

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 1958

[Full Table of Content](#)



58/W/BF/1 Market Garden Soil

Rothamsted Research

Rothamsted Research (1959) *58/W/BF/1 Market Garden Soil* ; Yields Of The Field Experiments 1958, pp 68 - 70 - DOI: <https://doi.org/10.23637/ERADOC-1-181>

58/Bf/1.1

WOBURN MARKET GARDEN EXPERIMENT

Organic manures and nitrogen - Lansome Field 1958, the 17th year.

For treatments etc., see "Details of the Classical and Long Term Experiments" 1956.

Note: The results for the 1958-59 leeks will be included in the 1959 report.

Area of each plot (acres): 0.0125. Area harvested: Leeks - 0.0104; globe beet - 0.0106; early potatoes - 0.0085.

Cultivations, etc.:

Leeks 1957-58. Organic manures applied: July 19, 1957. Ploughed: July 22. 'Nitro-Chalk' and basal fertilizers applied: July 23. Planted: July 24. Second dressing of 'Nitro-Chalk' applied: Sept 9. Harvested: Mar 3 - Apr 10, 1958. Variety: Musselburgh.

Early potatoes. Organic manures applied: Dec 16, 1957. All plots ploughed: Dec 19. Fertilizers applied on the flat: Apr 14, 1958. Machine planted: Apr 14. Earthed up: June 18. Sprayed with copper fungicide at 5 lb in 80 gallons per acre: July 14. Lifted: July 22. Variety: Arran Pilot.

Globe beet. Ploughed, organic manures applied: Apr 25, 1958. Ground chalk at 23 cwt per acre applied: Apr 30. 'Nitro-Chalk' and basal fertilizers applied: May 8. Seed drilled at 14 lb per acre: May 9. Sprayed with miscible DDT at 3 pints in 40 gallons per acre: May 28. Singled: June 25 - July 9. Second dressing of 'Nitro-Chalk' applied: July 16. Harvested: Aug 11 - Sept 18. Variety: Detroit.

Standard errors per plot:

| | | |
|-----------------|-------------------|--|
| Leeks 1957-58. | Saleable produce: | 0.423 tons per acre or 7.6% (17 d.f.) |
| Early potatoes. | Total tubers: | 0.892 tons per acre or 12.3% (17 d.f.) |
| Globe beet. | Saleable bulbs: | 1.45 tons per acre or 18.4% (17 d.f.) |

58/Bf/1.2

Summary of Results

| Organic manures | Level of manuring: tons per acre | N: cwt per acre | | | | Mean |
|-------------------|-------------------------------------|---------------------------------|-------------------|------|------|----------|
| | | None | 0.3 | 0.6 | 0.9 | |
| Leeks 1957-58. | | Saleable produce: tons per acre | | | | |
| | | (±0.299) | | | | (±0.211) |
| None | | 2.14 | 3.46 | 4.93 | 4.93 | 2.80* |
| Dung | 10 | 3.58 | 4.98 | | | 4.28 |
| | 20 | 6.18 | 6.59 | | | 6.38 |
| Sludge compost | 10 | 5.37 | 6.02 | | | 5.70 |
| | 20 | 6.22 | 7.02 | | | 6.62 |
| Sludge | 10 | 6.52 | 5.90 | | | 6.21 |
| | 20 | 6.34 | 6.89 | | | 6.61 |
| Vegetable compost | 10 | 4.48 | 5.93 | | | 5.20 |
| | 20 | 6.06 | 7.24 | | | 6.65 |
| Mean (±0.106) | | 5.59 ⁺ | 6.32 ⁺ | | | 5.54** |
| Leeks 1957-58. | | Percentage saleable (by number) | | | | |
| None | | 78.2 | 92.5 | 98.5 | 99.5 | 85.4* |
| Dung | 10 | 96.2 | 99.0 | | | 97.6 |
| | 20 | 98.1 | 98.8 | | | 98.4 |
| Sludge compost | 10 | 97.3 | 100.0 | | | 98.6 |
| | 20 | 100.0 | 97.7 | | | 98.9 |
| Sludge | 10 | 100.0 | 97.7 | | | 98.8 |
| | 20 | 97.8 | 100.0 | | | 98.9 |
| Vegetable compost | 10 | 98.3 | 99.4 | | | 98.8 |
| | 20 | 99.8 | 99.1 | | | 99.4 |
| Mean | | 98.4 ⁺ | 99.0 ⁺ | | | 97.4** |
| Early potatoes. | | Total tubers: tons per acre | | | | |
| | | (±0.630) | | | | (±0.446) |
| None | | 3.62 | 6.13 | 6.71 | 6.97 | 4.87* |
| Dung | 10 | 6.68 | 6.91 | | | 6.80 |
| | 20 | 7.49 | 8.57 | | | 8.03 |
| Sludge compost | 10 | 6.85 | 7.56 | | | 7.20 |
| | 20 | 8.03 | 9.02 | | | 8.52 |
| Sludge | 10 | 6.91 | 7.84 | | | 7.37 |
| | 20 | 8.86 | 8.24 | | | 8.55 |
| Vegetable compost | 10 | 6.12 | 7.72 | | | 6.92 |
| | 20 | 7.33 | 7.29 | | | 7.31 |
| Mean (±0.223) | | 7.28 ⁺ | 7.89 ⁺ | | | 7.24** |

