

### 3.4.3 Hyola® FCT Performance & Agronomy Trial Results - Lake Bolac, Vic

**Location:** SFS Lake Bolac Research Site

**Researcher(s):**

Pacific Seeds Hyola® FCT with SFS

**Author(s):**

Justin Kudnig & Anton Mannes - Pacific Seeds

**Summary of findings:**

- Hyola® 404RR and Hyola® 505RR show their adaptation to the medium and higher rainfall districts of Victoria and ability to have highest yields and Oil %'s assisted with excellent blackleg resistance.
- Hyola® 474CL and Hyola® 575CL performed well against competitor Clearfield hybrids along with providing improved Oil%'s and standability.
- Most of the Hybrids evaluated significantly out-yielded the OP Clearfield variety 43C80.
- Hyola® 555TT, Crusher TT, Thumper TT and Jackpot TT show good adaptation and ability to have some of the highest yields for the Western Districts of Victoria.

**Background/Aim:**

Pacific Seeds conduct 20 replicated Hyola FCT Performance and Agronomy trials across Australia each year and these locations are used to provide growers with scientifically based and analysed replicated results which identify and highlight regional canola varietal differences in agronomic traits and seasonal performance.

The aim of this trial is to:

- To compare and contrast the performance of current and experimental RR, CL and TT Hybrid and Open pollinated varieties of canola in the Western Districts of VIC.
- To compare and contrast the performance of selected industry leading canola varieties with new seed fungicide and insecticide treatments and foliar fungicides.
- To compare and contrast the regional resilience blackleg internal infection scores of the Hyola Hybrids versus a range of other competitor varieties in the industry.

**Rainfall:**

2011 Total: 595 mm  
 Avg. Annual: 540 mm  
 2011 G.S.R.: 347 mm  
 Avg. G.S.R.: 400 mm

**Sowing date:** 5 May 2011

**Harvest date:** 20 December 2011

**Sowing rate:** 2.5kg/ha for hybrids  
 3.0kg/ha for open pollinated

**Row spacing:** 180mm

**Fertiliser:** 05-May-11 100kg/ha MAP at sowing  
 23-Aug-11 150kg/ha Urea on surface

**Plot size:** 8m x 1.45m x 6 reps



**Image 1.** Hyola 404RR (left) vs Hyola 505RR (right), Anton Mannes, Pacific Seeds Territory Manager extremely impressed with the Hybrid growth and yield potential for canola growers in the Western Districts of Victoria.

Herbicide - Insecticide - Fungicide Applications				
Date	Product	Rate/Ha	Timing/Method	Crop Stage
4/05/11	TRIFLURALIN	3lt	IBS	Pre-sowing
4/05/11	ROUNDUP DST	2lt	IBS	Pre-sowing
6/05/11	DUAL GOLD	0.3lt	PSPE	Post-sowing
6/05/11	LORSBAN	0.5lt	PSPE	Post-sowing
6/05/11	METAREX	5kg	PSPE	Post-sowing
19/05/11	TALSTAR	40ml	Post-sowing	0,8
10/06/11	METAREX	5kg	Post-sowing	1,2 Leaf
10/06/11	ROUNDUP READY (RR Plots)	0.9kg	Post-sowing	1,2 Leaf
10/06/11	ATRAZINE 900 (TT Plots)	1.5kg	Post-sowing	1,2 Leaf
10/06/11	HASTEN (TT Plots)	1.00%	Post-sowing	1,2 Leaf
10/06/11	INTERVIX (CL Plots)	0.6lt	Post-sowing	1,2 Leaf
10/06/11	HASTEN	0.50%	Post-sowing	1,2 Leaf
27/06/11	LE MAT	0.12lt	Post-sowing	1,3 Leaf
27/06/11	LONTREL	0.3lt	Post-sowing	1,3 Leaf
27/06/11	PROSARO	0.425lt	Post-sowing	1,3 Leaf
23/07/11	PROSARO	0.425lt	Post Em - Selected varieties	1,3 Leaf
27/07/11	HASTEN	1.00%	Post-sowing	1,3 Leaf
27/07/11	SELECT	0.5lt	Post-sowing	1,7 Leaf
27/07/11	HASTEN	1%	Post-sowing	1,7 Leaf
27/07/11	ATRAZINE 900 (TT Plots)	0.7kg	Post-sowing	1,7 Leaf



