

POTATO EXPERIMENT 1971

Site: Megg's Land,  
Morley, Norfolk.

EXPERIMENT

Blight control systems trial

TREATMENT AND LAYOUT

Randomised block with 6 replicates

- A. Antracol 2lb/ac  
 B. Antracol 2 lb/ac substituted by Du-ter 1½ lb/ac late in season  
 C. Du-ter 1½ lb/ac  
 D. Femite A 1½ lb/ac

PLOT SIZE

Treatment: Four 30in. rows x 20 yds.

Harvest: One 30in. row x 18 yds.

MANURING OF  
EXPERIMENTAL CROP:

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

PREVIOUS CROPPING

1969: Spring wheat

1970: Spring wheat

CULTIVATIONS:

29 March: Worked down with Triple K

PLANTING:

Date: 8 April

Seed: Maris Piper

Spraying (1)

Date: 29 June

Weather conditions during spraying:

17°C, slight W breeze, mod. humidity, sunny becoming cloudy later

Equipment and method adopted:

Van der Weij 2.2 kg/cm<sup>2</sup>  
Birchmeier nozzles 1.6-2F (very fine), 28 gal/ac

Chemicals:

Antracol (Ex Bayer) - 70% dispersible powder of propineb  
Du-ter (Ex Midox) - 20% fentin hydroxide  
Fennite A (Ex Fisons) - 6.5% fentin acetate + maneb

State of potatoes:

18in. tall meeting in rows, some flowering

Potato assessment:

Date: 31 August (blight seen on 13 August in trial)

Method: Assessment of specific levels of infection on foliage.

HARVEST:

Date: 15 November

Method: One 30in. row x 18 yds.

Spraying (2)

Date: 30 July

Weather conditions during spraying:

22°C, cloudless sky, S breeze force 3, mod. humidity

Equipment and method adopted:

Van der Weij 2.2 kg/cm<sup>2</sup>  
Birchmeier nozzles 1.6-2F, 28 gal/ac

Chemicals:

See (1.) above

State of potatoes:

Potatoes flowering, some seed pods. Tops crossing in rows.

Potato assessment:

Date: 31 August (blight seen on 13 August in trial)

Method: Assessment of specific levels of infection on foliage.

HARVEST:

Date: 15 November

Method: One 30in. row x 18 yds.

Spraying (3)

Date: 9 August

Weather conditions during spraying: 21°C, sunny spells, strong W breeze force 4-5, moderate-high humidity.

Equipment and method adopted: Van der Weij 2.2 kg/cm<sup>2</sup>  
Birchmeier nozzles 1.6-2F, 28 gal/ac

Chemicals: See Sheet 1

State of potatoes: Potatoes fully mature some senescence of bottom leaves

Potato assessment: Date: 31 August (blight seen on 13 Aug. in trial)  
Method: Assessment of specific levels of infection on foliage

HARVEST:

Date: 15 November

Method: One 30in. row x 18 yds.

Spraying (4)

Date: 18 August

Weather conditions during spraying: 19°C, high cloud, wind force 4, low humidity

Equipment and method adopted: Van der Weij 2.2 kg/cm<sup>2</sup>  
Birchmeier nozzles 1.6-2F 28 gal/ac

Chemicals: See sheet 1

State of potatoes: Beginning to senesce.

Potato assessment: Date: 31 August (blight seen on 13 Aug. in trial)  
Method: Assessment of specific levels of infection on foliage

HARVEST:

Date: 15 November

Method: One 30in. row x 18 yds.

TREATMENT (prod/ac)	YIELD TUBERS <1½ in. ton/ac	YIELD WARE TUBERS 1½-2½ in. ton/ac	YIELD WARE TUBERS > 2½ in. ton/ac	TOTAL WARE YIELD ton/ac	TOTAL YIELD ton/ac
Antracol 2 lb	0.32	5.47	7.20	12.67	12.99
Antracol early 2 lb	0.43	5.67	6.77	12.44	12.87
Duter 1½ lb	0.41	5.89	6.74	12.63	13.04
Fennite A 1½ lb	0.35 (±0.044)	6.01 (±0.255)	7.70 (±0.549)	13.71 (±0.653)	14.06 (±0.676)
Standard error per plot	±0.109 or 28.7%	±0.624 or 10.8%	±1.344 or 18.9%	±1.600 or 12.4%	±1.656 or 12.5%

BLIGHT CONTROL SYSTEMS TRIAL

MORLEY 1971

TREATMENT (prod/ac)	% BLIGHT INFECTION ON 31 AUGUST	YIELD TUBERS < 1½ in as % TOTAL YIELD	YIELD TUBERS 1½ in-2¼ in as % TOTAL YIELD	YIELD TUBERS > 2¼ in as % TOTAL YIELD	TOTAL WARE as % TOTAL YIELD	YIELD SMALL (< 2¼ in) as % TOTAL YIELD
Antracol 2 lb	60.8	2.5	42.3	55.2	97.5	44.8
Antracol early 2 lb	55.0	3.3	44.1	52.6	96.7	47.4
Du-ter 1½ lb	40.8	3.2	45.8	51.0	96.8	49.0
Femite A 1½ lb	64.2 (±7.09)	2.5 (±0.28)	43.1 (±1.96)	54.3 (±2.04)	97.5 (±0.28)	45.7 (±2.04)
Standard error per plot	±17.36 or 31.4%	±0.69 or 24.1%	±4.81 or 11.0%	±5.00 or 9.4%	±0.69 or 0.7%	±5.00 or 10.7%