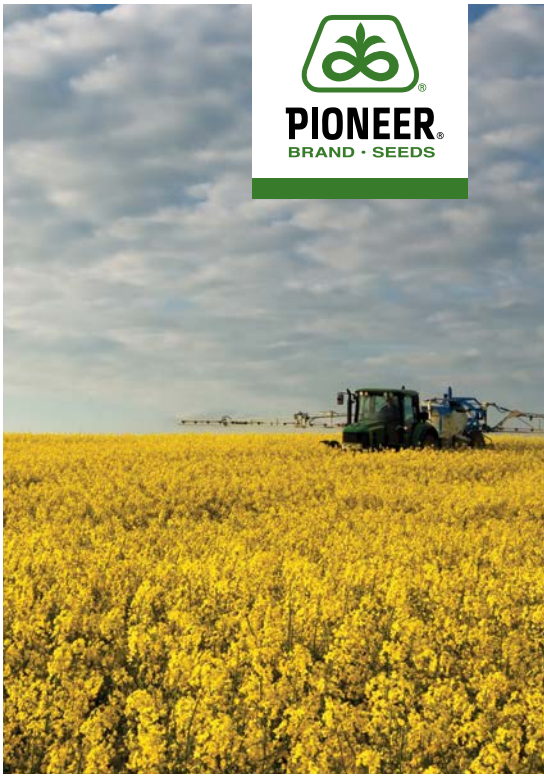
PIONEER®
BRAND · SEEDS

HERBICIDE TOLERANT CANOLA STEWARDSHIP GUIDE



WITH YOU FROM THE WORD GO

WE UNDERSTAND THE BEST LEADERS SERVE

We believe we have a unique responsibility to help better growers operations and advance the science of agriculture in Australia.

We do this by delivering improved seed genetics to farmers, developing and distributing high-quality corn, sorghum, canola, summer forage seed and inoculant products.

All Pioneer® brand seed sold in Australia is grown and processed to world-class, quality-assured standards at the company's Narromine based Seed Production Operations Plant.

We believe supporting our customers drive for success means delivering farmers with the very best performing products on the market and also sharing our knowledge and passion for field agronomy through our dedicated people.

The company is committed to comprehensive pre- and post-sales technical service, together with broader farm management advice and support.

We're a Yates family-owned company and we've been operating in Australia for over 40 years, serving our customers with integrity, unmatched agronomic knowledge and solutions to help them succeed.

PIONEER LONG LOOK AS ADOPTED BY GENTECH SEEDS

We strive to produce the best products on the market.

We deal honestly and fairly with customers, employees and business associates.

We vigorously market our products, but without misrepresentation.

We provide helpful management information to assist customers in making optimum profits from our products.

STEWARDSHIP IN PRACTICE

Protecting canola choices, today and for the future.

- Promoting stewardship is our way of doing business;
- Preserving the long-term sustainability of herbicide tolerant technologies and production systems in canola rotations ensures the competitive edge of Australian canola;
- Industry stewardship protects market choice for all stakeholders along the supply chain and market access in existing and new export markets;
- Stewardship is everyone's responsibility and supports our licence to operate.

Stewardship in sustainable farming systems.

- Stewardship should be a priority area of focus in whole farm planning;
- Support implementation of good stewardship through sustainable production practices and compliance to grain trading standards from **'paddock to plate'**;
- Leadership in integrated weed management helps Australian farmers continually reduce their environmental footprint and adapt to the evolving challenge of herbicide resistance.
- Use the **'BIG 6' OF THE WEEDSMART PLAN** WEEDSMART is an Australian stewardship initiative to help manage herbicide resistance and win the battle against weeds in crop rotations. See www.weedsmart.org.au

Industry partnership along the supply chain.

- Creating industry partnership helps to drive participation by ALL key stakeholders to promote stewardship and best practices on-farm and along the supply chain, see Supporting Resources (pg. 20).
- Stewardship is a core principle adopted by the Australian grains industry that pro-actively supports co-existence of technologies. Thus, growers and consumers can exercise their choice to respectively use new production technologies and make consumption choices.
- Putting stewardship management practices in action along the Australian supply chain encourages on-going innovation and investment.

HERBICIDE TOLERANT CANOLA FARMING SYSTEMS

Stewardship practices help to manage the long-term sustainability of ALL herbicide technology systems and ultimately, more profitable farming systems.

REVIEW OF MAIN CANOLA SYSTEMS COMMERCIALLY AVAILABLE IN AUSTRALIA

Triazine System

System is limited by poor early crop vigour and lower yield potential linked to the triazine trait. Herbicide efficacy is impacted by dry conditions but provides some residual control for multiple germinations of ryegrass. Ensure triazine herbicides are used responsibly and thoughtfully to minimise potential to impact the environment and off-target spray damage.

