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 readible, or you suspect there are some problems, please let us know and we will correct that.



# Yields of the Field Experiments 1987



Full Table of Content

## **Potatoes**

## **Rothamsted Research**

Rothamsted Research (1988) *Potatoes*; Yields Of The Field Experiments 1987, pp 254 - 267 - **DOI:** https://doi.org/10.23637/ERADOC-1-37

## 87/R/P/1 and 87/W/P/1

#### POTATOES

## VARIETIES

Object: To compare the quality and yield of some of the newer varieties of potato with current standards on two soil types - Rothamsted Little Hoos (R), Woburn Horsepool Lane Close West (W).

Sponsor: R. Moffitt.

Design: 4 randomised blocks of 7 plots.

Whole plot dimensions: 3.0 x 6.1.

#### Treatments:

VARIETY	Varieties:		
CARA	Cara		
CROWN	Pentland Crown		
DESIREE	Desiree		
ESTIMA	Estima		
KINGSTON	Kingston		
ROMANO	Romano		
WILJA	Wilja		

## Basal applications:

Little Hoos (R): Manures: (0:18:36) at 690 kg. Chalk at 5 t. FYM at 35 t. (10:10:15+4.5 Mg) at 1960 kg. Weedkillers: Linuron at 1.7 kg with paraquat at 0.50 kg ion in 500 l. Fungicides: Mancozeb at 1.4 kg in 200 l on four occasions applied with the insecticide on the second occasion. Fentin hydroxide at 0.28 kg in 200 l on two occasions. Insecticide: Pirimicarb at 0.14 kg. Desiccant: Diquat at 0.80 kg ion in 300 l.

Horsepool Lane Close West (W): Manures: (0:18:36) at 690 kg. (10:10:15+4.5 Mg) at 2290 kg. Weedkillers: Glyphosate at 1.4 kg in 200 l. Linuron at 1.7 kg in 200 l. Fungicides: Mancozeb at 1.4 kg in 200 l on four occasions applied with the insecticide on the second occasion. Fentin hydroxide at 0.28 kg in 200 l on two occasions. Insecticide: Pirimicarb at 0.14 kg. Desiccant: Diquat at 0.80 kg ion in 200 l.

## Cultivations, etc.:-

Little Hoos (R): PK applied: 17 Sept, 1986. Chalk applied: 24 Sept. FYM applied: 12 Nov. Ploughed: 17 Nov. NPK Mg applied: 14 Apr, 1987. Rotary harrowed and ridged: 21 Apr. Potatoes hand planted, split back: 22 Apr. Ridged: 29 Apr. Weedkillers applied: 8 May. Mancozeb applied: 24 June, 8 July, 28 July, 10 Aug. Fentin hydroxide applied: 28 Aug, 9 Sept. Insecticide applied: 8 July. Desiccant applied: 21 Sept. Haulm mechanically destroyed: 26 Sept. Lifted: 25 Nov. Previous crops: W. barley 1985, oilseed rape 1986.

## 87/R/P/1 and 87/W/P/1

Cultivations, etc.:-Horsepool Lane Close West (W): PK applied: 16 Sept, 1986. Glyphosate applied: 19 Sept. Ploughed: 12 Nov. NPK Mg applied: 22 Apr, 1987. Rotary cultivated, ridged, potatoes hand planted, split back: 28 Apr. Rotary ridged: 15 May. Linuron applied: 25 May. Mancozeb applied: 29 June, 8 July, 26 July, 5 Aug. Fentin hydroxide applied: 18 Aug, 4 Sept. Insecticide applied: 8 July. Desiccant applied: 18 Sept. Haulm mechanically destroyed: 1 Oct. Lifted: 6 Nov. Previous crops: W. wheat 1985, w. oats 1986.

