

# Trial 22

## Canola Variety Trial

### Sponsored by the Victorian Farmers Federation

**Aim:** to identify the highest yielding canola variety in the southern Mallee (this experiment will be repeated over a number of seasons)

**Method:** 15 canola varieties were sown in a replicated randomised block design

#### Results:

variety	yield t/ha	oil %
Narendra	1.00	42.5
Rainbow	1.36	44.7
Oscar	1.35	45.0
Dunkeld	1.21	47.6
Monty (BLN900)	0.81	45.2
Grouse (BLN884)	1.00	45.9
AGA95-1	0.39	45.3
AGA96-1	0.41	44.7
Hvola 42	0.95	na
PAC 101	1.09	45.9
PAC 102	1.14	43.8
<b>Significant difference</b>	<b>P&lt;0.05, LSD=0.13</b>	
<b>triazine tolerant types</b>		
Siren	1.57	40.3
Karoo (TI 7)	1.38	40.6
TI 10	1.71	40.3
Pinnacle (TI 1)	1.81	41.1
<b>Significant difference</b>	<b>NS</b>	

**Note:** mice damage was severe, especially on the early varieties

#### Interpretation:

Frost and mouse damage was severe in the plots. The crops were sown early and the frost occurred just as the grain was starting to form in the pods. Mice were active in the plots until bait was put out.

The triazine tolerant canola varieties yielded significantly more than the regular canola varieties - this was thought to be due to improved weed control (primarily mustard). There was no significant difference in yield between the triazine tolerant varieties. There was a significant difference in yields for the regular non triazine tolerant canola varieties, with Rainbow, Oscar and Dunkeld producing the best yields (the later flowering types).

### Variety Descriptions And Main Characteristics

**Narendra:-** early maturing cultivar recommended for growing in short season growing areas of 250-400mm rainfall where enhanced yields have been measured. Narendra has average blackleg resistance, oil content and canola quality.

**Rainbow:-** medium to quick variety, flowering 0 to 4 days earlier than Oscar, has good blackleg resistance, similar to Oscar and oil content is up to 1% higher than Oscar. Rainbow has excellent early vigour and vegetative growth. Seed yields have been 3% less than Oscar.

**Oscar:-** mid-season variety which combines high seed yield with excellent adaptation, good blackleg resistance and improved canola quality characteristics.

**Dunkeld:-** mid-season variety with flowering time similar to Oscar. Dunkeld has excellent vigour and vegetative growth with enhanced blackleg resistance compared with Oscar and oil contents up to 3% higher than Oscar. Seed yields are similar to Oscar. Recommended for average to better rainfall zones.

**Monty (BLN900):-** An early maturing line, particularly suited to Western Australia and other areas where yield potential is less than 1.5t/ha. Compared with Narendra, Monty has improved yield, oil and protein contents and blackleg resistance.

**Grouse (BLN884):-** a mid-maturity line similar to Oscar. Oil and protein contents are similar to Dunkeld, as is yield, Grouse may be best suited to NSW where its reduced height relative to Dunkeld will be advantageous, particularly with early sowing's (April). Blackleg resistance is similar to Oscar and Dunkeld.

**AGA95-1:-** maturity similar to Narendra, suitable for rainfall zones 250-400mm. Yields 5% higher than Narendra, and oil 2-3% higher than Narendra. Blackleg resistance similar to Narendra and shatter resistance is lower than Narendra.

**AGA96-1:-** maturity midway between Narendra and Rainbow. Suitable for central Mallee and northern Wimmera, rainfall zones of 300-500mm. Yields 10% higher than Narendra with oil and protein similar to Rainbow. Its blackleg resistance is better than Narendra but not as high as Oscar and Rainbow. Shatter resistance is good.

**Hyola 42:-** hybrid variety, flowers between 5 and 14 days earlier than Oscar. Excellent seedling vigour but with low tolerance to black leg. Could be well suited to the southern Mallee

**PAC101 and 102:-** new Pacific Seeds hybrid varieties. Flowering slightly earlier than Hyola 42. Improved black leg resistance (similar to Dunkeld). Excellent seedling vigour. Better yielding than Hyola 42. Could be well suited to the southern Mallee.

*The following varieties have high level of resistance to Gesaprim® and Gesatop® herbicides. Recommended for regions of 350-500mm rainfall, where difficult weed species like brassica weeds and/or grasses such as silvergrass and brome grass are a significant problem:-*

**Karoo (TI 7):-** is medium to early maturity variety similar to Rainbow. Has 1-2% oil higher than Siren, has moderate level of blackleg resistance. Seed yields are 110-130% of Siren.

**TI 10:-** medium maturity variety similar to Oscar. Has 1% oil higher than Siren and moderate level of black leg resistance. Seed yields are 110-120% of Siren in average to better rainfall regions. A possible release for 1997.

**Pinnacle (TI 1):-** a mid season line with enhanced yield (30%), blackleg resistance and oil content (1%) relative to Siren. A possible release for 1997.

**Siren:-** mid-season variety of maturity slightly later than Oscar with average black leg resistance. Seed yields are around 85% of Oscar and oil content is 1% better than Oscar.