**Image 2.** Pacific Seeds Lake Bolac Hyola FCT Performance Trial July 2011 conducted in conjunction with SFS

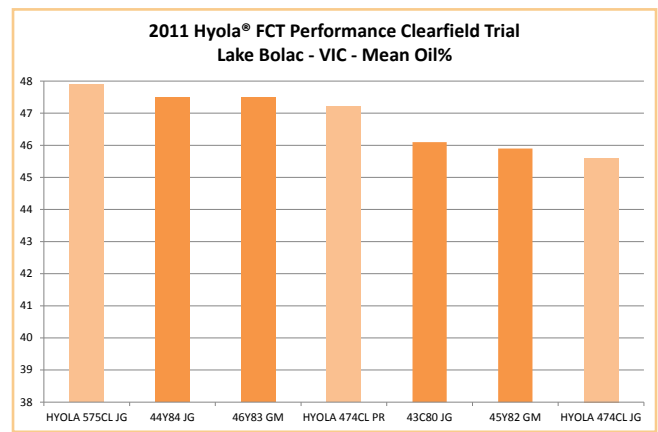
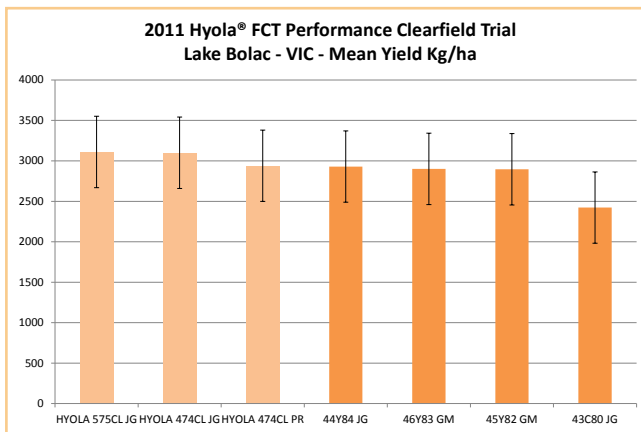
Variety	HTGrp	YLDHA	Rank	Oil
HYOLA 575CL JG	FCT CL BOL	3110	1	47.9
HYOLA 474CL JG	FCT CL BOL	3101	2	45.6
HYOLA 474CL PR	FCT CL BOL	2940	3	47.2
44Y84 JG	FCT CL BOL	2930	4	47.5
46Y83 GM	FCT CL BOL	2901	5	47.5
45Y82 GM	FCT CL BOL	2896	6	45.9
43C80 JG	FCT CL BOL	2423	7	46.1
HYOLA 404RR CM	FCT RR BOL	3248	1	46.1
HYOLA 505RR CM	FCT RR BOL	3168	2	46.3
HYOLA 404RR PR	FCT RR BOL	3124	3	47.9
HYOLA 505RR PR	FCT RR BOL	3099	4	46.3
45Y22 JG	FCT RR BOL	3030	5	45.6
45Y21 JG	FCT RR BOL	2988	6	44.6
CB ECLIPSE RR JG	FCT RR BOL	2813	7	44.1
GT COUGAR SJ	FCT RR BOL	2778	8	45.3
GT SCORPION SJ	FCT RR BOL	2744	9	44.1
GT TAIPAN SJ	FCT RR BOL	2668	10	45.5
T98060 JG	FCT TT BOL	3293	1	48.0
T98022 JG	FCT TT BOL	3225	2	44.5
CRUSHER TT CFJ	FCT TT BOL	3138	3	46.7
CRUSHER TT PP J	FCT TT BOL	3114	4	46.3
HYOLA 555TT JG	FCT TT BOL	3109	5	45.4
CRUSHER TT BARE	FCT TT BOL	3064	6	45.2
CRUSHER TT PP J82 J	FCT TT BOL	3062	7	46.3
HYOLA 555TT PR	FCT TT BOL	3052	8	44.8
HYOLA 751TT JG	FCT TT BOL	3033	9	46.2
CRUSHER TT PR	FCT TT BOL	3026	10	47.8
CRUSHER TT PP J82	FCT TT BOL	3009	11	44.1
JACKPOT TT JG	FCT TT BOL	2901	12	48.3
THUMPER TT JG	FCT TT BOL	2828	13	44.1
HYOLA 444TT JG	FCT TT BOL	2787	14	45.2
CB JUNEE HT JG	FCT TT BOL	2779	15	44.8
ATR STINGRAY JG	FCT TT BOL	2751	16	46.0
THUNDER TT FILL	FCT TT BOL	2680	17	44.7
TAWRIFFIC TT JG	FCT TT BOL	2638	18	46.0
FIGHTER TT JG	FCT TT BOL	2602	19	45.5
CB JARDEE HT JG	FCT TT BOL	2593	20	43.8
ATR SNAPPER JG	FCT TT BOL	2570	21	45.3
CB MALLEE HT JG	FCT TT BOL	2563	22	44.2
BONANZA TT JG	FCT TT BOL	2517	23	45.2
ATR COBBLER JG	FCT TT BOL	2412	24	45.2
BONANZA TT JG PR	FCT TT BOL	2340	25	45.5

