

P – CANOLA VARIETIES

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There will be several new canola varieties available for production in 2021. These include SF Dynatron TT, Hyola Blazer TT, Hyola Enforcer CT, HyTTec Trifecta, InVigor T 6010 and Pioneer 44Y94CL. Further to this, 2021 brings the first year that South Australian growers may be able to grow genetically modified canola (glyphosate tolerant). There may be further variety releases in the months to follow with seed possibly available for planting in 2021, but these cannot be confirmed at this time.

NOTES ON VARIETIES AT HART 2020 AND NEWLY RELEASED VARIETIES

Disease ratings for cultivars

S	susceptible
MS	moderately susceptible
MR	moderately resistant
R	resistant

TRIAZINE TOLERANT (TT) VARIETIES

ATR Bonito early to mid season maturing open pollinated variety. Short - medium height. Suited to low - medium rainfall areas. Blackleg resistance rating of MS (resistance Group A). Tested in NVT trials 2012-18. Marketed by Nuseed (EPR \$5.00/t ex GST).

DG 670TT a mid to late maturity triazine tolerant hybrid. Medium to tall plant height. Suited to medium - high rainfall areas. Blackleg resistance of MR (resistance Group BF). Tested in NVT in 2016-20. Marketed by Nutrien Ag Solutions and Seednet.

Hyola® 350TT an early maturing TT hybrid with. Medium plant height and is suited for low to medium rainfall zones. Blackleg resistance rating of R (resistance Groups ABDF). Tested in NVT trials in 2016-20. Bred and marketed by Pacific Seeds.

Hyola® Blazer TT is a new release. A mid to early maturing TT hybrid. It has medium to short plant height and has a blackleg resistance rating R (resistance groups to be determined). It is suited for low to medium and high rainfall zones. Replacement for Hyola 550TT, 559TT and 650TT. Tested in NVT trials 2019-20. Bred and marketed by Pacific Seeds.

HyTTec Trident an early maturity hybrid canola. It has a medium to tall plant height with blackleg rating of R (resistance Group AD). Tested in NVT trials 2017-20. HyTTec Trident is marketed with an EPR of \$10/tonne, but a reduced seed price compared to other hybrid varieties. Bred and marketed by Nuseed.

HyTTec Trifecta a new release. A mid-maturity hybrid canola. Medium to tall plant height with provisional blackleg resistance rating of R (resistance Group ABD). Tested in NVT trials 2019-2020. HyTTec Trifecta is marketed with an EPR of \$10/tonne, but a reduced seed price compared to other hybrid varieties. Bred and marketed by Nuseed.

HyTTec Trophy an early to mid-maturity hybrid canola. Medium to tall plant height. Blackleg rating of R-MR (resistance Group AD). In NVT 2017-20. HyTTec Trophy is marketed with an EPR of \$10/tonne, but a reduced seed price compared to other hybrid varieties. Bred and marketed by Nuseed.

In Vigor T 4510 a mid- season hybrid variety. Medium plant height and suited to medium rainfall areas. Blackleg resistance rating of MR-MS (resistance Group BF). Tested in NVT trials 2016-19. Marketed by BASF.

In Vigor T 6010 a new release. Mid to late season hybrid variety which is suited to higher rainfall areas. BASF suggest a blackleg resistance rating of MS (resistance Group BC). Tested in NVT trials 2019-20. Marketed by BASF

Monola® 420TT a new release. A new open pollinated early maturing Monola variety. Provisional blackleg rating of MR (resistance group to be determined) with medium plant height. Tested in NVT trials 2019-20. A premium payment will apply to Monola H420TT. Closed loop market and must be delivered to Glencore Grain at Owen and Coomandook.

Monola® H421TT a new release. A new hybrid which is an early maturing Monola variety. Provisional blackleg rating of MR (resistance group to be determined). It has medium plant height and has been tested in NVT trials across 2019-20. A premium payment will apply to Monola H421TT. Closed loop market and must be delivered to Glencore Grain at Owen and Coomandook.

Pioneer 44T02 (TT) an early to mid-maturing hybrid variety. It has medium plant height, suited for low to medium rainfall areas. Blackleg resistance rating of R (resistance Group ABD). Tested in NVT trials in 2015-18. Marketed by Pioneer Brand Seeds.

