65 |
| | 30 | 7.82 | 9.70 | | | 8.76 |

Plant number: thousands per acre

| | | (± 0.71) | | | | (± 0.51) |
|-------------------|----|----------------|------|------|------|-------------------|
| None | | 11.6 | 13.4 | 15.1 | 15.6 | 12.5 [*] |
| Dung | 15 | 14.6 | 15.5 | | | 15.1 |
| | 30 | 15.6 | 16.2 | | | 16.0 |
| Sludge compost | 15 | 13.7 | 14.9 | | | 14.3 |
| | 30 | 15.3 | 16.0 | | | 15.7 |
| Sludge | 15 | 14.8 | 16.2 | | | 15.5 |
| | 30 | 16.2 | 15.8 | | | 16.0 |
| Vegetable compost | 15 | 12.8 | 15.2 | | | 14.0 |
| | 30 | 15.2 | 16.6 | | | 15.9 |

*Mean over None and 0.4 cwt N per acre only.