### Results and discussion:

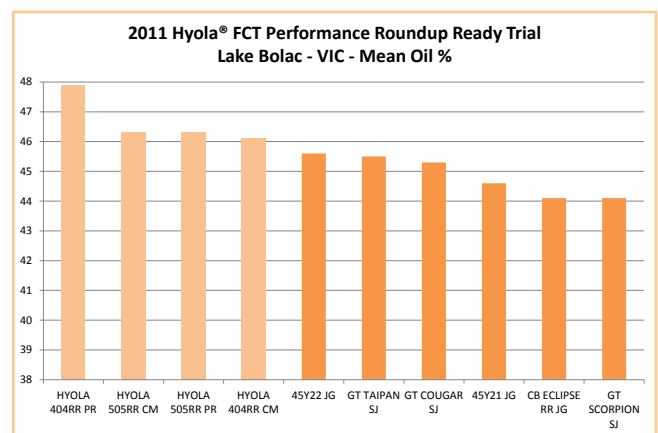
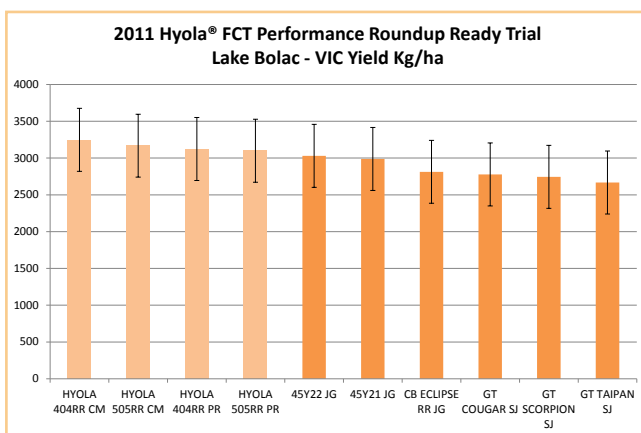
These trials were designed as 3 replicates within each herbicide technology group and each trial co-located next to each other. This site had excellent establishment and good subsoil moisture along with good finishing rains. This trial was conducted in conjunction with Southern Farming Systems on their Agri-Focus Trial site near Lake Bolac.