* Mean over None and 0.3 cwt N per acre only.

⁺ Excluding 'no organics'.

** General mean.

58/Bf/1.3

Globe beet

| Organic manures | Level of manuring: tons per acre | N: cwt per acre | | | | Mean |
|---|-------------------------------------|--------------------|--------------------|------|------|---------------------|
| | | None | 0.3 | 0.6 | 0.9 | |
| Saleable bulbs: tons per acre | | | | | | |
| | | | (±1.024) | | | (±0.724) |
| None | | 1.12 | 2.28 | 4.41 | 4.20 | 1.70* |
| Dung | 10 | 3.79 | 7.14 | | | 5.46 |
| | 20 | 11.66 | 11.88 | | | 11.77 |
| Sludge compost | 10 | 7.61 | 8.51 | | | 8.06 |
| | 20 | 10.62 | 12.72 | | | 11.67 |
| Sludge | 10 | 9.70 | 7.71 | | | 8.71 |
| | 20 | 9.06 | 11.58 | | | 10.32 |
| Vegetable compost | 10 | 5.86 | 6.60 | | | 6.23 |
| | 20 | 8.33 | 12.28 | | | 10.31 |
| Mean (±0.362) | | 8.33 ⁺ | 9.80 ⁺ | | | 7.85 ^{**} |
| Total produce (whole plants): tons per acre | | | | | | |
| None | | 3.31 | 4.66 | 8.01 | 7.85 | 3.99* |
| Dung | 10 | 7.06 | 11.83 | | | 9.44 |
| | 20 | 18.52 | 19.82 | | | 19.17 |
| Sludge compost | 10 | 12.70 | 13.83 | | | 13.27 |
| | 20 | 17.10 | 21.40 | | | 19.25 |
| Sludge | 10 | 15.99 | 13.28 | | | 14.64 |
| | 20 | 15.35 | 19.62 | | | 17.48 |
| Vegetable compost | 10 | 9.65 | 11.04 | | | 10.34 |
| | 20 | 13.73 | 19.48 | | | 16.60 |
| Mean | | 13.76 ⁺ | 16.29 ⁺ | | | 13.21 ^{**} |
| Plant number: thousands per acre | | | | | | |
| None | | 101.2 | 88.8 | 99.3 | 98.6 | 95.0* |
| Dung | 10 | 98.6 | 103.9 | | | 101.3 |
| | 20 | 102.2 | 99.6 | | | 100.9 |
| Sludge compost | 10 | 101.0 | 94.4 | | | 97.7 |
| | 20 | 95.6 | 101.2 | | | 98.4 |
| Sludge | 10 | 100.3 | 99.8 | | | 100.0 |
| | 20 | 97.3 | 91.2 | | | 94.2 |
| Vegetable compost | 10 | 101.4 | 92.6 | | | 97.0 |
| | 20 | 99.9 | 98.5 | | | 99.2 |
| Mean | | 99.5 ⁺ | 97.6 ⁺ | | | 98.3 ^{**} |

* Mean over None and 0.3 cwt N per acre only.

⁺ Excluding 'no organics'.

** General mean.