

Lubeck canola demonstration

Method

Seven varieties were sown at 4kg/ha in the nearest neighbour design with Surpass 501TT as the control. 100kg/ha of urea was predrilled at the site and 80kg/ha of EzyZinc was applied at sowing.

Chemical

2L/ha Triflur X[®] and 1L/ha Lorsban[®] (May 18)

1L/ha Endosulfan[®] (May 20)

75ml/ha Verdict[®], 300ml/ha Lontrel[®] and 90ml/ha Dimethoate[®] (June 25)

Results

Table 1. Canola yield and quality, Lubeck.

| Variety | Yield (t/ha) | Oil (%) | Protein (%) | Herbicide tolerance | Blackleg resistance |
|---------------------------------|--------------|---------|-------------|-----------------------|---------------------|
| Hyola 60 | 2.7 | 43.4 | 22.6 | Conventional (hybrid) | B. sylvestris |
| Surpass 603CL | 2.7 | 43.3 | 22.9 | Clearfield | B. sylvestris |
| ^{AV} Sapphire | 2.6 | 42.6 | 22.1 | Conventional | Conventional |
| ^{AG} Castle | 2.5 | 42.8 | 22.2 | Conventional | Conventional |
| ^{ATR} Stubby (AGT 103) | 2.4 | 38.4 | 23.2 | Triazine tolerant | Conventional |
| *Surpass 501TT | 2.4 | 42.7 | 23.0 | Triazine tolerant | B. sylvestris |
| ^{ATR} Beacon | 2.3 | 40.2 | 23.2 | Triazine tolerant | Conventional |
| LSD (5%) | 0.2 | 3.0 | 1.0 | | |
| CV % | 2.3 | 2.5 | 2.5 | | |

* Control variety – results presented are average for the control plots at the site.

Interpretation

- Good paddock selection, average growing season rainfall and high inputs meant this was a very high yielding site. The average yield at the site was 2.5t/ha, with a difference of only 0.4 t/ha across all varieties tested.
- Hyola 60, Surpass 603CL performed well however these varieties rely on the *B. sylvestris* major gene resistance for black leg, which has broken down in some SA districts.
- Varieties with conventional blackleg resistance (multigenic) such as ^{AV}Sapphire, ^{AG}Castle, and ^{ATR}Beacon performed well at this site. This demonstrates that there are both conventional and triazine tolerant high yielding alternatives to *B. sylvestris* varieties, suited to this district.
- Oil contents at the site were high, with the exception of Stubby and Beacon, which fell below the minimum 42%.