Irrigated Canola Variety Evaluation

The trial was sown on faba stubble at variable rates that ranged from 1.6 to 3.5 kg/ha targeting 40 plants/m² on April 18th. The trial was watered up on April 19th. Conditions were perfect and establishment was close to 40 plants/m². The trial is managed as a "conventional" trial – herbicide tolerant varieties do not receive their corresponding herbicide.

The trial was topdressed in July with 130 kg urea/ha to bring the total N budget to 260 kg N/ha, enough for a 3.5 - 4 t/ha crop.

There were no spring irrigations thanks to approximately 190 mm of rain during August, September and October.

Lodging was worse this year, with some varieties laying over to 30 degrees from the horizontal (lodging score of 6).

The mild September and October extended the period between the completion of flowering and ripening. The mild conditions also meant that the later varieties didn't "catch up" to the earlier varieties. When the trial was windrowed on November 3rd, some of the later varieties had a high percentage of green seeds eg RT725.

The trial was harvested on November 28th, with the trial average being 4.03 t/ha. As per the normal trend for our trial, all the TTs were the lower yielding (3.2 t/ha), with the CLs (4.5 t/ha), the RRs at 4.8 t/ha and the conventionals (only 2) at 4.6 t/ha.



LSD = 0.51 t/ha, cv% = 8.3

While the TTs are generally lower yielding, this season seems to have exacerbated the difference. Over the last 4 years, the average yield of the TTs is 79% of the RRs. This has varied between 67% in 2016 and 90% in 2013. As an observation, the TTs seemed to struggle with the wet winter, which also delayed weed (volunteer fabas) control. Inherently the TTs have lower vigour than the other groups but vigour is improving with the hybrid TTs.

Some of the new Clearfields are getting very tall, making them more prone to lodging. But lodging is also influenced by plant population and nitrogen management, so more care may be needed when sowing and fertilising these taller varieties.

Canola	2012	2013	2014	2015	2016	Average
Diamond			121%	114%	97%	111%
GT50		97%	117%	106%	108%	107%
45Y25			118%	105%	94%	106%
Hyola 600RR			113%	103%	100%	105%
44Y24				101%	104%	103%
AVGarnet	100%	100%	100%	100%	100%	100%
44Y26			97%	92%		95%
Hyola 577CL		86%	101%	92%		93%
Archer				94%	90%	92%
44Y89			95%	84%	92%	90%
Hyola 559 TT	69%	87%	101%	89%	74%	84%
Hyola 525RT			95%	92%	59%	82%
Bonito			85%	94%	64%	81%
Monola 314			77%		58%	68%
AVGarnet t/ha	4.84	4.68	4.09	4.05	4.66	4.46

Medium term performance of the canola varieties at Kerang