## 87/R/P/1

TOTAL TUBERS TONNES/HECTARE

\*\*\*\* Tables of means \*\*\*\*

VARIETY	
CARA	45.8
CROWN	37.6
DESIREE	37.9
ESTIMA	43.4
KINGSTON	33.3
ROMANO	31.5
WILJA	37.8
Mean	38.2

\*\*\* Standard errors of differences of means \*\*\*

VARIETY Table 3.69 s.e.d.

\*\*\*\* Stratum standard errors and coefficients of variation \*\*\*\*

d.f. s.e. CV% Stratum BLOCK . WP 18 5.22 13.7

PERCENTAGE WARE 3.81 CM (1.5 INCH) RIDDLE

\*\*\*\*\* Tables of means \*\*\*\*\*

VARIETY CARA 92.7 96.2 CROWN DESIREE 95.5 ESTIMA 92.9 93.0 KINGSTON ROMANO 95.6 WILJA 90.2

Mean 93.7

PLOT AREA HARVESTED 0.00091

```
87/W/P/1
TOTAL TUBERS TONNES/HECTARE
***** Tables of means *****
      VARIETY
         CARA
                   42.0
                   40.8
        CROWN
      DESIREE
                   26.0
                   37.0
       ESTIMA
                   39.1
     KINGSTON
       ROMANO
                   34.0
        WILJA
                   32.9
                   35.9
         Mean
*** Standard errors of differences of means ***
                   VARIETY
Table
                      5.04
s.e.d.
**** Stratum standard errors and coefficients of variation ****
Stratum
                   d.f.
                                 s.e.
                                               CV%
BLOCK . WP
                     18
                                 7.13
                                              19.8
PERCENTAGE WARE 4.44CM (1.75 INCH) RIDDLE
***** Tables of means *****
      VARIETY
         CARA
                   83.4
        CROWN
                   85.9
      DESIREE
                   82.5
       ESTIMA
                   85.5
     KINGSTON
                   86.1
```

PLOT AREA HARVESTED 0.00091

86.8 79.0

84.2

ROMANO

WILJA

Mean

#### POTATOES

#### SEED HEALTH PROGENY

Object: To compare the health and yield of two varieties of potatoes grown once or twice for seed at Rothamsted under three sets of treatments with the same varieties grown to AA standard in Scotland in 1986 - Bones Close.

Sponsors: R.W. Gibson, G.A. Hide, R. Harrington.

Design: 4 randomised blocks of 28 plots.

Whole plot dimensions: 1.5 x 19.0.

Treatments: All combinations of:-

VARIETY

Varieties:

**EDWARD** PIPER

King Edward Maris Piper

2. ROTHGROW

Frequency of cropping at Rothamsted:

ONCE

In 1986 only from Scottish FS seed

TWICE

In 1985 and 1986, from Scottish FS seed in 1985

PATHCONT[86]

Pest and pathogen control in 1985, to ROTHGROW TWICE only, and in 1986 to ROTHGROW ONCE and TWICE (in

addition to basals):

STANDARD

1985 and 1986: Plants with virus symptoms were removed in June.

ENHANCED

1985 and 1986: Seed treatment with tolclofos methyl at 0.24 kg and imazalil at 0.01 kg per tonne of tubers, applied by hydraulic and uncharged electrostatic sprayers respectively. Cypermethrin at 0.04 kg with 7.0 l oil in 500 l applied by hydraulic sprayer on 14 June, 1985, and on 13 and 19 June, 1986. Plants with virus symptoms were removed in June 1985 and 1986.

FULL

1985: As for ENHANCED 1985, plus:-The imazalil was applied by charged electrostatic sprayer. Cypermethrin at 0.04 kg with 7.0 l oil in 500 l was also applied on 28 June, 11 July, 26 July and (to HAULM D LATER plots only) 14 Aug.

1986: As for ENHANCED 1986, plus:-The imazalil was applied by charged electrostatic sprayer. Cypermethrin at 0.04 kg with oil at 7.0 1 in 500 1 was also applied on 3 July, 18 July, 1 Aug, 19 Aug and (to HAULM D LATER plots only) 4 Sept.

