

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

Numerical Results of the Field Experiments 1969

[Full Table of Content](#)



69/R&W/BE/4 - Deep-drilled Fertiliser - Beans

Rothamsted Research

Rothamsted Research (1970) *69/R&W/BE/4 - Deep-drilled Fertiliser - Beans* ; Numerical Results Of The Field Experiments 1969, pp 284 - 286 - DOI: <https://doi.org/10.23637/ERADOC-1-96>

SPRING BEANS

(69/R/BE/4 and 69/W/BE/4)

Deep-drilled fertiliser - Rothamsted (R) Little Hoos and Woburn (W) Horsepool 1969.

Design: 4 randomised blocks of 7 plots.

Area of each plot: 0.0193. Area harvested: 5.5 in rows - 0.0133, 21 in rows - 0.0121.

Treatments: All combinations of:-

1. Space between rows of seed:
5.5 in. (sown by 'Tume' drill) (C),
21 in. (sown by 'Smythe' drill) (W).
2. Methods of applying fertiliser (0:14:28): Broadcast (B1), injected 3-4 in. deep in rows 5.5 in. apart by 'Tume' drill (D1).

Additional treatments:-

- WP1: Seed sown in rows 21 in. apart, with fertiliser placed near seed by 'Smythe' drill.
- CD2: Seed in rows 5.5 in. apart (by 'Tume' drill), fertiliser as above plus 1 cwt K2O as muriate of potash all deeply drilled.
- WD2: Fertilizer as CD2, but seed sown in rows 21 in. apart (by 'Smythe' drill).

- NOTES: (1). Rate of application of (0:14:28) 400 lb Little Hoos (R), 430 lb Horsepool (W).
- (2). On B plots fertiliser was broadcast by the 'Tume' drill, tines in, spouts out, 'crumblers' on.
- (3). On plots where seed and fertiliser were both sown by 'Tume' drill the two operations were separate ('crumblers' on both times).
- (4). On D2 plots the extra K was applied by the 'Tume' drill in a separate operation ('crumblers' off).
- (5). On P plots the 'Tume' drill was used once without fertiliser, tines in, 'crumblers' on.

Basal applications:

- Weedkillers: Little Hoos (R): Paraquat at 0.5 lb ion in 25 gals
Simazine at 1 lb in 20 gals.
Horsepool (W): Simazine at 1 lb in 25 gals.
- Insecticide: Little Hoos (R): Demeton-s-methyl at 3.5 oz in
37 gals.
Horsepool (W) : Demeton-s-methyl at 3.5 oz in
30 gals.

Cultivations, etc.:

Little Hoos (R): Paraquat applied: 11 Oct, 1968. Ploughed: 12 Nov. Fertilisers applied, seed drilled at 200 lb: 25 Mar, 1969. Simazine applied: 27 Mar. Insecticide applied: 21 June. Combine harvested: 5 Sept. Variety: Maris Bead. Previous crops: Spring wheat 1967 and 1968.

Horsepool (W): Ploughed: 2 Dec, 1968. Fertilisers applied, seed drilled at 200 lb: 2 Apr, 1969. Simazine applied: 4 Apr. Insecticide applied: 19 June. Combine harvested: 8 Sept. Variety: Maris Bead. Previous crops: Potatoes 1967, winter wheat 1968.

Standard errors per plot. Grain, cwt:

Little Hoos (R): 1.19 or 5.1% (18 d.f.)
Horsepool (W) : 1.20 or 5.9% (18 d.f.)

SUMMARY OF RESULTS

GRAIN:CWT

CB1	CD1	CD2	WB1	WD1	WD2	WP1	Mean
LITTLE HDOS (R)							
(±0.60)							
22.0	25.5	23.5	21.5	24.3	24.8	22.8	23.5

Mean D.M.%: 83.2

HDRSEPOOL (W)

(±0.60)

19.2	21.4	20.5	19.8	20.7	20.0	21.3	20.4
------	------	------	------	------	------	------	------

Mean D.M.%: 81.5