

FIELD EXPERIMENTS 1965

Serial No. C I  
Stat. File 23 IV

Crop: Potatoes Field: Garden Pightle

Experiment: Periodic lifting.

Treatments and Layout: 4 randomised blocks with split plots

- Main:    chitted  
          unchitted
- Sub:     5 times of top removal
1. 26th July
  2. 5th August
  3. 16th August
  4. 25th August
  5. Maturity

Plot size: Treatment: 4 rows at 30 inches x 17 yards

Harvest: 2 rows at 30 inches x 15 yards

Manuring with dates of: 10 cwt 13 : 13 : 20 (2nd April)

Date of planting: 2nd April Variety: King Edward

Date of 1st blight spray:	29th June, (Dithane)	} by helicopter
Date of 2nd blight spray:	17th July, (Dithane)	
Date of 3rd blight spray:	31st July, (New Blitane)	
Date of harvesting:	28th October - Wild Bucher. 2 row lifter	
Date of riddling:	5th November. (2" x 1 1/2" riddles used)	

Previous cropping:

1964	Vining Peas
1963	Barley
1962	Sugar Beet

- Remark: 1. Trial not burnt off, maturity treatment left for blighted tuber assessment. Maturity - tops 'dead' by 13th September.
2. Emergence counts on 2 centre rows in Stats file 23 IV.
3. Unsprouted seed (Scotch) held in cold store at Terrington from 8th January to 31st March (under 40°F.)



Periodic Top Removal

Percentage of Yare over 2"

Time of Top Removal	Chitted	Unchitted	Mean Top Removal
26th July,	68.8	47.3	58.1
5th August	78.8	62.0	70.4
15th August	82.0	72.3	77.1
25th August	83.6	76.9	80.3
Maturity	83.1	80.1	81.6
Mean Seed Treatments	79.3	67.7	73.5

	S.E.	S.E. as % G.M.
Whole plots means (chitted v.s. unchitted)	+ - 0.43	1.2
Sub plot means (time of top removal)	+ - 1.26	4.8
Sub plots means at same whole plot level	+ - 1.78	
Sub plots means at different whole plot levels	+ - 1.65	

Potatoes Periodic Lifting Trial - 1965

Total Yield in tons per acre

Time of Top removal	chitted	Unchitted	Means Time of top removal
26th July	12.2	7.4	9.8
5th August	15.3	11.4	13.4
16th August	17.6	15.7	16.7
25th August	20.0	19.4	19.7
Maturity	21.5	20.4	20.9
Means Seed Treatment	17.3	14.9	

	S.E.	S.E. as % G.M.
Whole plot means (Chitted V.S. Unchitted)	+ - 0.40	4.9
Sub plot means (time of top removal)	+ - 0.60	10.6
Sub plot mean at same whole plot level	+ - 0.85	
Sub plot yields at different whole plot levels	+ - 0.86	

Periodic Top Removal

Yield of Ware over 1<sup>st</sup> in tons per acre

Time of Top Removal	Chitted	Unchitted	Top removal means
26th July	11.5	6.7	9.1
5th August	14.8	10.6	12.7
16th August	17.3	15.0	16.1
25th August	19.4	18.6	19.0
Maturity	20.9	19.5	20.2
Means Seed Treatment	16.8	14.1	

	S.E.	S.E. as % G.M.
Whole plot means (chitted v.s. unchitted)	+ - 0.35	4.5
Sub plot means (time of top removal)	+ - 0.60	10.9
Sub plot means at same whole plot level	+ - 0.84	
Sub plot means at different whole plot level	+ - 0.83	

Periodic Top Removal

Yield of Ware over 2" in tons per acre

Time of top removal	Chitted	Unchitted	Mean Top Removal
26th July	8.4	3.5	6.0
5th August	12.1	7.1	9.6
16th August	14.5	11.3	12.9
25th August	16.8	15.0	15.9
Maturity	17.8	16.3	17.1
Means Seed treatment	13.9	10.6	12.3

	S.E.	S.E. as % G.M.
Whole plot means (Chitted v.s. unchitted)	+ - 0.33	5.4
Sub plot means (Time of top removal)	+ - 0.48	11.0
Sub plot means at same whole plot level	+ - 0.68	
Sub plot means at different whole plot levels	+ - 0.69	

Periodic Top Removal

Percentage of #are over 1 1/2"

Time of top removal	Chitted	Unchitted	Means Top removal
26th July	94.0	89.9	92.0
5th August	96.4	92.5	94.4
16th August	97.8	95.6	96.7
25th August	97.1	95.9	96.5
Maturity	97.1	95.9	96.5
Mean Seed Treatment	96.5	94.0	95.2

	S.E.	S.E. as % G.M.
Whole plot means (chitted v.s. unchitted)	+ - 0.23	0.5
Sub plot means (time of top removal)	+ - 0.55	1.6
Sub plot means at same whole plot level	+ - 0.77	
Sub plot means at different whole plot level	+ - 0.75	

Potatoes Periodic Lifting Trial

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Percentage of diseased tubers over 1 1/2"

Time of Top Removal	Chitted	Unchitted
26th July	10.8	9.7
5th August	5.9	10.0
16th August	5.0	6.1
25th August	4.9	4.1
Maturity	4.4	2.2

The pattern of results is contrary to what may be expected in practice.  
See Stat. File 23 IV.