4. HAULM D[86] Dates of destroying haulm and of lifting in 1985 to ROTHGROW TWICE only and in 1986 to ROTHGROW ONCE and TWICE:

EARLY 1985: Haulm mechanically destroyed, 12 Aug. Haulm desiccant applied 14 Aug and potatoes lifted

1986: Haulm desiccant applied 29 Aug. Haulm mechanically destroyed 16 Sept and potatoes lifted

mechanically destroyed 16 Sept and potatoes lifted 23 Sept.

LATER 1985: Haulm mechanically destroyed 4 Sept. Haulm desiccant applied 5 Sept and potatoes lifted

desiccant applied 5 Sept and potatoes lifted 11 Oct.

1986: Haulm mechanically destroyed 25 Sept. Haulm desiccant applied 27 Sept and potatoes lifted 13 Oct.

plus two extra treatments:

SCOTS AA

KE SAA King Edward Scottish AA seed bought in 1987 (duplicated)
MP SAA Maris Piper Scottish AA seed bought in 1987 (duplicated)

- NOTES: (1) Basal pest and pathogen control in 1985 (to ROTHGROW TWICE only) was phorate at 1.7 kg with the seed and mancozeb at 1.4 kg in 200 l on five occasions applied with pirimicarb at 0.14 kg on all but the first occasion.
  - (2) Basal pest and pathogen control in 1986 was phorate at 1.7 kg with the seed, mancozeb at 1.4 kg in 200 l on four occasions with pirimicarb at 0.14 kg on each occasion and (to HAULM D LATER plots only) fentin hydroxide at 0.28 kg in 200 l on two occasions applied with pirimicarb at 0.14 kg on the first.
- Basal applications: Manures: FYM at 35 t. (0:18:36) at 690 kg. (10:10:15+4.5 Mg) at 1960 kg. Weedkillers: Linuron at 1.6 kg and paraquat at 0.50 kg ion in 500 l. Fungicides: Mancozeb at 1.4 kg in 200 l on four occasions, applied with the pirimicarb on the second occasion. Fentin hydroxide at 0.28 kg in 200 l on two occasions. Insecticide: Pirimicarb at 0.14 kg. Haulm desiccant: Diquat at 0.80 kg ion in 300 l.
- Cultivations, etc.:- (0:18:36) applied: 28 Oct, 1986. FYM applied: 11 Nov. Ploughed: 21 Nov. (10:10:15+4.5 Mg) applied: 13 Apr, 1987. Rotary harrowed: 20 Apr. Potatoes planted by hand: 21 Apr. Rotary ridged: 27 Apr. Weedkillers applied: 8 May. Mancozeb applied: 24 June, 8 July, 28 July and 10 Aug. Pirimicarb applied: 8 July. Fentin hydroxide applied: 28 Aug, 9 Sept. Haulm desiccant applied: 21 Sept. Haulm mechanically destroyed: 26 Sept. Lifted: 29 Oct. Previous crops: S. barley 1985, w. beans 1986.

NOTE: Viruses were assessed during the season. Tuber samples were taken at harvest to assess storage diseases.