Pioneer 45T03 (TT) a mid maturing triazine tolerant hybrid. Medium plant height and suited to medium to high rainfall areas. Blackleg resistance rating of R (resistance Group ABD). Tested in NVT trials 2018-20. Marketed by Pioneer Brand Seeds.

SF Dynatron TT a new release. Mid maturing hybrid canola. It is suited to medium to high rainfall areas. Medium-tall height with a high oil content. Blackleg rating of MR-MS (resistance Group BC). NVT tested 2019-20 as SFR65-061TT. Released 2020. Marketed by Seed Force. EPR \$10.00.

SF Ignite TT a mid maturing hybrid. Suited to medium to high rainfall zones. Medium plant height. Blackleg resistance rating MR (resistance Group BF). Tested in NVT 2016-20. Marketed by Seed Force.

SF Spark TT an early maturing hybrid. Suited for low to medium rainfall areas. Medium plant height. Blackleg rating R (resistance Group ABDS). Tested in NVT trials 2018-20. Marketed by Seed Force.

SF Turbine TT an early to mid maturing hybrid. Excellent early vigour with a moderate height

and oil content. Suited to medium rainfall areas. Blackleg resistance rating MR-MS (resistance Group BF). Tested in NVT 2015-20. Marketed by Seed Force.

DUAL TRIAZINE AND IMIDAZOLINONE TOLERANT

Hyola® 580CT a dual herbicide tolerant, Hyola® 580CT carries tolerance to both triazine and imidazolinone herbicide chemistries. It is a mid-maturing hybrid. Hyola® 580CT is thermal responsive and when sown in early-mid April, will commence flowering at a similar time to other varieties with mid - fast phenology. Medium plant height. Suited to Medium-high through to high rainfall areas. Blackleg resistance rating R (resistance Groups BC). Tested in NVT trials in 2017-20. Bred and Marketed by Pacific Seeds.

Hyola® Enforcer CT a new release. Dual herbicide tolerant, Hyola Enforcer CT carries tolerance to both triazine and imidazolinone herbicide chemistries. Mid-early maturity. Medium plant height. Suited to low-medium through to high rainfall areas. Blackleg resistance rating R (resistance groups to be determined). Tested in NVT trials in 2019-20. Bred and marketed by Pacific Seeds.

IMIDAZOLINONE TOLERANT

Pioneer 43Y92 (CL) an early maturing hybrid with medium plant height. Blackleg resistance rating of R (resistance Group B). Suited for low to medium rainfall areas and short season growing zones. Tested in NVT trials 2016-20. Marketed by Pioneer Brand Seeds.

Pioneer 44Y90 (CL) an early to mid-maturing hybrid. It has medium plant height and suited for low to medium rainfall areas. Blackleg resistance rating of R (resistance Group B). Tested in NVT trials in 2015-20. Marketed by Pioneer Brand Seeds.

Pioneer 44Y94 (CL) a new release. An early to mid maturing hybrid. Blackleg resistance rating of R (resistance Group BC). Tested in NVT trials in 2019-20. Marketed by Pioneer Brand Seeds.

Pioneer 45Y93 (CL) an early flowering, mid maturing hybrid variety. It has medium to tall plant

height with a blackleg rating of R (resistance Group BC). Tested in NVT trials in 2017-20. Marketed by Pioneer Brand Seeds.

Saintly CL a mid maturity hybrid, slightly earlier than Banker with high oil content. It has medium plant height with a blackleg rating MR (resistance Group B). Tested in NVT 2016-20. Marketed by Barenbrug.

Victory® V75-03CL a mid maturing specialty (high oleic, low linoleic oil) hybrid. Medium plant height. Blackleg rating R-MR (resistance Group AB). Tested in NVT trials from 2017-2020. Bred by Cargill. Marketed by AWB under contract.

CONVENTIONAL

AV-Garnet a mid-maturing open pollinated variety. It has medium height and is widely adapted. Blackleg resistance rating of MS (resistance Group A). Tested in NVT trials 2006-2019. Bred by DPI Victoria. Marketed by Nuseed Pty Ltd.

Nuseed Diamond a early maturing hybrid. Very fast to flower. Medium plant height. Suited for low to medium rainfall areas. Blackleg resistance rating of MR (resistance Group ABF). Tested in NVT trials in 2012-20. Bred and marketed by Nuseed Pty Ltd.