Overall the trial was well managed and weed control was excellent, with all the necessary specific chemistries applied for the herbicide tolerance groups.

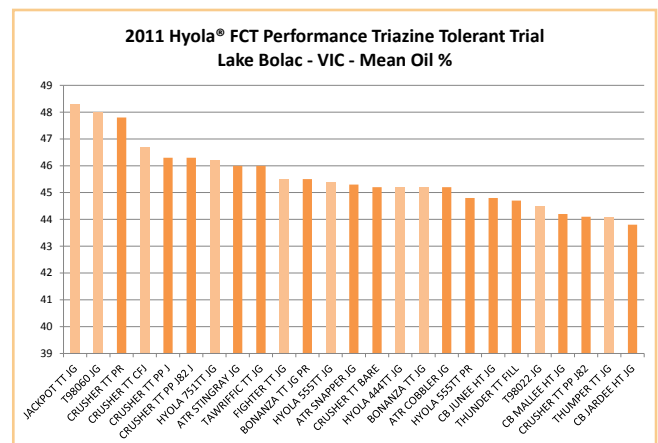
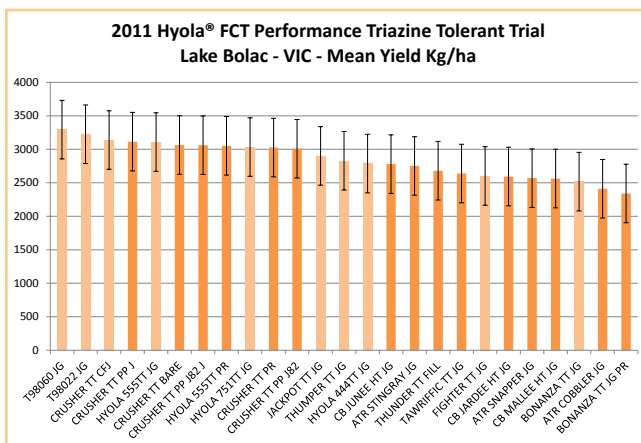
**RR Technology:** Hyola® 404RR and Hyola® 505RR show their adaptation to the medium and higher rainfall districts of Victoria and ability to have highest yields and Oil %'s assisted with excellent blackleg resistance.



**CL Technology:** Hyola® 474CL and Hyola® 575CL performed well against competitor Clearfield hybrids along with providing improved Oil%'s and standability. Most of the Hybrids evaluated significantly out-yielded the OP Clearfield variety 43C80. Both Hyola® 474CL and Hyola® 575CL provide excellent Clearfield canola options for Western District canola growers.



**TT Technology:** Hyola® 555TT, Crusher TT, Thumper TT and Jackpot TT show good adaptation and ability to have some of the highest yields for the Western Districts of Victoria. T98060 and T98022 show excellent potential as new improved TT Hybrids with the highest yields, significantly improved oil levels and blackleg resistance. Jackpot TT and T98060 show some of the highest oils in TT varieties.



**Prosaro Foliar Treatment:** Unfortunately by mistake Prosaro was applied across all plots in all 3 trials and in selected plots twice. This could and did have some influence on results pertaining to the effect of Prosaro on varietal performance so please disregard the effects other than the observation that lower blackleg rated varieties seemed to benefit from the application relative to higher rated varieties. Normally, there is no response to Prosaro, it is due to a number of factors including the genetic inherent resistance of the varieties, timing and amount of rainfall received at the trial site and the types or races of blackleg isolates evident in the district around the trial which could infect different varieties.

**Seed Treatments on Crusher TT:** No significant yield responses were achieved at this particular site for each of the seed treatments applied to Crusher TT; however several treatments were 100 to 150kg/Ha higher than the untreated control. Several of the treatments such as Cruiser Opti + Jockey showed enhanced early plant vigour and leaf growth during the drier cooler conditions. The Prosaro application across the whole trial may have also masked some of the effects of the fungicide treatments.