87/R/P/2

## TOTAL TUBERS TONNES/HECTARE

\*\*\*\* Tables of means \*\*\*\*

**** lables of	means ~~~			
ROTHGROW	ONCE	TWICE	Mean	
V AR IETY EDWARD	76.4	77.9	77.1 82.9	
PIPER	84.6	81.2	02.9	
Mean	80.5	79.5	80.0	
PATHCONT[86] VARIETY	STANDARD	ENHANCED	FULL	Mean
EDWARD PIPER	76.9 83.3		77.7 83.0	77.1 82.9
Mean	80.1	79.5	80.4	80.0
PATHCONT[86] ROTHGROW	STANDARD	ENHANCED	FULL	Mean
ONCE TWICE	80.8 79.4	80.4 78.7	80.2 80.5	80.5 79.5
Mean	80.1	79.5	80.4	80.0
HAULM D[86] VARIETY	EARLY	LATER	Mean	
EDWARD PIPER	78.5 83.3	75.8 82.4	77.1 82.9	
Mean	80.9	79.1	80.0	
HAULM D[86] ROTHGROW	EARLY	LATER	Mean	
ONCE TWICE	81.4 80.4	79.5 78.6	80.5 79.5	
Mean	80.9	79.1	80.0	
HAULM D[86]	EARLY	LATER	Mean	
STANDARD ENHANCED	81.3 80.0		80.1 79.5	
FULL	81.4	79.3	80.4	
Mean	80.9	79.1	80.0	
VARIETY	PATHCONT[8 ROTHGR		ENHANCED	FULL
EDWARD	ON	CE 76.5	76.8	75.9
PIPER	TWI ON TWI	CE 85.2	77.0 84.0 80.4	79.5 84.5 81.5
	14.0.1			

TOTAL TUBERS TONNES/HECTARE

\*\*\*\*\* Tables of means \*\*\*\*\*

VARIETY	HAULM D[86] ROTHGROW	EARLY	LATER	
EDWARD	ONCE	77.3	75.5	
	TWICE	79.7	76.1	
PIPER	ONCE	85.6	83.5	
	TWICE	81.1	81.2	
VARIETY	HAULM D[86] PATHCONT[86]	EARLY	LATER	
EDWARD	STANDARD	80.2	73.5	
	ENHANCED	77.1	76.7	
	FULL	78.2	77.1	
PIPER	STANDARD	82.3	84.3	
	ENHANCED	83.0	81.3	
	FULL	84.6	81.5	
ROTHGROW	HAULM D[86] PATHCONT[86]	EARLY	LATER	
ONCE	STANDARD	82.4	79.3	
	ENHANCED	80.8	80.0	
	FULL	81.1	79.3	
TWICE	STANDARD	80.2	78.5	
	ENHANCED	79.3	78.1	
	FULL	81.7	79.3	
		HAULM D[86]	EARLY	LATER
VARIETY		PATHCONT[86]		
EDWARD	ONCE	STANDARD	80.1	72.9
		ENHANCED	75.9	77.7
		FULL	75.9	75.9
	TWICE	STANDARD	80.4	74.1
		ENHANCED	78.2	75.8
חזחדה	ONOF	FULL	80.6	78.4
PIPER	ONCE	STANDARD	84.6	85.7
		ENHANCED	85.7	82.3
	TUTOE	FULL	86.4	82.6
	TWICE	STANDARD	80.0	83.0
		ENHANCED	80.4	80.4
		FULL	82.8	80.3
SCOTS AA K	E SAA MP S	AA Mean		
		.3 72.9		
Grand mean	79.0			

BLOCK . WP

## TOTAL TUBERS TONNES/HECTARE

\*\*\* Standard errors of differences of means \*\*\*

Table s.e.d.	VARIETY 0.71	ROTHGROW 0.71	PATHCONT[86] 0.87	HAULM D[86] 0.71
Table	VARIETY	VARIETY PATHCONT[86]	ROTHGROW	VARIETY HAULM DE867
s.e.d.	1.01	1.23	1.23	1.01
Table	ROTHGROW HAULM D[86]	PATHCONT[86] HAULM D[86]	VARIETY ROTHGROW PATHCONT[86]	VARIETY ROTHGROW HAULM D[86]
s.e.d.	1.01	1.23	The state of the s	1.42
Table	VARIETY PATHCONT[86] HAULM D[86]	ROTHGROW PATHCONT[86] HAULM D[86]		SCOTS AA
s.e.d.	1.74	1.74		1.74
**** Stratum	standard err	ors and coeffi	cients of var	iation *****
Stratum	d.f.	s.e.	cv%	

