

\*CONFIDENTIAL

MORLEY RESEARCH CENTRE

NAS 932 ML 1992  
(2nd year)

Experiment report

**Crop**            Linseed  
**Title**            Variety x disease control

**Summary**

Powdery mildew, which affected all varieties in late July, was well controlled by a range of fungicide programmes based on Compass and Tilt. However botrytis was not significantly reduced and yields did not respond to fungicide use.

**Manager** G M Palmer

**Object**    To investigate the potential in linseed for yield loss due to disease using several different fungicide programmes on a range of varieties.

**Site**        Wheate Close, Morley Research Centre

**Method**

**Treatments**

*Variety*

Antares

Barbara

Blue Chip

Norlin

*Fungicide (rate of product/ha)*

Nil

Compass(3.0 l) at early flower and capsule formation.

Compass as F2, plus Tilt(0.5 l) at mid-flower.

Compass and Tilt as F3, plus Corbel(0.5 l) at capsule formation.

**Layout**    Factorial in 3 randomised blocks

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\*Not for publication without the Director's consent. This report deals primarily with only one year's work, so any conclusions given are only provisional.

## Results and discussion

Disease levels were low until late July when powdery mildew (*Oidium lini*) and botrytis (*Botrytis cinerea*) infections spread on all varieties. Antares and Norlin were most affected by powdery mildew, Blue Chip and Norlin were most affected by botrytis.

Table 1. *Disease levels at 31 July (% whole plant, mean all varieties)*

Fungicide (l/ha)		Capsules formed	Powdery mildew	Botrytis
Early flower	Late flower			
Untreated	-	-	33	40
Compass	-	Compass	8	27
Compass	Tilt	Compass	3	30
Compass	Tilt	Compass +Corbel	0	25
LSD			7.0	NS
SE per plot (30 df) or as % GM			±8.5 78.1	±14.8 48.5

While mildew was significantly reduced by all fungicide programmes (Table 1) the level of botrytis was not consistently affected.

Table 2. *Grain yield (t/ha at 91% dm)*

Fungicide	Early flower	Late flower	Capsules formed	Antares	Barbara	Blue Chip	Norlin	Mean
Untreated	-	-	-	2.52	3.00	2.37	2.56	2.61
Compass	-	-	Compass	2.48	3.06	2.49	2.49	2.63
Compass	-	Tilt	Compass	2.75	2.91	2.38	2.65	2.67
Compass	-	Tilt	Compass +Corbel	2.58	2.87	2.49	2.53	2.62
LSD						0.256		NS
Mean				2.58	2.96	2.43	2.56	
LSD						0.128		
SE per plot (30 df) ±0.154 or 5.8% GM								

There were no significant yield responses to any of the fungicide programmes either overall or on the most disease infected varieties (Table 2).

### **Appendix**

Details of other assessments including capsule staining and thousand seed weight and field and experiment diary are available on request.