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Linseed

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91/R/LN/1

LINSEED

VARIETIES AND FUNGICIDES

Object: To study the effects of fungicides on the incidence of diseases and on the yield of four varieties - Long Hoos I/II.

Sponsors: B.D.L. Fitt, H. Davies.

Design: 4 randomised blocks of 8 plots.

Whole plot dimensions: 3.0 x 15.0.

Treatments: All combinations of:-

1. **VARIETY** Varieties:

ANTARES	Antares
BARBARA	Barbara
NORLIN	Norlin
MCGREGOR	McGregor

2. **FUNGICIDE** Fungicides:

NONE	None
PR+IP+CM	Prochloraz (as seed dressing) at 0.40 g/kg seed Prochloraz at 0.32 kg in 200 l on 2 July, 1991 Iprodione at 0.50 kg in 200 l on 22 July Carbendazim at 0.25 kg and maneb at 1.6 kg in 220 l on 1 Aug

Basal applications: Manure: 'Nitram' at 220 kg. Weedkillers: Bromoxynil at 0.24 kg and clopyralid at 0.05 kg with bentazone at 0.96 kg in 200 l. Desiccant: Diquat at 0.60 kg ion with a wetting agent, 'Vassgro' at 0.40 l, in 400 l.

Seed: Varieties, sown at 600 seeds per square metre.

Cultivations, etc.:- Ploughed: 31 Oct, 1990. N applied: 9 Apr, 1991. Spring-tine cultivated, rotary harrowed, seed sown: 10 Apr. Weedkillers applied: 6 June. Desiccant with wetting agent applied: 2 Sept. Combine harvested: 10 Oct. Previous crops: Potatoes 1989, linseed 1990.

NOTE: The incidence of diseases was assessed regularly during the season. Oil content of harvested seed was measured.

91/R/LN/1

GRAIN (AT 90% DRY MATTER) TONNES/HECTARE

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

FUNGCIDE	NONE	PR+IP+CM	Mean
VARIETY			
ANTARES	2.22	2.43	2.32
BARBARA	2.43	2.37	2.40
NORLIN	1.50	1.85	1.67
MCGREGOR	1.67	2.13	1.90
Mean	1.95	2.19	2.07

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

VARIETY	FUNGCIDE	VARIETY FUNGCIDE
0.126	0.089	0.179

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	21	0.253	12.2

GRAIN MEAN DM% 85.7

PLOT AREA HARVESTED 0.00276

91/R/LN/2

LINSEED

FUNGICIDES AND DISEASE RESISTANCE

Object: To study the effects of different fungicides on the pathogens and yield of linseed - Long Hoos IV 4.

Sponsors: I. Vloutoglou, B.D.L. Fitt.

Design: 5 randomised blocks of 4 plots.

Whole plot dimensions: 3.0 x 10.0.

Treatments:

FUNGCIDE	Fungicides:
NONE	None
BENOMYL	Benomyl at 0.14 kg
IPRODION	Iprodione at 0.25 kg
PROCHLOR	Prochloraz at 0.16 kg

NOTE: Fungicides were applied in 220 l on 20 June, 1991, 10 and 23 July, 7 and 27 Aug.

Basal applications: Manure: 'Nitram' at 220 kg. Weedkillers: Bentazone at 0.96 kg with bromoxynil at 0.24 kg and clopyralid at 0.05 kg in 200 l. Desiccant: Diquat at 0.60 kg ion with wetting agent, 'Vassgro' at 0.4 l, in 400 l.

Seed: Antares undressed, sown at 600 seeds per square metre.

Cultivations, etc.:- Ploughed: 4 Sept, 1990. N applied: 9 Apr, 1991. Rotary harrowed, seed sown, rolled: 10 Apr. Weedkillers applied: 6 June. Desiccant with wetting agent applied: 2 Sept. Combine harvested: 11 Oct. Previous crops: S. barley 1989, w. wheat 1990.

NOTE: Foliar diseases were assessed throughout the growing season.

91/R/LN/2

GRAIN (AT 90% DRY MATTER) TONNES/HECTARE

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

FUNGICIDE	
NONE	2.24
BENOMYL	2.59
IPRODION	2.50
PROCHLOR	2.67
Mean	2.50

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

FUNGICIDE
0.082

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	12	0.129	5.2
GRAIN MEAN DM%	87.1		
PLOT AREA HARVESTED	0.00230		

91/R/LN/4

LINSEED

RATES AND TIMES OF FUNGICIDE

Object: To study the effects of fungicide rates and timing on the control of pathogens and on the yield of linseed - White Horse II.

Sponsor: B.D.L. Fitt.

Design: 3 randomised blocks of 8 plots.

Whole plot dimensions: 3.0 x 15.0.

Treatments:

FUNG R T	Fungicides, rates and times of application:
NONE	None
PROC 4 E	Prochloraz at 400 g, applied early on 20 June, 1991
PROC 5 E	" " 500 g, " " " 20 June
PROC 4 L	" " 400 g, " later " 17 July
PROC 5 L	" " 500 g, " " " 17 July
P2E+P2L	" " 250 g, " early on 20 June and later on 17 July
P3E+FN6E	" " 394 g + fenpropimorph at 656 g applied early on 20 June
P3L+FN6L	Prochloraz + fenpropimorph at above rates applied later on 17 July

NOTE: Fungicides were applied in 200 l.

Basal applications: Manure: 'Nitram' at 220 kg. Weedkillers: Bromoxynil at 0.24 kg and clopyralid at 0.05 kg with bentazone at 0.96 kg in 200 l. Desiccant: Diquat at 0.60 kg ion, with a wetting agent, 'Vassgro' at 0.40 l, in 400 l.

Seed: Antares, dressed prochloraz, sown at 600 seeds per square metre.

Cultivations, etc.:- Ploughed: 18 Oct, 1990. N applied: 9 Apr, 1991. Spring-tine cultivated, rotary harrowed, seed sown: 10 Apr. Weedkillers applied: 5 June. Desiccant with wetting agent applied: 2 Sept. Combine harvested: 9 Oct. Previous crops: W. wheat 1989 and 1990.

NOTE: The incidence of diseases was assessed regularly during the season.

91/R/LN/4

GRAIN (AT 90% DRY MATTER) TONNES/HECTARE

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

FUNG R T	
NONE	1.52
PROC 4 E	1.77
PROC 5 E	1.51
PROC 4 L	1.54
PROC 5 L	1.85
P2E+P2L	1.58
P3E+FN6E	1.61
P3L+FN6L	1.76
Mean	1.64

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

FUNG R T
0.199

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	14	0.244	14.8
GRAIN MEAN DM%	84.7		
PLOT AREA HARVESTED	0.00345		