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Numerical Results of the Field Experiments 1970

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70/S/RN/2 Rotation II 1970- Potatoes, Sugar Beet, Barley

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SAXMUNDHAM

ROTATION II 1970

(70/S/RN/2)

For history, treatments, rotations and results see 'Details' 1967 and 'Results' 68/A/10 and 69/S/RN/2.

Area of each sub plot:	Area harvested:
Potatoes: 0.0048	0.0019
Sugar beet: 0.0050	0.0025
Barley: 0.0273	0.0015

Basal applications: Manures as 1969.

Potatoes: Weedkiller: Linuron at 1.5 lb in 40 gals. Insecticide: Menazon ('Saphicol' at 0.5 pints in 40 gals) alone and with fungicide. Fungicide: Captafol at 1.5 lb in 40 gals alone and with insecticide.

Sugar beet: Weedkiller: Pyrazon at 2.4 lb in 20 gals. Insecticide: Menazon ('Saphicol' at 0.5 pints in 40 gals on four occasions).

Barley: Weedkiller: Mecoprop at 36 oz and 2,4-D at 9 oz in 20 gals.

Cultivations, etc.:

Potatoes: Ploughed: 10 Oct, 1969. Fertilisers applied: 29 Apr, 1970.

Potatoes planted: 30 Apr. Weedkiller applied: 28 May.

Insecticide applied: 24 June. Insecticide plus fungicide applied: 14 July, 6 Aug. Fungicide applied: 26 Aug. Lifted: 22 Sept. Variety: King Edward.

Barley: Ploughed: 10 Oct, 1969. Fertilisers applied, seed drilled:

20 Apr, 1970. Weedkiller applied: 28 May. Combine harvested: 11 Aug. Variety: Julia.

Sugar beet: Ploughed: 10 Oct, 1969. Fertilisers applied: 29 Apr, 1970.

Seed drilled: 30 Apr. Weedkiller applied: 1 May. Insecticide applied: 24 June, 22 July, 6 Aug and 26 Aug. Lifted: 13 Oct. Variety: Klein E.

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SUMMARY OF RESULTS

POTATOES

TOTAL TUBERS: TONS

Plot	Treatment 1966 and 1967	1970				Mean
		PO*	P1	P2	P3	
1	PO	3.59	3.94	4.51	6.02	4.33
2	PO	5.44	4.17	7.99	6.48	5.90
3	PO	9.72	9.03	8.91	9.38	9.35
4	D	10.88	11.46	9.84	11.81	10.97
5	DP1	11.58	12.39	12.04	11.11	11.74
6	P1	11.81	10.42	10.65	12.96	11.53
7	P2	10.88	11.46	12.73	11.58	11.51
8	PO	9.67	10.07	11.11	8.57	9.82
Mean		9.20	9.12	9.72	9.74	9.39

SUGAR BEET

ROOTS (WASHED): TONS

1	PO	2.12	2.61	2.70	12.78	4.47
2	PO	4.95	6.75	7.20	7.20	6.21
3	PO	9.36	11.52	9.00	13.77	10.61
4	D	9.41	6.66	7.09	6.48	7.81
5	DP1	10.14	10.08	11.25	9.99	10.32
6	P1	9.99	12.69	11.16	8.01	10.37
7	P2	10.49	14.49	10.80	14.85	12.23
8	PO	13.05	13.14	10.53	9.90	11.94
Mean		8.69	9.75	8.72	10.38	9.24

* Duplicated treatment

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SUGAR BEET

Plot	Treatment 1966 and 1967	1970				Mean
		PO*	P1	P2	P3	
SUGAR %						
1	PO	13.9	13.0	13.2	15.2	13.8
2	PO	14.3	13.8	14.8	14.3	14.3
3	PO	14.5	15.6	14.6	15.4	14.9
4	D	15.2	14.3	14.3	14.5	14.7
5	DP1	14.5	15.2	15.0	14.3	14.7
6	P1	14.6	15.4	16.0	14.6	15.0
7	P2	15.7	15.5	15.1	15.7	15.5
8	PO	15.5	15.2	15.5	15.5	15.5
Mean		14.8	14.8	14.8	15.0	14.8

TOTAL SUGAR: CWT

1	PO	5.9	6.8	7.1	39.0	12.9
2	PO	14.2	18.6	21.3	20.6	17.8
3	PO	27.2	36.0	26.2	42.3	31.8
4	D	28.6	19.1	20.2	18.8	23.1
5	DP1	29.3	30.7	33.9	28.6	30.3
6	P1	30.0	39.2	35.6	23.5	31.7
7	P2	32.9	44.8	32.6	46.6	38.0
8	PO	40.5	39.9	32.7	30.8	36.9
Mean		26.1	29.4	26.2	31.3	27.8