Clearfield® Production System

Clearfield® Production System for Canola

System proven top performance for early vigour and yield potential. Good broadleaf weed control, but limited control on ryegrass if not used with grass selective herbicide. Watch herbicide resistance risk and carryover soil residues.

Roundup Ready® Technology System

Roundup Ready® CANOLA

System now with proven hybrids. Excellent broad-spectrum weed control. This system provides a good opportunity to avoid over-reliance on Group A and B herbicide groups in the canola phase. Note limitations on the cultivation, segregation and marketing of GM canola in some Australian States and Territories for marketing reasons, see OGTR website (www.ogtr.gov.au).

Roundup Ready® and Triazine Tolerant System

Roundup Ready® CANOLA + Triazine Tolerant

System performance limited by triazine trait. Trait stack adds different herbicide modes of action and combination of knockdown and residual weed control post emergence.

SYSTEM-SPECIFIC STEWARDSHIP PRACTICES IN CANOLA FARMING

Triazine Tolerant System Guidelines

- Carefully manage the lower crop vigour of Triazine Tolerant (TT) canola to enhance crop competition;
- Monitor triazine herbicide carryover risk for crop rotational planning;
- Always adhere to mandatory application practices for triazine herbicides (atrazine, simazine) set by industry and government. E.g. Maximum annual rates, withdrawal of atrazine use in non-agricultural situations and avoiding run-off into waterways. See Supporting Resources (pg. 20);
- Be mindful that triazine resistance in weeds has been recorded in Australia and globally.

Clearfield® Production System Guidelines

- Do not rely solely on ALS-inhibiting herbicides, for more than two out of four years, unless other weed-control practices are implemented on targeted weed species;
- Monitor imidazolinone herbicide carryover risk for crop rotational planning;
- Use imidazolinone herbicide only on designated Pioneer® brand canola varieties with Clearfield® technology;
- Target proper control of volunteer plants and outcrossing in crop rotations with the growing of ALL Clearfield® crops including corn, wheat, barley and some pulses;
- Avoid Group B herbicides to control crop volunteers post-harvest.

Always use Herbicide Tolerant Canola systems to manage weed seed banks across the crop rotation sequence.

Roundup Ready® Technology System Guidelines

- Minimise glyphosate as a stand-alone knockdown for other crops in the rotation and across the farming system;
- Growers must have a plan to manage glyphosate resistant weed populations;
- Always use first generation hybrid seed with Roundup Ready® Technology to be compliant with commercial licence conditions;
- Use Roundup Ready® herbicide with PLANTSHIELD® at labelled rate;
- Maximum of 2 applications of Roundup Ready Herbicide with PLANTSHIELD by 6 true leaf stage per crop;
- Glyphosate herbicide will NOT control crop volunteers in the fallow phase;
- Important to implement glyphosate resistance risk management strategy utilising pre-emergent herbicides with different modes of action and cultural practices;
- Clearly identify grain harvested from GM canola to trucking contractors and at delivery points for segregation in the supply chain including the use of vendor declarations, labels and records;
- Glyphosate may not control canola volunteers; use of glyphosate alone is NOT registered for control of canola volunteers in ALL canola systems. For further information see page 19.

CHOOSING THE RIGHT CANOLA SYSTEM FOR YOUR FARM

Stewardship aims to reduce the risk of herbicide resistance while capturing the many benefits of canola in a farming system.

Selecting the right system

- Australian farmers are at the forefront of having access to and adopting herbicide tolerant crops in cropping rotations. A range of herbicide tolerant (HT) systems in canola provide choice and more management options;
- Choosing the right canola system and frequency of rotation will always be linked to maximising profitability, but the decision should be guided by crop sequencing options to use alternative herbicide groups and to prevent weed seed bank build-up;
- Avoid blanket recommendations. Factors for consideration in each paddock include weed spectrum history, herbicide resistance status, crop rotation sequences and state legislation (GM);
- Stewardship for a designated herbicide tolerant canola system should focus on system-specific practices;
- A combination of 'double-knock' strategies including application of pre-emergent and post-emergent herbicides across herbicide groups is recommended for all herbicide tolerant canola systems.

