

POTATO FERTILIZER EXPERIMENT 1969EXPERIMENT:

Foliar feed on potatoes  
(Poliverdol)

SITE:

Deopham Green, Morley, Norfolk.

TREATMENTS AND LAYOUT: Randomised block with 6 replicates.

Poliverdol at 1.5 pints/acre applied 0,2,4,6 times.

PLOT SIZE:

Treatment: three 30in rows x 24 yds.

Harvest: two 30in/<sup>ROWS</sup> x 30ft.

MANURING OF EXPERIMENTAL CROP:

10 cwt 13:13:20 giving 130:130:200

PREVIOUS CROPPING:

1967 Barley  
1968 Vining Peas

CULTIVATIONS:

AS FARM CROP

PLANTING:

Date: 10 May

Seed: Pentland Crown

SPRAYING (1)

Date: 22 July

Weather during spraying: 22°C WSW breeze low humidity sunny

Equipment and method adopted: Oxford Precision Sprayer, 30 lb/in<sup>2</sup> 25 gal/ac  
Birchmeier nozzles 1.6-2F.

Order of spraying: As convenient 2,4,6 times

Chemicals: Poliverdol (Ex Midox) Proprietary mixture of trace  
elements and growth hormones

State of potatoes: flowering not meeting in rows 18 in tall x 15 in across

Potato counts:

Date: 22 October

Method: plant stations on 22 yds of row per plot

HARVEST:

Date: 12 November

SPRAYING (2)

Date: 28 July

Weather conditions during spraying: 20°C., slight SE breeze,  
high humidity and cloudy

Equipment and method adopted: Oxford Precision Sprayer 30lb/in<sup>2</sup>  
25 gal/ac

Birchmeier nozzles 1.6-2F

Order of spraying: as convenient treatments 2,4,6 times

Chemicals:

See spraying sheet (1)

State of potatoes: not meeting in rows

POTATO COUNTS:

Date: 22 October

Method: plant stations on 22 yd of row per plot

HARVEST:

Date 12 Nov.

SPRAYING (3)

Date: 4 August

Weather during spraying: 22<sup>o</sup>C, slight S breeze, moderate humidity,  
sunny spells

Equipment and method adopted: Oxford Precision Sprayer 30lb/in<sup>2</sup> 25gal/ac  
Birchmeier nozzles 1.6-2F

Order of spraying: C and D as convenient

Chemicals:

See spraying sheet (1)

State of potatoes: nearly meeting in rows

POTATO COUNTS:

Date: 22 October

Method: Plant stations on 22yd of row per plot

HARVEST:

Date: 12 November

SPRAYING (4)

Date: 12 August

Weather during spraying: cloudy with rain at times, breeze S force 5,  
moderate to high humidity

Equipment and method adopted: Oxford Precision Sprayer 30lb/in<sup>2</sup> 25gal/ac  
Birchmeier nozzles 1.6-2F.

Order of spraying: C & D as convenient

Chemicals:

See spraying sheet (1)

State of potatoes: meeting in rows

POTATO COUNTS:

Date: 22 October

Method: Plant stations on 22yd of row per plot

HARVEST:

Date: 12 November

SPRAYING (5)

Date: 19 August

Weather during spraying: 17°C, cloudy, slight SW breeze, moderate humidity  
and few rain spots

Equipment and method adopted: Oxford Precision Sprayer 25lb/in<sup>2</sup> 25gal/ac  
Birchmeier nozzles 1.6-673a

Order of spraying: D only

Chemicals

See spraying sheet (1)

State of potatoes: meeting in rows but only 18in tall

POTATO COUNTS:

Date: 22 October

Method: Plant stations on 22yd of row per plot

HARVEST:

Date: 12 November

SPRAYING (6)

Date: 27 August

Weather conditions during spraying: 12°C, cloudy with high humidity,  
NW breeze force 4

Equipment and method adopted: Oxford Precision Sprayer 25lb/in<sup>2</sup> 25gal/ac  
nozzles  
Birchmeier/ 1.6-673a

Order of spraying: D only

Chemicals:

See spraying sheet (1)

State of potatoes: Very little additional growth but still very green  
and free from blight

CONDITIONS AFTER SPRAYING:

	2	3	4	5	6	Total
Rainfall between sprayings (inches)	tr	1.72	0.02	0.72	0.80	3.26

POTATO COUNTS:

Date: 22 October

Method: Plant stations on 22yd of row per plot

HARVEST:

Date: 12 November

POLIVERDOL FOLIAR FEED ON POTATOES 1969

MORLEY, NORFOLK

TIMES OF APPLICATION rate = 1.5 pint/ac	YIELD PER PLANT OF TUBERS OVER 2 in. grams %	YIELD/PLANT OF TUBERS 1 1/2-2 in. grams %	YIELD/PLANT OF TUBERS 1 1/4-1 1/2 in. grams %	YIELD/PLANT TUBERS LESS THAN 1 1/4 in. grams %	YIELD/PLANT OF WARE grams %	YIELD/PLANT OF SEED grams %	YIELD/PLANT OF CHATS grams %	TOTAL YIELD PER PLANT grams %
0	883 100	348.8 100	47.9 100	15.5 100	1232 100	396.6 100	63.4 100	1295 100
2	821 93	305.2 88	40.5 85	10.8 70	1126 91	345.8 87	51.4 81	1177 91
4	828 94	355.0 102	39.8 83	13.1 85	1183 96	394.7 100	52.8 83	1236 95
6	772 87	319.8 92	43.1 90	12.0 77	1092 89	362.9 92	55.1 87	1147 89
Standard error	±59.6 ±6.7	±9.71 ±2.8	±3.20 ±6.7	±1.91 ±12.3	±56.1 ±4.6	±10.10 ±2.5	±3.59 ±5.7	±57.5 ±4.4
Standard error per plot	±146.0 or 17.67%	±23.79 or 7.16%	±7.84 or 18.30%	±4.69 or 36.44%	±137.3 or 11.86%	±24.73 or 6.59%	±8.79 or 15.78%	±140.8 or 11.60%



POLLIVERDOL FOLIAR FEED ON POTATOES 1969

MORLEY, NORFOLK

TIMES OF APPLICATION	PERCENTAGE TUBERS OVER 2in.	PERCENTAGE TUBERS 1½in-2in.	PERCENTAGE TUBERS 1¼in.-1½in.	PERCENTAGE TUBERS LESS THAN 1¼in.	PERCENTAGE WARE	PERCENTAGE SEED	PERCENTAGE CHATS
rate=1.5pint/a <sup>o</sup>	recorded %	recorded %	recorded %	recorded %	recorded %	recorded %	recorded %
0	67.11	100	100	1.3	95.0	31.6	100
2	69.35	102 <sup>3</sup>	94	1.0	95.5	29.7	94
4	67.07	100	86	1.1	95.7	31.9	101
6	67.44	100	103	1.0	95.2	31.5	100
Standard error	±1.710	±2.5	±5.5	±0.18	±0.30	±1.62	±0.30
Standard error per plot	±4.188 or 6.18%	±3.78 or 13.68%	±0.56 or 15.71%	±0.45 or 41.07%	±0.74 or 0.77%	±3.97 or 12.74%	±0.74 or 15.88%

POLIVERDOL FOLLAR FEED ON POTATOES 1969

MORLEY, NORFOLK

TIMES OF APPLICATION rate = 1.5 pint/ac	PLANT NUMBERS '000/ac %	YIELD OVER 2in. ton/ac %	YIELD 1½in.-2in. ton/ac %	YIELD 1¼in.-1½in. ton/ac %	YIELD LESS THAN 1¼in. ton/ac %	YIELD WARE OVER 1½in. ton/ac %	YIELD CHATS LESS THAN 1½in. ton/ac %	TOTAL YIELD ton/ac %
0	9.4 100	8.07 100	3.23 100	0.44 100	0.14 100	11.30 100	0.58 100	11.88 100
2	10.3 110	8.22 102	3.06 95	0.40 91	0.11 79	11.28 100	0.51 88	11.79 99
4	10.3 110	8.41 104	3.62 112	0.40 91	0.13 93	12.03 106	0.54 93	12.57 106
6	10.4 111	7.93 98	3.28 102	0.44 100	0.12 86	11.21 99	0.56 97	11.77 99
Standard error	±0.35 ±3.7	±0.418 ±5.2	±0.147 ±4.6	±0.029 ±6.6	±0.019 ±3.6	±0.357 ±3.2	±0.035 ±6.0	±0.366 ±3.1
Standard error per plot	±0.85 or 8.39%	±1.023 or 12.54%	±0.360 or 10.92%	±0.070 or 16.68%	±0.047 or 37.47%	±0.874 or 7.63%	±0.086 or 15.75%	±0.897 or 7.48%