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Yields of the Field Experiments 1995



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95/R/WW/2

WINTER WHEAT

WATER STRESS AND WEED COMPETITION

Object: To study the competitive effects of weeds in winter wheat, with and without irrigation - Stackyard.

Sponsors: J.W. Cussans, P.J.W. Lutman.

Design: 4 randomised blocks of 2 plots split into 4 sub-plots.

Whole plot dimensions: 8.0×30.0 . Sub-plot dimensions: 4.0×15.0 .

Treatments:

1.	IRRIGATN				Irrigation:
	-				
	I				Irrigated
	0				None
2.	WEED				Weed species:
	_				None
	SM				Stellaria media (chickweed)
	AM	AM			Alopecurus myosuroides (black-grass)
	GA Galium aparine (cleavers)			Galium aparine (cleavers)	
EX	perimental			_	
					PK as (0:20:32) at 1317 kg.
					Ploughed and furrow pressed.
					Rotary harrowed.
					Spring-tine cultivated.
	05-Oct-94				Rotary harrowed.
		:	T	:	WEED SM, AM: Seed broadcast at 320 seeds per m ² .
					WEED GA: Seed broadcast at 24 seeds per m ² .
		:	В	:	Rotary harrowed, Mercia, dressed Cerevax, drilled
					at 380 seeds per m ² .
					Draza at 5.5 kg.
	13-Jan-95				WEED SM, GA: Cheetah R at 2.5 1 in 220 1.
		:	T	:	WEED AM: Starane 2 at 0.75 l with Oxytril CM at 1.5 l in
					220 1.
		:	T	:	WEED -: Stefes IPU at 3.0 1 with Stomp 400 at 3.3 1 in
					220 1.
					34.5% N at 118 kg.
	21-Mar-95				WEED GA: Isoproturon 500 at 3.0 l in 220 l.
		:	T	:	WEED -: Ally at 30 g with Starane 2 at 0.75 l and Topik
	10 2 25		_		at 125 ml in 220 l.
	19-Apr-95	:	В	:	34.5% N at 463 kg.

05-May-95 : B : Calixin at 0.35 1 with Halo at 2.0 1 in 200 1.

28-Apr-95 : T : IRRIGATN I: Irrigated 25 mm.

15-May-95 : **T** : **IRRIGATN** I: Irrigated 25 mm. 02-Jun-95 : **T** : **IRRIGATN** I: Irrigated 25 mm. 20-Jun-95 : B : Silvacur at 1.0 1 in 200 1.

95/R/WW/2

Experimental diary:

20-Jun-95 : **T** : IRRIGATN I: Irrigated 15 mm. 21-Jun-95 : **T** : IRRIGATN I: Irrigated 20 mm. 29-Jun-95 : **T** : IRRIGATN I: Irrigated 25 mm. 06-Jul-95 : **T** : IRRIGATN I: Irrigated 25 mm. 13-Jul-95 : **T** : IRRIGATN I: Irrigated 25 mm. 20-Jul-95 : **T** : IRRIGATN I: Irrigated 25 mm. 05-Aug-95 : B : Roundup at 4.0 1 in 200 1. 14-Aug-95 : B : Hand harvested.

Previous crops: S. rape 1993, w. oats 1994.

NOTE: Weed density was assessed in autumn and spring. Weeds and crop were sampled regularly and dry weight, green area, height and nutrient content were measured. Tillers and leaves were also counted in the crop. Soil was sampled for nitrogen content in February. Flag leaf area and nutrient content were assessed in June. Black-grass seed produced was measured in June. Components of yield were assessed after harvest

GRAIN TONNES/HECTARE

***** Tables of means *****

WEED IRRIGATN	-	SM	AM	GA	Mean
I	7.18	5.58	2.71	4.08	4.89
0	8.12	6.60	3.49	6.68	6.22
Mean	7.65	6.09	3.10	5.38	5.55

*** Standard errors of differences of means ***

		IRR		WE	ED	IRRIGATN WEED		
			0.433		0.25		0.534	
Except	when	comparing	means	with	the	same	level(s)	of
IRRIG	ATN						0.361	

***** Stratum standard errors and coefficients of variation *****

Stratum	d.f.	s.e.	CV%
BLOCK.WP.SP	18	0.511	9.2

GRAIN MEAN DM% 91.0

SUB-PLOT AREA HARVESTED 0.00020