

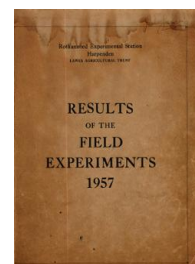
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Yields of the Field Experiments 1957

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57/W/BF/1 Market Garden Soil

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57/Bf/1.1

WOBURN MARKET GARDEN EXPERIMENT

Organic manures and nitrogen - Lansome 1957, the 16th year.

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

Note: The results for the 1957-58 leeks will be included in the 1958 report.

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

Cultivations, etc.:

Leeks 1956-57. Organic manures applied: July 27, 1956. Ploughed: July 28 - 30. 'Nitro-Chalk' and basal fertilizers applied: July 31. Planted: Aug 1 - 4. Second dressing of 'Nitro-Chalk' applied: Nov 12. Harvested: Mar 28, 1957 - May 2. Variety: Musselburgh.

Early potatoes. Organic manures applied, all plots ploughed: Jan 15, 1957. Fertilizers applied on the flat: Mar 29. Machine planted: Apr 1. Earthed up: Apr 26. Sprayed with dieldrin at $2\frac{1}{2}$ pints in 20 gallons per acre: June 14 (to act as bird deterrent). Lifted: July 15. Variety: Arran Pilot.

Globe beet. Ploughed: Aug 31, 1956. Organic manures applied, all plots ploughed: May 13, 1957. Ground chalk at 20 cwt per acre, 'Nitro-Chalk' and basal fertilizers applied: May 14. Seed drilled at 14 lb per acre: May 15. Sprayed with miscible DDT at 3 pints in 20 gallons per acre: June 6. Singled: June 24 - July 6. Second dressing of 'Nitro-Chalk' applied: July 10. Harvested: July 31 - Sept 5. Variety: Detroit.

Standard errors per plot:

| | | |
|-----------------|-------------------|---------------------------------------|
| Leeks 1956-57. | Saleable produce: | 1.36 tons per acre or 30.5% (17 d.f.) |
| Early potatoes. | Total tubers: | 0.425 tons per acre or 9.2% (17 d.f.) |
| Globe beet. | Saleable bulbs: | 1.08 tons per acre or 12.9% (17 d.f.) |

57/Bf/1.2

Summary of Results

Leeks 1956-57

| Organic manures | Level of manuring: tons per acre | N: cwt per acre | | | | Mean |
|---------------------------------|-------------------------------------|-------------------|-------------------|------|----------|-------|
| | | None | 0.3 | 0.6 | 0.9 | |
| Saleable produce: tons per acre | | | | | | |
| | | (±0.961) | | | (±0.679) | |
| None | | 3.37 | 4.19 | 4.91 | 2.41 | 3.78* |
| Dung | 10 | 2.38 | 5.43 | | | 3.91 |
| | 20 | 4.29 | 4.09 | | | 4.19 |
| Sludge compost | 10 | 5.38 | 4.57 | | | 4.97 |
| | 20 | 3.69 | 4.37 | | | 4.03 |
| Sludge | 10 | 5.50 | 5.01 | | | 5.25 |
| | 20 | 5.52 | 4.56 | | | 5.04 |
| Vegetable compost | 10 | 5.51 | 4.29 | | | 4.90 |
| | 20 | 5.25 | 4.47 | | | 4.86 |
| Mean (±0.340) | | 4.69 ⁺ | 4.60 ⁺ | | | 4.46 |

Percentage saleable (by number)

| | | | | | | |
|-------------------|----|-------------------|-------------------|------|------|-------|
| None | | 95.1 | 88.9 | 97.5 | 88.2 | 92.0* |
| Dung | 10 | 90.6 | 98.3 | | | 94.5 |
| | 20 | 96.7 | 95.9 | | | 96.3 |
| Sludge compost | 10 | 100.0 | 97.9 | | | 99.0 |
| | 20 | 97.1 | 99.4 | | | 98.2 |
| Sludge | 10 | 98.2 | 99.6 | | | 98.9 |
| | 20 | 99.8 | 98.0 | | | 98.9 |
| Vegetable compost | 10 | 99.2 | 96.9 | | | 98.1 |
| | 20 | 98.5 | 96.5 | | | 97.5 |
| Mean | | 97.5 ⁺ | 97.8 ⁺ | | | 96.6 |

