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86/R/B/2 Sowing Dates, Aphids and Bydv - W. Barley

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86/R/B/2

WINTER BARLEY

SOWING DATES, APHIDS AND BYDV

Object: To study the relationship of aphid numbers in suction trap samples to crop populations and the incidence of BYDV on winter barley sown on a range of dates - Great Field II.

Sponsors: N. Carter, R.T. Plumb.

Design: 4 randomised blocks of 10 plots.

Whole plot dimensions: 3.0 x 10.0.

Treatments: All combinations of:-

1. SOWDATE Dates of sowing:

13 SEPT	13 September, 1985
23 SEPT	23 September
2 OCT	2 October
11 OCT	11 October
23 OCT	23 October

2. APHICIDE Aphicide:

NONE	None
CYPERMET	Cypermethrin at 0.025 kg in 280 l on 14 Nov, 1985

NOTE: The crop was netted against birds from mid-June until maturity.

Basal applications: Manures: 'Nitram' at 130 kg, and again at 340 kg.
Weedkillers: Isoproturon at 2.0 kg with clopyralid at 0.07 kg, bromoxynil octanoate at 0.34 kg and mecoprop at 2.5 kg in 200 l.
Fungicides: Prochloraz at 0.4 kg and carbendazim at 0.15 kg in 200 l. Triadimenol at 0.062 kg in 500 l.

Seed: Igri, sown at 150 kg.

86/R/B/2

Cultivations, etc.:— Cultivated by rotary grubber: 9 Sept, 1985.
 SOWDATE 13 SEPT plots heavy spring-tine cultivated, seed sown:
 13 Sept. SOWDATE 23 SEPT plots rotary harrowed, seed sown: 23 Sept.
 Remaining plots heavy spring-tine cultivated, SOWDATE 2 OCT plots
 rotary harrowed and seed sown: 2 Oct. SOWDATE 11 OCT plots rotary
 harrowed, seed sown: 11 Oct. SOWDATE 23 OCT plots rotary harrowed,
 seed sown: 23 Oct. First N applied: 13 Mar, 1986. Second N applied:
 25 Apr. Weedkillers applied: 29 Apr. Prochloraz and carbendazim
 applied: 16 May. Triadimenol applied: 9 June. Combine harvested:
 1 Aug. Previous crops: S. barley 1984 and 1985.

NOTE: Aphids were counted from October to January and in April. Visual
 estimates of BYDV were made in May. Components of yield were
 measured.

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

SOWDATE APHICIDE	13 SEPT	23 SEPT	2 OCT	11 OCT	23 OCT	MEAN
NONE	4.28	4.80	5.40	6.00	5.31	5.16
CYPERMET	4.69	4.94	5.88	6.16	5.50	5.43
MEAN	4.48	4.87	5.64	6.08	5.41	5.30

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	SOWDATE	APHICIDE	SOWDATE APHICIDE
SED	0.142	0.090	0.201

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	27	0.284	5.4

GRAIN MEAN DM% 82.1

PLOT AREA HARVESTED 0.00231