Nuseed Quartz mid-maturing conventional hybrid. Replacement for AV Garnet with medium height. Blackleg resistance rating of R (resistance Group ABD). Tested in NVT trials 2016-20. Bred and marketed by Nuseed Pty Ltd.

GLYPHOSATE TOLERANT HYBRID VARIETIES

Hyola® 404RR an early, Roundup Ready® hybrid canola. Medium to medium-tall plant height. Suited for low to medium rainfall zones with a blackleg resistance rating of R-MR, (resistance Groups ABD). NVT tested 2010-2020. Bred and marketed by Pacific Seeds.

Hyola® 410XX an early to mid, Truflex® hybrid canola. It has medium to medium-tall plant height and it suited for low to medium-high rainfall zones. Blackleg resistance rating of R-MR, (resistance Groups ABD). NVT tested 2018-2020. Bred and marketed by Pacific Seeds.

Hyola® 506RR a mid maturing hybrid variety. It has medium plant height and is suited for medium to high rainfall zones. Blackleg rating R (resistance Group ABD). NVT tested 2013, 2016-19. Released 2017. Bred and Marketed by Pacific Seeds.

InVigor R 3520 an early maturing Roundup Ready® hybrid variety. Suited to early season areas or later planting. Medium plant height. Blackleg rating R-MR (resistance group unknown). NVT tested 2016-20. Released 2017. Bred and marketed by BASF.

InVigor R 4022P an early to mid-maturing Truflex® hybrid, suited to medium rainfall zones. PodGuard® technology makes it suited to later windrowing timings or direct harvest. BASF indicate a blackleg rating of MR (resistance Group ABC). NVT tested 2019-20. Bred and marketed by BASF.

InVigor R 5520P a mid-maturing Roundup Ready® hybrid variety suited to medium to high rainfall areas. PodGuard™ technology makes it suitable for flexible windrow timing or direct heading with reduced harvest losses. Medium height. Blackleg rating MR (resistance Group ABC). NVT tested 2015-20. Bred and marketed by BASF.

Pioneer® 43Y23 (RR) early maturing Roundup Ready® hybrid best suited to low to medium rainfall districts. Blackleg rating R-MR (resistance Group BC). NVT tested 2011-18. Marketed by Pioneer Brand Seeds.

Pioneer® 43Y29 (RR) early to mid-maturing Roundup Ready® hybrid variety. Suited for early sowing in a wide range of rainfall zones. Blackleg rating of R-MR (resistance Group BC). Medium height. NVT tested 2017-20 Released 2018. Marketed by Pioneer Brand Seeds.

Pioneer® 44Y27 (RR) early to mid-season Roundup Ready® hybrid variety, ideally suited to low to medium rainfall zones. Blackleg rating R-MR (resistance Group B). NVT tested 2016-19. Marketed by Pioneer Brand Seeds.

Pioneer® 45Y28 (RR) mid maturing Roundup Ready hybrid variety. Suited to medium to high rainfall zones and irrigation. Blackleg rating unknown (resistance Group BC). Medium to tall height. NVT tested in 2018-19. Released 2018. Marketed by Pioneer Brand Seeds.

Xseed™ Raptor early to mid-maturing Truflex® hybrid. Blackleg rating MR (resistance Group AD). Medium height. NVT tested 2018-20. Marketed by Nuseed.

Xseed™ Condor a new release. Mid maturing Truflex® hybrid. Provisional blackleg rating R (Nuseed) (resistance Group ABD). Tall height. NVT tested 2019-20. Marketed by Nuseed.

Victory® V5003RR a mid maturing Roundup Ready® specialty (high oleic, low linoleic oil) hybrid variety. Medium height. Blackleg rating R-MR (resistance Group AB). NVT tested 2013-2020. Bred by Cargill. Marketed by AWB under contract.

DUAL TRIAZINE AND ROUNDUP READY TOLERANT VARIETY

BASF 3000 TR an early maturing Roundup Ready®/ Triazine Tolerant hybrid suited for low to medium rainfall zones. Blackleg rating MS-S (resistance Group B). NVT tested 2015-19. Marketed by BASF.