Maximising the benefits of hybrids

- Australian breeders are at the forefront of delivering access to high yielding hybrids over the range of available herbicide tolerant systems and maturities in canola which suit all growing regions;
- Take advantage of hybrid vigour for early sowing opportunities and greater choice of herbicide tolerant technology systems to add flexibility and diversity in farming systems;
- Crop competition is an important strategy in the 'Big 6' of the WeedSmart Plan to manage herbicide resistance – but it's not all about row width and seeding rate – the agronomic management of the hybrid crop makes a difference too;
- Stewardship for a designated hybrid starts with knowing what you grow – always plant first-generation hybrid canola seed;
- Balance the inputs for hybrid canola with the yield targets and aim to maximise crop competition. Avoid blanket recommendations for hybrids compared to open-pollinated varieties including paddock selection, crop nutrition, and canopy management (sowing time, row spacing).

HOW THE CANOLA PLANT DEVELOPS

Understanding canola plant development

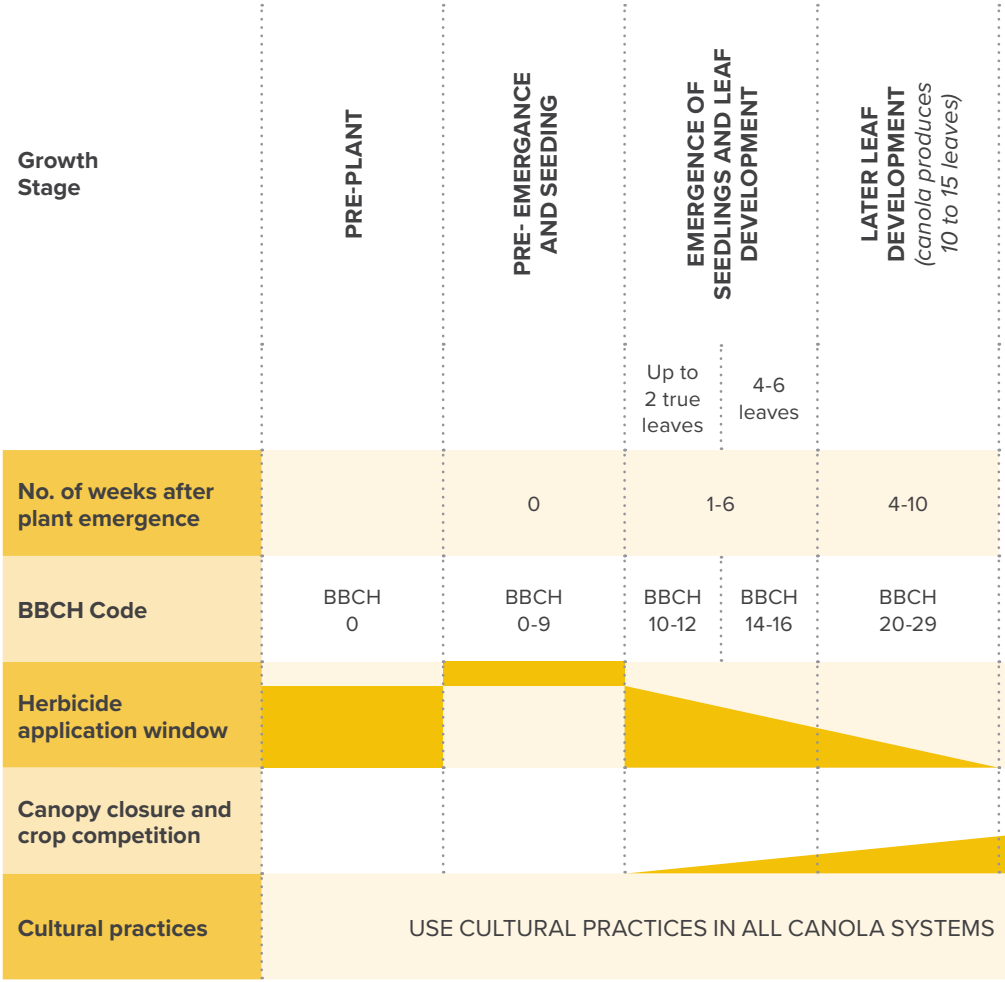
- It is important to understand the development of a canola plant and the phenology of specific varieties grown. This information supports management decisions and allows proper timing of inputs e.g. spray applications and crop safety;
- Apply selective herbicides before elongation of canola plants (**BBCH 16**) in ALL commercial canola technology systems;
- A standardised scale called the **BBCH Decimal Growth Stage Scale System** is used globally in crops such as canola and should be recommended to describe canola growth stages, see Supporting Resources (pg. 20).
- Recommended herbicide application timing and use of other weed management practices in canola are shown in Figure 2.

