

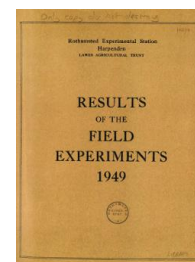
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# Yields of the Field Experiments 1949

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## 49/CF/1 Linseed - Rates and Application of Manures

*49/CF/1 Linseed - Rates and Application of Manures*, Rothamsted Research (1950) Yields Of The Field Experiments 1949, pp 89 - 90

49/Cf/1.1

## LINSEED

The effect of sulphate of ammonia and of rates and methods of application of two types of a PK compound fertilizer.

R/JL Great Knott I, 1949

System of replication: 2 replicates of 2 randomized blocks of 8 plots each, the third order interaction being confounded with block differences. To each block were added 4 plots without compound fertilizer, 2 of these receiving sulphate of ammonia and 2 being untreated.

Area of each plot: 0.0212 acre.

Treatments: All combinations of

Sulphate of ammonia: none, 0.3 cwt N per acre.

PK compound fertilizer: Granular (13%  $P_2O_5$ , 13%  $K_2O$ ) or equivalent powder of superphosphate and muriate of potash.

Rate 1,  $P_2O_5$  and  $K_2O$  each 0.3 cwt per acre or Rate 2,  $P_2O_5$  and  $K_2O$  each 0.6 cwt per acre. Broadcast or drilled.

Basal manuring: None.

Cultivations, etc.: Ploughed: Oct. Reploughed: Jan 14.

Springtined: Mar 2. Thistle barred: Mar 28. Seed and

fertilizer drilled: Apr 11. Sulphate of ammonia and broadcast fertilizers applied, harrowed and rolled in:

Apr 12. Sprayed with "Agroxone" to kill weeds: June 2.

Harvested: Aug 11.

Standard error per plot: Grain, 0.615 cwt per acre or 15.0%

## Responses to Treatments

| Response to                                                                  | Mean                           | Sulphate of ammonia<br>Abs. | Sulphate of ammonia<br>Pres. | Granular Powder                                        | PK mixture<br>Rate 1        | Rate 2                      | Broad-<br>cast             | Drilled                    |
|------------------------------------------------------------------------------|--------------------------------|-----------------------------|------------------------------|--------------------------------------------------------|-----------------------------|-----------------------------|----------------------------|----------------------------|
|                                                                              | ( $\pm 0.218$ )                |                             |                              | Grain: mean yield 4.11 cwt per acre<br>( $\pm 0.308$ ) |                             |                             |                            |                            |
| Sulphate of ammonia<br>Powder-Granular<br>Rate 2-Rate 1<br>Drilled-Broadcast | 0.26<br>0.07<br>-0.31<br>-0.66 | -<br>0.00<br>-0.59<br>-0.67 | -<br>0.14<br>-0.03<br>-0.65  | 0.19<br>-<br>-0.09<br>-0.75                            | 0.33<br>-<br>-0.53<br>-0.57 | -0.02<br>0.29<br>-<br>-0.12 | 0.25<br>-0.02<br>0.23<br>- | 0.27<br>0.16<br>-0.85<br>- |
|                                                                              |                                |                             |                              | Straw: mean yield 6.84 cwt per acre                    |                             |                             |                            |                            |
| Sulphate of ammonia<br>Powder-Granular<br>Rate 2-Rate 1<br>Drilled-Broadcast | 0.03<br>0.46<br>-0.85<br>-1.68 | -<br>0.24<br>-0.86<br>-1.72 | -<br>0.68<br>-0.84<br>-1.64  | -0.19<br>-<br>-0.60<br>-1.51                           | 0.25<br>-<br>-1.10<br>-1.85 | 0.02<br>0.71<br>-<br>-0.35  | -0.01<br>0.63<br>0.48<br>- | 0.07<br>0.29<br>-2.18<br>- |

## Plots without PK mixture

| Sulphate of ammonia<br>Abs. | Sulphate of ammonia<br>Pres. | Response                               | Mean |
|-----------------------------|------------------------------|----------------------------------------|------|
|                             |                              | Grain: cwt per acre<br>( $\pm 0.308$ ) |      |
| 4.24                        | 4.39                         | 0.15                                   | 4.31 |
|                             |                              | Straw: cwt per acre                    |      |
| 8.31                        | 7.64                         | -0.67                                  | 7.98 |

49/Gr/1.2