3.48

4.4

83

87/R/P/2
PERCENTAGE WARE 4.44 CM (1.75 INCH) RIDDLE
\*\*\*\*\* Tables of means \*\*\*\*\*

and lables	or means **	***		
ROTHGROV		TWICE	Mean	
VARIETY	1			
EDWARD	81.9	81.3	81.6	
PIPER			83.6	
		00.0	03.0	
Mear	82.8	82.4	82.6	
ricar	. 02.0	02.4	02.0	
DATHCONTEGE	STANDARD	ENUMBER	F	
		ENHANCED	FULL	Mean
VARIETY				
EDWARD		80.1	82.7	81.6
PIPER	83.6	82.5	84.6	83.6
Mean	82.8	81.3	83.6	82.6
PATHCONT[86]	STANDARD	ENHANCED	FULL	Mean
ROTHGROW			IOLL	rican
ONCE		81.9	83.8	00 0
TWICE				82.8
IMICE	03.0	80.7	83.4	82.4
Wasa	00.0			
Mean	82.8	81.3	83.6	82.6
HAULM D[86]		LATER	Mean	
VARIETY				
EDWARD	82.3	81.0	81.6	
PIPER		83.7	83.6	
	00.0	00.7	03.0	
Mean	82.9	82.3	82.6	
· icuii	02.5	02.5	02.0	
HAULM D[86]	EADI V	LATER	W	
	EARLY	LATER	Mean	
ROTHGROW				
ONCE	83.5	82.1	82.8	
TWICE	82.2	82.6	82.4	
Mean	82.9	82.3	82.6	
			02.00	
HAULM D[86]	EARLY	LATER	Mean	
PATHCONT[86]	221	LATER	rican	
STANDARD	83.8	81.9	02 0	
ENHANCED	81.1		82.8	
		81.5	81.3	
FULL	83.7	83.5	83.6	
			//E/CSIP 11.00	
Mean	82.9	82.3	82.6	
	PATHCONT[86]		ENHANCED	FULL
VARIETY	ROTHGROU	N		
EDWARD	ONCE	82.3	81.1	82.3
	TWICE			83.1
PIPER	ONCE			85.4
	TWICE			
	IWICE	04.2	02.4	83.8

87/R/P/2

PERCENTAGE WARE 4.44 CM (1.75 INCH) RIDDLE

\*\*\*\* Tables of means \*\*\*\*

	HAULM D[86]	EARLY	LATER	
VARIETY EDWARD	ROTHGROW ONCE TWICE	82.9 81.6	80.9 81.0	
PIPER	ONCE	84.2 82.8	83.2 84.2	
	HAULM D[86]	EARLY	LATER	
VARIETY EDWARD	PATHCONT[86] STANDARD ENHANCED	84.0 79.9	80.1 80.3	
PIPER	FULL	82.9 83.5	82.5 83.7	
	ENHANCED FULL	82.3 84.6	82.8 84.6	
DOTUCDOM	HAULM D[86] PATHCONT[86]	EARLY	LATER	
ONCE	STANDARD ENHANCED	84.1 82.9	81.3 80.8	
TWICE	FULL STANDARD	83.5 83.4 79.3	84.1 82.5 82.2	
	ENHANCED FULL	83.9	83.0	
VARIETY		HAULM D[86] PATHCONT[86]	EARLY	LATER
EDWARD	ONCE	STANDARD ENHANCED FULL	84.2 82.1 82.4	80.5 80.2 82.1
	TWICE	STANDARD ENHANCED	83.9 77.7	79.7 80.4
PIPER	ONCE	FULL STANDARD ENHANCED	83.3 84.1 83.8	82.8 82.0 81.5
	TWICE	FULL STANDARD	84.7 83.0	86.1 85.4
		ENHANCED FULL	80.8 84.5	84.0 83.1
SCOTS AA	KE SAA MP 84.8 8	SAA Mean 5.1 84.9		

Grand mean 82.9

PLOT AREA HARVESTED 0.00286

## 87/W/P/2

#### POTATOES

## VARIETIES AND CONTROL OF GLOBODERA PALLIDA

Object: To study the effects of rates of nematicide on seven varieties of potato differing in their resistance to the pale cyst nematode (Globodera pallida) - Woburn Far Field II.

