ROTHAMSTED RESEARCH

Yields of the Field Experiments 1979

Full Table of Content

79/R/WW/8 Integrated Pest Control - W. Wheat

Rothamsted Research

Rothamsted Research (1980) *79/R/WW/8 Integrated Pest Control - W. Wheat ;* Yields Of The Field Experiments 1979, pp 279 - 280 **- DOI: https://doi.org/10.23637/ERADOC-1-45**

79/R/WW/8

WINTER WHEAT

INTEGRATED PEST CONTROL

Object: To study the effects of chemical and biological pest control treatments on the incidence of pests and beneficial insects and on yield of winter wheat - Stackyard.

Sponsors: W. Powell, R. Bardner, G.J.W. Dean, C.A. Edwards, J.R. Lofty, K.E. Fletcher, J.W. Stephenson, A. Dewar, N. Wilding, R.T. Plumb.

Design: 3 randomised blocks of 4 plots.

Whole plot dimensions: 19.2 x 19.2.

Treatments:

TREATMNT	Chemical and biological treatments:
NONE	None
APHICIDE	Aphicide - Pirimicarb at 0.14 kg in 550 l on 26 June, 1979
BIOLOGIC	Biological control of aphids by the release of 14 Sitobion avenae and 12 Metopolophium dirhodum per square metre, both species infected with Entomophthora aphidis, on 22 June, 1979
MULTCHEM	Multiple chemical treatments: Aldicarb at 5 kg to the seedbed on 17 Oct, 1978 Metaldehyde at 31 kg on 31 Oct Omethoate at 0.2 kg in 280 l on 15 May, 1979

Basal applications: Manures: (10:23:23) at 250 kg, combine drilled. 'Nitro-Chalk' at 500 kg. Autumn weedkiller: Chlortoluron at 5.6 kg in 220 l. Spring weedkiller: Mecoprop at 2.5 kg in 220 l.

Seed: Flanders, undressed, sown at 190 kg.

Cultivations, etc.:- Ploughed: 12 Oct, 1978. Disc harrowed: 16 Oct. Rotary harrowed: 18 Oct. Seed sown: 19 Oct. Autumn weedkiller applied: 20 Oct. N applied: 27 Apr, 1979. Spring weedkiller applied: 15 May. Combine harvested: 30 Aug. Previous cropping: Wheat 1977, spring oats 1978.

NOTE: Aphid counts were made weekly between June and early August and Entomophthora infection was assessed. Slugs and stem boring insects were counted and the incidence of barley yellow dwarf virus assessed. Polyphagous predators and aphid-specific predators and parasites were sampled regularly between late May and early August.

https://doi.org/10.23637/ERADOC-1-45

79/R/WW/8

GRAIN TONNES/HECTARE

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

TREATMNT	NONE	APHICIDE	BIOLOGIC	MULTCHEM	MEAN
	7.21	7.14	7.03	7.44	7.20

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

TABLE	TREATMNT
SED	0.241

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

STRATUM	DF	SE	CV%
BLOCK.WP	6	0.296	4.1

GRAIN MEAN DM% 84.3

PLOT AREA HARVESTED 0.00410

https://doi.org/10.23637/ERADOC-1-45