* Duplicated treatment

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SUGAR BEET

Plot	Treatment	1970				Mean
	1966 and 1967	P0*	P1	P2	P3	
TOPS: TONS						
1	P0	3.06	4.01	4.10	8.33	4.51
2	P0	5.38	8.96	8.64	8.60	7.39
3	P0	8.71	13.19	9.14	13.28	10.61
4	D	10.22	7.88	9.23	7.43	8.99
5	DP1	10.69	9.59	14.54	9.14	10.93
6	P1	12.40	11.93	12.83	9.99	11.91
7	P2	11.57	13.46	11.39	13.28	12.25
8	P0	12.58	11.48	10.04	12.02	11.74
Mean		9.33	10.06	9.99	10.26	9.79

PLANT NUMBER: THOUSANDS

1	P0	8.9	11.7	9.3	13.7	10.5
2	P0	11.5	15.3	14.1	14.5	13.4
3	P0	16.3	18.6	13.7	22.2	17.4
4	D	15.9	13.3	8.5	14.1	13.6
5	DP1	14.5	14.9	15.7	10.9	14.1
6	P1	22.4	18.1	21.8	13.3	19.6
7	P2	21.2	27.8	16.9	30.7	23.6
8	P0	21.8	22.6	21.0	20.2	21.5
Mean		16.6	17.8	15.1	17.4	16.7

* Duplicated treatment

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BARLEY AFTER POTATOES

Plot	Treatment 1966 and 1967	1969				Mean
		P0*	P1	P2	P3	
GRAIN: CWT						
1	P0	22.9	25.4	33.9	31.7	27.4
2	P0	30.3	32.1	35.5	36.5	33.0
3	P0	35.3	35.3	34.3	36.5	35.3
4	D	37.1	35.5	38.7	38.0	37.3
5	DP1	37.0	35.9	40.2	36.0	37.2
6	P1	38.1	37.2	33.2	39.5	37.2
7	P2	38.3	34.4	33.5	36.9	36.3
8	P0	37.8	35.0	32.3	36.2	35.8
Mean		34.6	33.9	35.2	36.4	34.9

STRAW: CWT						
1	P0	20.4	23.6	28.1	30.8	24.7
2	P0	27.7	29.3	34.6	32.6	30.4
3	P0	36.5	35.9	32.9	33.7	35.1
4	D	38.6	40.7	41.6	40.3	39.9
5	DP1	40.2	38.4	39.1	38.2	39.2
6	P1	39.5	35.9	39.9	37.6	38.5
7	P2	36.2	37.3	41.9	40.0	38.3
8	P0	37.2	33.3	34.2	39.9	36.4
Mean		34.5	34.3	36.6	36.6	35.3

Mean D.M. %: Grain: 84.2
Straw: 74.6

* Duplicated treatment

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BARLEY AFTER SUGAR BEET

Plot	Treatment	1969				Mean
	1966 and 1967	PO*	P1	P2	P3	
GRAIN: CWT						
1	PO	18.1	20.6	25.8	29.5	22.4
2	PO	24.9	28.5	29.5	28.2	27.2
3	PO	32.1	30.7	30.7	31.7	31.5
4	D	32.6	37.5	36.5	33.2	34.5
5	DP1	36.9	36.1	32.1	34.6	35.3
6	P1	34.6	39.2	34.2	37.5	36.0
7	P2	36.2	35.2	39.3	39.9	37.4
8	PO	32.7	35.4	36.8	34.9	34.5
Mean		31.0	32.9	33.1	33.7	32.3

STRAW: CWT						
1	PO	16.5	17.3	22.5	23.9	19.3
2	PO	23.1	23.4	28.3	27.9	25.2
3	PO	31.2	33.9	34.7	33.1	32.8
4	D	35.5	40.2	37.2	35.1	36.7
5	DP1	36.7	40.7	37.7	36.8	37.7
6	P1	37.0	41.0	35.7	38.1	37.8
7	P2	39.7	38.7	37.3	42.6	39.6
8	PO	43.4	38.1	42.2	37.4	40.9
Mean		32.9	34.2	34.5	34.3	33.8

Mean D.M. %: Grain: 83.4
Straw: 72.9

* Duplicated treatment