Sponsor: A.G. Whitehead.

Design: 3 randomised blocks of 21 plots.

Whole plot dimensions:  $3.0 \times 4.6$ .

Treatments: All combinations of:-

1. VARIETY Varieties:

CAXTON DESIREE FINGAL

GLENNA MORAG

ROMANO SANTE

2. OXAMYL Rates of oxamyl (kg):

0.0

2.8

5.6

Basal applications: Manures: (10:10:15+4.5 Mg) at 2290 kg. Weedkiller: Linuron at 1.6 kg in 200 l. Fungicides: Mancozeb at 1.4 kg in 200 l on four occasions applied with the insecticide on the second. Fentin hydroxide at 0.28 kg in 200 l on two occasions. Insecticide: Pirimicarb at 0.14 kg. Desiccant: Diquat at 0.80 kg ion in 200 l.

Cultivations, etc.:- Spring-tine cultivated: 30 Jan, 1987 and 16 Feb. NPK Mg applied: 22 Apr. Oxamyl applied, rotary cultivated and potatoes planted: 28 Apr. Rotary ridged: 15 May. Weedkiller applied: 25 May. Mancozeb applied: 24 June, 26 July, 5 Aug. Mancozeb and pirimicarb applied: 8 July. Fentin hydroxide applied: 18 Aug, 4 Sept. Desiccant applied: 18 Sept. Haulm mechanically destroyed: 1 Oct. Lifted: 5 Oct. Previous crops: Potatoes 1985 and 1986.

NOTE: Soil samples were taken before applying nematicide and after harvest for cyst and egg counts of G. pallida.

## 87/W/P/2

TOTAL TUBERS TONNES/HECTARE

\*\*\*\*\* Tables of means \*\*\*\*\*

OVAMVI	0.0	0.0		
OXAMYL	0.0	2.8	5.6	Mean
VARIETY				
CAXTON	42.2	52.4	49.7	48.1
DESIREE	29.4	50.1	51.7	43.7
FINGAL	45.9	65.7	64.6	58.7
GLENNA	47.9	59.3	58.8	55.3
MORAG	46.2	56.1	58.7	53.7
ROMANO	18.4	40.9	44.4	34.6
SANTE	31.1	53.9	48.7	44.5
Mean	37.3	54.1	53.8	48.4

\*\*\* Standard errors of differences of means \*\*\*

Table	VARIETY	OXAMYL	VARIETY
			OXAMYL
s.e.d.	3.36	2.20	5.81

\*\*\*\*\* Stratum standard errors and coefficients of variation \*\*\*\*\*

Stratum	d.f.	s.e.	cv%
BLOCK . WP	40	7.12	14.7

## PERCENTAGE WARE 4.44CM (1.75 INCH) RIDDLE

\*\*\*\* Tables of means \*\*\*\*

OXAMYL	0.0	2.8	5.6	Mean
VARIETY CAXTON	93.7	87.5	87.7	89.6
DESIREE	85.3	95.2	92.0	90.8
FINGAL	91.1	95.5	93.2	93.3
GLENNA	97.1	96.7	95.9	96.5
MORAG	91.3	92.5	92.8	92.2
ROMANO	86.7	93.7	94.1	91.5
SANTE	91.1	94.8	93.0	93.0
Mean	90.9	93.7	92.7	92.4

PLOT AREA HARVESTED 0.00070

#### POTATOES

#### EFFECTS OF SEED TUBER TREATMENTS

Object: To study the effects of seed tuber health, size and fungicide treatment on crop growth, yield and quality of potatoes after storage - Little Hoos.

Sponsor: K.J. Boorer.

Design: 3 randomised blocks of 8 plots.

