HYBRID TT CANOLA VARIETY ASSESSMENT

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AIM

To assess the yield and quality potential of the new Hybrid TT and Roundup Ready Canola varieties

BACKGROUND

The release of Roundup Ready Canola varieties and Hybrid TT varieties is a recent occurrence. The breeding of a hybrid variety utilizes the first cross of two parent lines. The result is a plant that has better early vigour, higher yields and higher oil content than standard open pollinated varieties and the triazine vigour penalty that is often observed after application of atrazine is reduced. Hybrid lines can be sown at lower seeding rates (2.5 – 3 kgs) because of the early vigour. Farmer saved Tribune seed was used as the base variety for the trial; however the preferred variety in the district is Cobbler.

TRIAL DETAILS

	Site 1
Property	Craig Simkin, Binnu
Plot size & replication	13.6m x 700m
Soil type	Yellow sand
Sowing date	14,05,10
Seeding rate	Approx 4 kg/ha
Fertiliser (kg/ha)	50kg/ha MAP & 20kg SOP down the tube
Paddock rotation	2009 Wheat, 2008 Wheat
Herbicides	14,05,10 1 l/ha Roundup 450 1.1 kg Atrazine + SOA +Wetter
Growing Season Rainfall	April to October 183mm
Roundup Ready	Sprayed 08,06,10 @ 900gms/ha + SOA
Everything else	Sprayed 09,06,10@ 1kg/ha + 100mls Dimethoate + 100mls Cypermethrin
Roundup Ready	Sprayed 25,06,10 @ 900gms/ha + SOA
Everything else	Sprayed 28,06,10 @ Select 300mls, 70l water
Harvest	Direct headed 28,10,10, Moisture Content 7.4%

TRIAL DESIGN

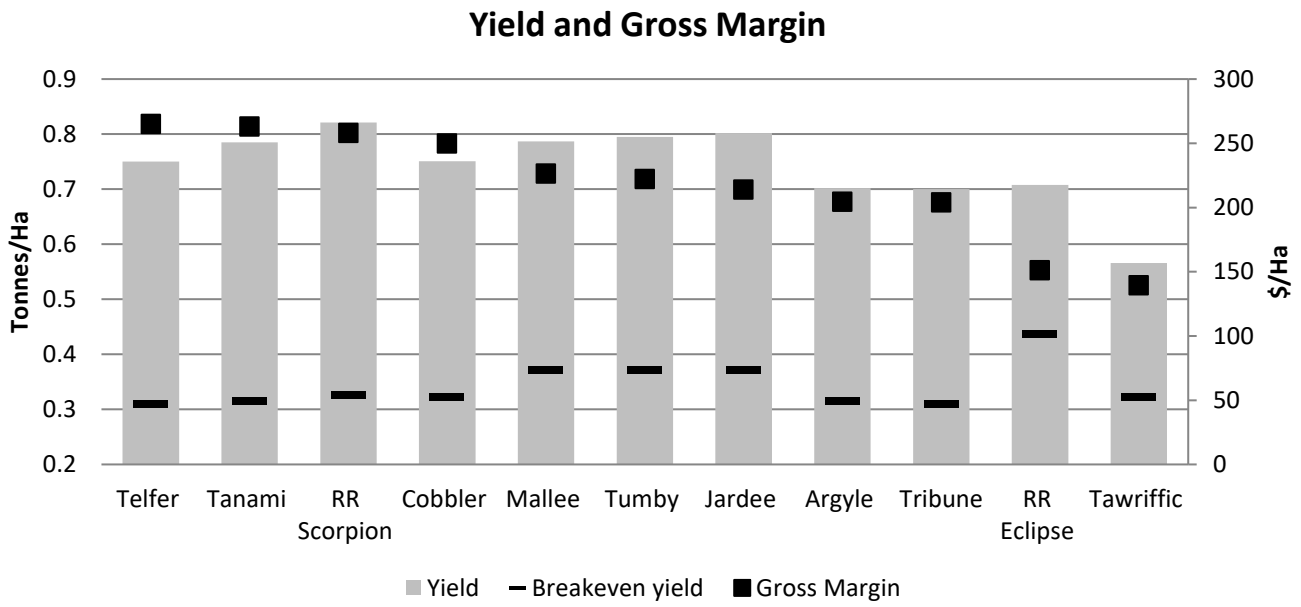
Scorpion 3 kg/ha (RR E)
Eclipse RR 4 kg/ha (RR E-M)
Tribune 4 kg/ha
Jardee 2.5 kg/ha (hybrid M)
Mallee 2.5 kg/ha (hybrid E)
Tumby 2.5 kg/ha (hybrid E-M)
Tanami 4 kg/ha (TTop E–L)
Tawriffic 4 kg/ha (TT E-M)
Telfer 4 kg/ha (TTop E)
Argyle 4 kg/ha (TTop E-M)
Cobbler 4 kg/ha (ATR E-M)
Tribune 4 kg/ha

