

# 13. MFMG Canola Variety Trials

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A MacKillop Farm Management Group (MFMG) canola variety trial was sown in 2016 at Conmurra. This trial is conducted annually to enable growers to evaluate a selected number of varieties under specific local conditions. There are no NVT Canola sites in the lower south-east and the Conmurra site is seen as important in evaluating both spring type and winter type canola varieties in a higher rainfall environment.

The site was sown on the 17th May 2016 and harvest of the spring canola varieties occurred on 6th December 2016 (along with Archer). The remaining winter canola varieties were harvested later on 5th January 2017. At the time of harvest, the winter canola varieties appeared to have been damaged by birds. In the triazine tolerant variety trial (Table 1), grain yields varied from 3.01t/ha (Hyola 650TT) down to 1.93t/ha (ATR Bonito). In general, the early-mid maturity varieties were significantly lower yielding than the other varieties (with the exception of SF Turbine, 2.67t/ha).

**Table 1:** MFMG Conmura 2016 Triazine tolerant variety trial.

Variety	Yield t/ha	% site mean	1000 grain weight (g/1000 seeds)	Test weight (kg/hl)	Protein (%)	Screenings (%<2.0mm)
Beckom	5.13	117	41.02	80.03	8.7	0.4
Cutlass	5	114	50.82	82.8	8.5	0.24
Cobra	4.8	110	44.05	81.93	9.2	0.46
DS Pascal	4.7	108	43.47	80.85	9.5	0.17
Cosmick	4.58	105	42.24	81.01	8.8	0.48
Trojan	4.57	105	53.26	83.62	8.7	0.24
LRPB Arrow	4.56	104	45.4	81.91	9.3	0.44
Scout	4.56	104	47.82	82.24	8.9	0.49
Barham	4.55	104	47.03	79.99	9	0.36
Scepter	4.53	104	50.8	81.97	8.8	0.61
Harper	4.44	102	47.44	82.81	8.8	0.48
Correll	4.37	100	50.87	82.81	8.8	0.48
Justice Cl. Blue	4.36	100	44.35	82.81	8.8	0.48

Note: the Julian Day measurement is the day of the year that 50% of the plants are flowering and provides an indication of the variation in maturity of the varieties.



The Clearfield (imidazolinone tolerant) variety trial provided site yields of up to 3.48t/ha (Hyola 577CL) with the majority of the medium and medium-late varieties outyielding the early maturing varieties significantly. The results for this trail are shown in Table 2.

**Table 2:** MFMG Conmurra 2016 Clearfield (imidazolinone tolerant) variety trial.

Variety	Yield		1000 grain weight	Test weight	Protein	Screenings
	t/ha	%	(g/1000 seeds)	(kg/hl)	(%)	(%<2.0mm)
Cobra	5.86	111	39.8	83.1	10.4	0.44
Trojan	5.86	111	44.44	84.83	9.5	0.48
LRPB Arrow	5.74	109	41.83	83.48	9.9	0.84
DS Pascal	5.68	108	38.87	83.76	10.2	0.39
Beckom	5.67	107	35.6	84.2	9	0.79
Chief CL Plus	5.54	105	50.85	83.6	10	0.21
Scout	5.53	105	43.16	85.17	9.8	0.5
Cutlass	5.48	104	41.82	83.62	9.2	0.33
Harper	5.36	102	40.44	84.24	9.3	1.28
Impala	5.28	100	37.85	84.2	10.1	0.61
Phantom	5.28	100	41.98			

**Table 3:** MFMG Conmurra 2016 winter canola variety trial.

Variety	Yield		1000 grain weight	Test weight	Protein	Screenings
	t/ha	%	(g/1000 seeds)	(kg/hl)	(%)	(%<2.0mm)
Trojan	7.9	112	47.7	85.25	11.5	0.53
Cobra	7.87	111	40.02	82.8	12.4	0.8
Scout	7.56	107	43.43	85.27	11.5	0.79
LRPB Arrow	7.46	105	42.24	82.82	12.1	0.58
Beckom	7.43	105	35.22	84.24	11.5	1.28
Corack	7.42	105	49.08	83.26	11.9	0.88
Mace	7.35	104	42.83	82.96	11.9	0.85
Emu Rock	7.31	103	46.06	83.06	12	1.55
Scepter	7.29	103	48.24	84	11.6	0.99
DS Darwin	7.24	102	45.54	84.79	12.6	0.77
DS Pascal	7.18	101	40.15	84.81	12.1	0.61
Coemick	7.14	101	36.79	84.3	11.7	1.55
Estoc	6.91	98	40.41	85.11	12.8	0.92
Gladus	6.86	97	47.64	82.7	12.9	0.83
Wallup	6.85	97	39.66	83.28	12.5	0.65
Phantom	6.84	97	41.25	82.58	11.3	1.31
Cutlass	6.8	96	43.64	83.72	11.5	0.92
Impala	6.8	96	35.11	84.26	11.8	1.23
Justica CL Plus	6.8	96	38.83	81.65	12.9	1.01
Yitpi	6.72	95	44.14	84.06	11.9	1.11
Tunosten	6.67	94	43.42	81.17	11.8	1.48

The long season winter canola varieties require a vernalisation period (cold requirement) before they become reproductive and bud elongation starts to occur. This gives these varieties the ability to be sown early and then grazed without significantly affecting grain yields. In 2016, three winter canola varieties were sown at Conmurra. They were sown at the same time as the spring sown canola variety trials, and as a result, their full yield potential has not been achieved (Table 3). To try and maximise the benefits, need to be prepared to sow early. There was no significant difference in yield between the three varieties sown.