Early potatoes

Total tubers: tons per acre

| | | | | | | |
|-------------------|----|-------------------|-------------------|------|----------|-------|
| | | (±0.300) | | | (±0.212) | |
| None | | 2.21 | 3.24 | 4.26 | 3.15 | 2.72* |
| Dung | 10 | 4.13 | 5.29 | | | 4.71 |
| | 20 | 5.81 | 5.70 | | | 5.76 |
| Sludge compost | 10 | 3.93 | 4.71 | | | 4.32 |
| | 20 | 5.06 | 5.32 | | | 5.19 |
| Sludge | 10 | 4.29 | 3.54 | | | 3.92 |
| | 20 | 4.51 | 5.50 | | | 5.00 |
| Vegetable compost | 10 | 4.81 | 4.77 | | | 4.79 |
| | 20 | 5.19 | 6.58 | | | 5.88 |
| Mean (±0.106) | | 4.72 ⁺ | 5.18 ⁺ | | | 4.60 |

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

⁺ Excluding 'no organics'.

57/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 | | | | | | |
| (±0.762) | | | | | | (±0.539) |
| None | | 2.26 | 3.33 | 5.57 | 6.08 | 2.80* |
| Dung | 10 | 8.52 | 8.75 | | | 8.64 |
| | 20 | 11.38 | 13.76 | | | 12.57 |
| Sludge compost | 10 | 7.37 | 9.31 | | | 8.34 |
| | 20 | 10.95 | 11.78 | | | 11.36 |
| Sludge | 10 | 5.91 | 6.83 | | | 6.37 |
| | 20 | 7.99 | 7.37 | | | 7.68 |
| Vegetable compost | 10 | 8.06 | 10.60 | | | 9.33 |
| | 20 | 10.21 | 11.30 | | | 10.76 |
| Mean (±0.270) | | 8.80 ⁺ | 9.96 ⁺ | | | 8.37 |
| Total produce (whole plants): tons per acre | | | | | | |
| None | | 5.00 | 6.39 | 10.06 | 11.39 | 5.69* |
| Dung | 10 | 13.43 | 14.32 | | | 13.88 |
| | 20 | 17.96 | 21.05 | | | 19.51 |
| Sludge compost | 10 | 12.55 | 15.83 | | | 14.19 |
| | 20 | 18.93 | 20.24 | | | 19.59 |
| Sludge | 10 | 11.00 | 12.46 | | | 11.73 |
| | 20 | 14.15 | 13.53 | | | 13.84 |
| Vegetable compost | 10 | 12.54 | 16.50 | | | 14.52 |
| | 20 | 15.34 | 17.20 | | | 16.27 |
| Mean | | 14.49 ⁺ | 16.39 ⁺ | | | 13.99 |
| Plant number: thousands per acre | | | | | | |
| None | | 84.8 | 81.5 | 91.4 | 85.1 | 83.1* |
| Dung | 10 | 99.9 | 95.1 | | | 97.5 |
| | 20 | 91.9 | 92.2 | | | 92.0 |
| Sludge compost | 10 | 89.1 | 87.4 | | | 88.2 |
| | 20 | 92.4 | 100.3 | | | 96.3 |
| Sludge | 10 | 85.9 | 87.0 | | | 86.4 |
| | 20 | 89.1 | 82.7 | | | 85.9 |
| Vegetable compost | 10 | 92.0 | 84.9 | | | 88.5 |
| | 20 | 91.7 | 95.9 | | | 93.8 |
| Mean | | 91.5 ⁺ | 90.7 ⁺ | | | 90.0 |

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

⁺Excluding no organics'.