Yields of the Field Experiments 1976

76/R/B/11 Mildew Tolerance to Ethirimol - Barley

Rothamsted Research

76/R/B/11

SPRING BARLEY

MILDEW TOLERANCE TO ETHIRIMOL

Object: To study the effects of a range of rates of ethirimol seed dressing on mildew tolerance and yield of barley - Long Hoos VI/VII 3.

Sponsor: D.W. Hollomon.

Design: 3 randomised blocks of 4 plots.

Whole plot dimensions: 2.40 x 5.18.

Treatments:

ETHIRIMO   Ethirimol seed dressing (g/kg of seed):

0	None
1	0.92
2	4.80
3	17.9

NOTE: Surrounds sown to Proctor sprayed with tridemorph at 0.53 kg in 340 l on 14 May and 21 June.

Basal applications: Manures: (0:14:28) at 850 kg. 'Nitro-Chalk' at 450 kg.

Seed: Proctor, sown at 160 kg.

Cultivations, etc.:- PK applied: 9 Dec, 1975. Ploughed: 16-23 Dec. Spring-tine cultivated twice: 10 Mar, 1976. Seed sown, N applied: 11 Mar. Combine harvested: 26 July. Previous crops: Barley 1974, potatoes 1975.

NOTES: (1) Plots were inoculated with an ethirimol-sensitive strain of powdery mildew on two occasions.
(2) Mildew was assessed at four growth stages. The race composition and ethirimol tolerance of mildew on the plots was assessed.

GRAIN TONNES/HECTARE

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

ETHIRIMO	0	1	2	3	MEAN
	2.92	3.49	3.39	3.67	3.37

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

TABLE	ETHIRIMO
SED	0.407

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

STRATUM	DF	SE	CV%
BLOCK.WP	6	0.498	14.8

GRAIN MEAN DM% 87.8

PLOT AREA HARVESTED 0.00050

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