RESULTS

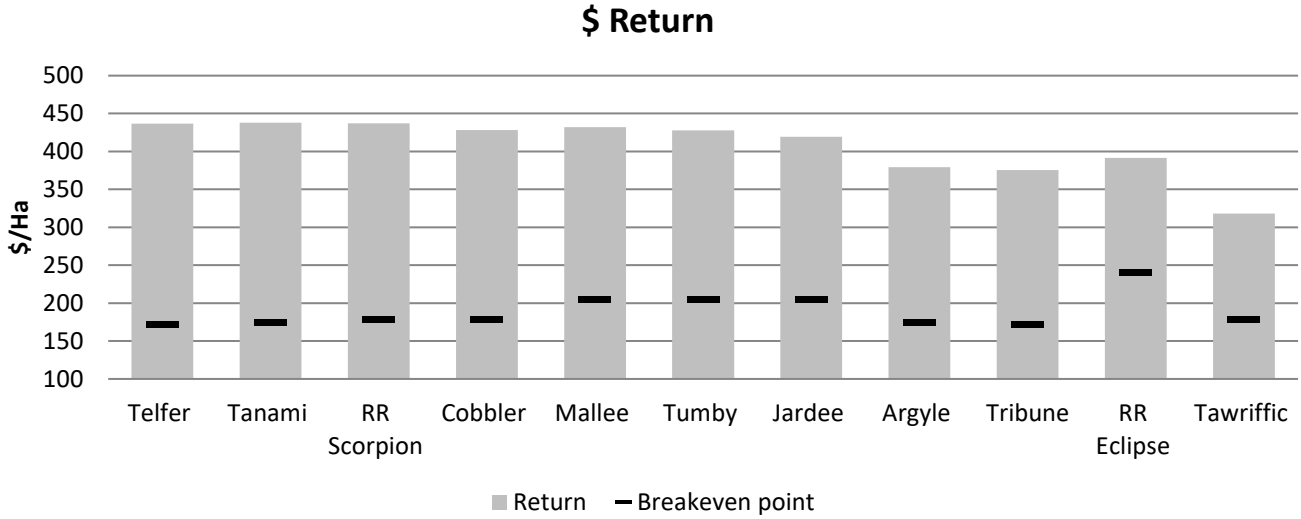
TABLE 1: RESULTS

VARIETY	YIELD (T/HA)	OIL (%)	COST ($/HA)	RETURN ($/HA)	GROSS MARGIN ($/HA)
RR SCORPION	0.821	39.5	178.77	436.99	258.22
RR ECLIPSE	0.708	42.0	240.10	391.52	151.43
JARDEE	0.802	38.4	205.39	419.56	214.17
MALLEE	0.787	41.5	205.39	431.95	226.56
TUMBY	0.795	40.2	205.39	427.76	222.38
TANAMI	0.785	42.6	174.72	438.01	263.29
TAWRIFFIC	0.566	43.1	178.52	318.16	139.64
TELFER	0.750	45.5	171.24	436.52	265.28
ARGYLE	0.702	40.5	174.22	379.47	204.75
COBBLER	0.751	44.1	178.48	428.39	249.90
TRIBUNE	0.700	40.0	171.24	375.49	204.24

GRAPH 1: YIELD AND GROSS MARGIN RESULTS WITH BREAKEVEN POINT



GRAPH 2: $ RETURN PER HECTARE WITH BREAKEVEN POINT



DISCUSSION

This was a broad acre trial with 1ha plot sizes and no replicates. Growing season rainfall was well below average with no finishing rains.

There was no significant difference in yield between the varieties which were well below the normal canola average for the area. All the hybrid varieties had good early season vigour with Mallee and Scorpion looking the best. Eclipse struggled to match the early vigour of Scorpion, but caught up later on. Telfer performed the best from a gross margin point of view because it is a short season variety that is capable of producing good oil content. All of the hybrids struggled because of the lack of growing season rainfall, however in a more typical season these should produce better results. The three hybrids, Mallee, Jardee and Tumby all yielded in the top half of the trial but the gross margin and return were affected because of the initial cost of the seed. Cobbler yielded 750kgs/ha with high oil content to give a better than average return.

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