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Numerical Results of the Field Experiments 1969

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Sweet Corn

Rothamsted Research

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DRY MATTER: CWT

	IQA	IAS	IQS	BD	BS	Mean
3RD CUT						
	(±0.48)					(±0.21)
N1	2.0	1.9	1.8	8.5	2.0	3.2
N2	2.4	2.2	3.2	12.2	3.4	4.7
N3	5.9	3.6	5.3	11.9	5.7	6.5
N4	9.5	5.7	9.4	9.5	8.3	8.5
Mean (±0.24)	5.0	3.3	4.9	10.5	4.9	5.7

NO: 1.5 (±0.33)

General mean (Excl IAA): 5.3

Mean D.M. %: 27.4
(All plots)

TOTAL OF 3 CUTS

	(±1.93)					(±0.86)
N1	58.2	57.4	60.3	65.6	57.4	59.8
N2	65.8	60.3	69.8	81.0	71.3	69.6
N3	77.2	64.8	77.1	83.1	74.8	75.4
N4	77.9	73.3	79.8	77.5	77.6	77.2
Mean (±0.97)	69.8	63.9	71.8	86.8	70.3	70.5

NO: 32.2 (±1.36)

General mean (Excl IAA): 67.0

Mean D.M. %: 21.4
(All plots)

SWEET CORN

(69/G/SC/1)

Seed spacing, phorate and nitrogen - Garden Plots.

Design: 2 blocks of 8 plots, split into 6.

Area of each sub plot: 0.0024. Area harvested: 0.0008.

Treatments: All combinations of:-

- Whole plots: 1. Seed spacing: 3 in. (3), 6 in. (6), 12 in. (12), 18 in. (18) in rows 2 feet apart.
2. Phorate: None (0), phorate applied at 1.5 lb a.i. in rows, close to seed (P).
Sub plots: 3. Nitrogen: 0.75 (N1), 1.50 (N2), 3.00 (N4) cwt N as 'Nitro-Chalk'.
4. Time of application of N: All in seedbed (S1), half in seedbed plus half at tasselling (S2).

Basal applications: 1120 lb (0:14:28) broadcast before ploughing.

Weedkiller: Atrazine at 1.5 lb in 30 gals.

Cultivations, etc.: Basal PK applied: 18 Nov, 1968. Ploughed:

10 Dec. Seed sown by seed-spacing drill, phorate applied:

21 May, 1969. N applied: 10 June and 1 Aug. Basal irrigation applied at 1 inch: 11 June. Weedkiller applied: 16 June.

Cobs harvested: 24 Sept. Variety: Early King. Previous crops: Fallow 1967, wheat and barley 1968.

NOTE: Cobs were separated into 3 grades:

1. Large saleable, 2. small saleable, 3. unsaleable.

Cobs in saleable grades were counted, and all grades weighed.

Standard errors per plot.

Saleable cobs, cwt: Whole plot: 7.11 or 7.2% (7 d.f.)

Sub plot: 14.68 or 14.9% (39 d.f.)

Number of saleable cobs, thousands:

Whole plot: 1.32 or 5.8% (7 d.f.)

Sub plot: 3.83 or 17.0% (39 d.f.)

SUMMARY OF RESULTS

TOTAL SALEABLE COBS: CWT

	3	6	12	18	Mean
	(±5.03)				(±2.51)
O	110.6	103.6	84.9	66.8	91.5
P	119.2	125.9	107.0	69.3	105.3
	(1) and (2)				(±2.60)
N1	115.5	110.5	108.4	64.6	99.7
N2	117.2	119.1	88.2	74.3	99.7
N4	112.1	114.7	91.2	65.4	95.8
	(3) and (4)				(±2.12)
S1	115.9	114.8	96.1	60.8	96.9
S2	114.0	114.7	95.8	75.4	100.0
Mean(±3.56)	114.9	114.7	95.9	68.1	98.4

- (1) (±5.53) (3) (±4.65) For use in horizontal and diagonal comparisons only
 (2) (±5.19) (4) (±4.24) For use in vertical and interaction comparisons only

NUMBER OF SALEABLE COBS: THOUSANDS

	3	6	12	18	Mean
	(±0.93)				(±0.47)
O	28.3	24.4	17.9	15.1	21.5
P	31.9	26.6	20.8	15.0	23.6
	(1) and (2)				(±0.68)
N1	31.5	24.0	22.1	15.0	23.1
N2	30.6	26.6	18.1	15.4	22.7
N4	28.4	25.9	17.8	14.8	21.7
	(3) and (4)				(±0.55)
S1	30.3	25.5	20.2	13.4	22.3
S2	30.0	25.5	18.6	16.7	22.7
Mean(±0.66)	38.1	25.5	19.4	15.1	22.5

(1) (±1.29) (3) (±1.02) For use in horizontal and diagonal comparisons only

(2) (±1.35) (4) (±1.11) For use in vertical and interaction comparisons only