Whole plot dimensions:  $6.0 \times 12.2$ .

Treatments: All combinations of:-

1. SEED STK

Seed stock:

STOCK A STOCK B

2. SIZE

Size of seed tubers:

SMALL LARGE 25 - 55 g 100 - 160 g

3. FUNGCIDE

Fungicide to seed tubers:

NONE

None

TOL+IMAZ

Tolclofos methyl plus imazalil

NOTES: (1) The fungicide treatments were applied as a dip in a mixture containing 0.5 % tolclofos methyl and 0.05 % imazalil.

- (2) It was intended that on STOCK A there would be few tuber borne diseases at planting and on STOCK B many. In practice the differences were slight and varied with particular pathogens.
- Basal applications: Manures: Chalk at 5.0 t. FYM at 35 t. (0:18:36) at 690 kg. (10:10:15+4.5 Mg) at 1960 kg. Weedkillers: Linuron at 1.6 kg with paraquat at 0.50 kg ion in 500 l. Fungicides: Mancozeb at 1.4 kg in 200 l on four occasions, applied with the pirimicarb on the second occasion. Fentin hydroxide at 0.28 kg in 200 l on two occasions. Insecticide: Pirimicarb at 0.14 kg. Desiccant: Diquat at 0.80 kg ion in 300 l.

Seed: Estima.

Cultivations, etc.:- (0:18:36) applied: 17 Sept, 1986. Chalk applied: 24 Sept. FYM applied: 12 Nov. Ploughed: 17 Nov. (10:10:15+4.5 Mg) applied: 14 Apr, 1987. Rotary harrowed: 21 Apr. Potatoes planted: 22 Apr. Rotary ridged: 29 Apr. Weedkillers applied: 8 May. Mancozeb applied: 24 June, 28 July and 10 Aug. Mancozeb and pirimicarb applied: 8 July. Fentin hydroxide applied: 28 Aug, 9 Sept. Desiccant applied: 21 Sept. Haulm mechanically destroyed: 26 Sept. Lifted: 28 Sept and 10 Nov. Previous crops: W. barley 1985, w. oilseed rape 1986.

NOTE: Emergence and ground cover percentages were recorded. Samples were taken on six occasions, from late June to early September, for measurements of haulm weight, leaf area, weight and disease assessments of stem bases and tubers.

## TOTAL TUBERS TONNES/HECTARE

\*\*\*\*\* Tables of means \*\*\*\*\*

SIZE SEED STK	SMALL	LARGE	Mean
STOCK A STOCK B	65.3 58.1	57.9 57.4	61.6 57.7
Mean	61.7	57.6	59.7
FUNGCIDE SEED STK	NONE	TOL+IMAZ	Mean
STOCK A	60.8	62.4	61.6
STOCK B	56.7	58.8	57.7
Mean	58.7	60.6	59.7
FUNGCIDE SIZE	NONE	TOL+IMAZ	Mean
SMALL	62.9	60.5	61.7
LARGE	54.6	60.7	57.6
Mean	58.7	60.6	59.7
0555 AT	FUNGCI		TOL+IMAZ
SEED STK		ZE	C4 C
STOCK A	SMA		
STOCK B	SMA		
JIOUN D	LAR		

\*\*\* Standard errors of differences of means \*\*\*

Table	SEED STK	SIZE	FUNGCIDE	SEED STK SIZE
s.e.d.	2.56	2.56	2.56	3.63
Table	SEED STK FUNGCIDE	SIZE FUNGCIDE	SEED STK SIZE FUNGCIDE	
s.e.d.	3.63	3.63	5.13	

\*\*\*\* Stratum standard errors and coefficients of variation \*\*\*\*

Stratum	d.f.	s.e.	cv%
BLOCK . WP	14	6.28	10.5

PLOT AREA HARVESTED SIZE SMALL 0.00018 PLOT AREA HARVESTED SIZE LARGE 0.00030 PERCENTAGE WARE NOT RECORDED