DUAL IMIDAZOLINONE AND ROUNDUP READY TOLERANT VARIETY

Hyola® 540XC dual herbicide tolerant, early to mid TruFlex® + Imidazolinone hybrid canola. Suited for the medium to high rainfall zones. Hyola® 540XC is thermal responsive and when sown in early-mid-April, will commence flowering at a similar time to other varieties with mid - fast phenology. Blackleg rating R (resistance groups to be determined). NVT tested 2019-2020. Marketed by Pacific Seeds.

Hyola® Garrison XC a new release dual herbicide tolerant, early to mid-maturing Truflex® + Imidazolinone hybrid canola. Medium to medium-tall plant height. Suited for the low to medium and high rainfall zones. Blackleg resistance rating R (resistance groups to be determined). NVT tested 2019-2020. Bred and marketed by Pacific Seeds.

Canola variety trial plan

1	SF Turbine TT	1	
2	SF Ignite TT	2	
3	SF Spark TT	3	
4	Pioneer 44T02 TT	4	
5	Pioneer 45T03 TT	5	
6	ATR Bonito	6	
7	HyTTec Trophy	7	
8	HyTTec Trident	8	
9	HyTTec Trifecta	9	Nuseed Quartz
10	Hyola® 350TT	10	Nuseed Diamond
11	Hyola® 559TT	11	
12	Hyola® 580CT	12	
13	CT 90008	13	
14	InVigor T4510	14	Pioneer 44Y90 (CL)
15	InVigor T3510	15	Pioneer 43Y92 (CL)
16	DG1902TT	16	Pioneer 45Y93 (CL)
17	DG 670TT	17	Banker CL
18	DG 1903TT	18	Saintly CL

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Seeding date: May 5, 2020
Fertiliser: DAP + Impact
Fertiliser rate: 80 kg/ha

*2 plots sown for each variety

Table 3. Mid-North mid-season canola

Year	2015	2016	2017	2018	2019	
Mean yield (t/ha)	1.76 t/ha	2.79 t/ha	2.34 t/ha	1.34 t/ha	1.56 t/ha	
Variety	No. Trials	3	3	3	1	3
ATR Bonito	9	96	97	96	93	
ATR Mako	9	95	95	96	95	
ATR Stingray	7	97	96	93	87	
ATR Wahoo	5	88	97	96		
DG 670TT	9		112	108	103	108
Hyola 350TT	6		109	107	111	111
Hyola 559TT	13	105	103	106	113	104
Hyola 580CT	5			100	99	96
Hyola 650TT	8	97	102	104	106	
Hyola Enforcer CT	3					113
HyTTec Trident	5			119	128	116
HyTTec Trifecta	3				120	122
HyTTec Trophy	7			115	118	115
InVigor T 4510	10		117	113	113	117
InVigor T 6010	3					116
Pioneer 44T02 TT	7	108	103	106	113	
Pioneer 45T03 TT	4				97	102
SF Dynatron TT	3					116
SF Ignite TT	9		112	108	101	105
SF Spark TT	3					103
SF Turbine TT	13	110	108	106	108	108
Mean yield (t/ha)	1.76 t/ha	2.80 t/ha	2.34 t/ha	1.34 t/ha	1.56 t/ha	
Variety	No. Trials	3	3	3	1	3
Banker CL	9	110	111	105	100	
Hyola 575CL	6	90	91	92	91	92
Pioneer 43Y92 (CL)	3		111	108	111	
Pioneer 44Y90 (CL)	10	114	112	108	107	111
Pioneer 44Y94 CL						116
Pioneer 45Y91 (CL)			106	103		104
Pioneer 45Y93 CL	12			109		110
Saintly CL	8	120	112	107		115
VICTORY V7002CL	13			96		95
VICTORY V75-03CL	2					94
Mean yield (t/ha)	1.80 t/ha	2.92 t/ha	1.97 t/ha	No Result	1.59 t/ha	
Variety	No. Trials	1	1	1		1
AV Garnet	4	86	87	86		87
Nuseed Diamond	4	108	107	106		111
Nuseed Quartz	3		114	116		112

Triazine Tolerant

Imidazolinone Tolerant

Conventional

NVT Trials are not designed to allow comparison of varieties between herbicide tolerance groups.

Data source: SARDI/GRDC, NVT 2015-2019 MET data analysis by National Statistics Program.