Canola BBCH stage development chart, *Lancashire PD et al (1991) Figure 1*

Cotyledon (BBCH 10) | **2 leaf** (BBCH 12) | **6 leaf** (BBCH 16) | **10% flowering** (BBCH 61) | **Physiological maturity** (BBCH 86-88)

CANOLA TECHNOLOGY SYSTEM WEED MANAGEMENT

Figure 2



STEM ELONGATION AND BUD FORMATION

FLOWER BUD PRESENT Flowers open and senesce

POD DEVELOPMENT

PRE HARVEST

HARVEST

POST-HARVEST

8-14	10-16		16-20	20-24		1-6
BBCH 30-49	BBCH 50-59	BBCH 60-69	BBCH 70-79	BBCH 80-89		BBCH 90-99

THROUGHOUT THE SEASON TO ADD DIVERSITY

CANOLA SYSTEM-SPECIFIC HERBICIDE MANAGEMENT PRACTICES

Figure 3

CANOLA TECHNOLOGY SYSTEM (HERBICIDE TOLERANCE)

ROTATION PLAN	PRE-PLANT	PRE-EMERGENCE
Triazine Tolerant	Use grazing/burning crop residues, knockdown herbicide(#watch for canola plantback period) and strategic tillage to optimise EARLY sowing opportunities.	*Simazine @ 2 L/ha + Atrazine @ 1 L/ha PSPE *TriflurX® @ 2 L/ha IBS
Clearfield® Production System for Canola		*TriflurX® @ 2 L/ha and Avadex Xtra® @ 3.2 L/ha IBS *Propyzamide (Rustler®) @ 1 L/ha IBS *Butisan® @ 1.8 L/ha
		*Propyzamide(Rustler®) @ 1 L/ha and Sentry® @ 50 g/ha *TriflurX® @ 2 L/ha, Bouncer®960S @ 250 ml/ha and Sentry® 50 g/ha
Roundup Ready® CANOLA		*TriflurX® @ 2 L/ha and Bouncer®960S @ 250 ml/ha IBS *Propyzamide (Rustler®) @ 1 L/ha IBS *Butisan® @ 1.8 L/ha
Roundup Ready® CANOLA **+ Triazine Tolerant**		Simazine @ 2 L/ha + Atrazine @ 1 L/ha PSPE *TriflurX® @ 2 L/ha IBS

Identify opportunities to introduce Canola technology systems into crop rotations

BBCH 10-12	BBCH 14-16	BBCH 20-29	BBCH 30-49	BBCH 50-59	BBCH 60-69	BBCH 70-79	BBCH 80-89	BBCH 90 -99
Atrazine @ 1 L/ha + Select™ @ 0.4 L/ha		Herbicide application for late weed control is limited in ALL commercial canola systems. Herbicide options include Lontrel™ and selective grass herbicides (Select™, Verdict® and Factor®). Watch A12:AC30 crop damage and refer to manufacturer's product labels for directions of use.	**NO herbicide application recommended across these canola growth stages in ALL commercial canola systems**			Weedmaster® DST® is registered for application pre-harvest in ALL commercial canola systems. Target late weed control and prevention of weed seed set. Refer to label for directions of use. Watch for grain residue limits in marketing contracts and damage to seed if retained for planting.	Reglone® is registered for crop dessication pre-harvest in ALL canola systems. Also, contributes to pre-harvest weed control.	Target ALL canola volunteers and surviving weeds early (by 4-leaf stage) post-harvest.
Intervix® @ 0.5 L/ha + Select™ @ 0.4 L/ha + Lontrel™ @ 0.3 L/ha								
Select™ @ 0.4 L/ha + Lontrel™ @ 0.3 L/ha								
1st post emergent Roundup Ready® with PLANTSHIELD®	2nd post emergent Roundup Ready® with PLANTSHIELD®							
1st post emergent Roundup Ready® with PLANTSHIELD®	2nd post emergent Roundup Ready® with PLANTSHIELD®							
	2nd post emergent Roundup Ready® with PLANTSHIELD® + Atrazine® @1 L/ha							

HERBICIDE STEWARDSHIP
BEST PRACTICE OVERVIEW

Use registered herbicide – READ AND FOLLOW LABEL DIRECTIONS.

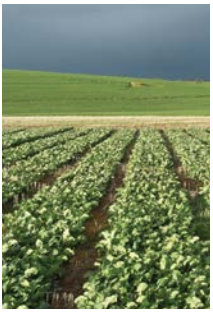
HERBICIDE APPLICATION GUIDELINES:

General guidelines

- Avoid dry sowing in obviously weedy paddocks and use a knockdown herbicide after the opening rains;
- A pre-plant herbicide (e.g. trifluralin) from an alternate herbicide group is recommended;
- Post-emergence herbicide application should be made when weeds are small (1-2 leaf ryegrass and/or broadleaf weeds are 2-3 cm diameter);
- It is critical to minimize early weed competition to maximize canola yield potential;
- Getting the crop agronomy right will boost early plant vigour and competitiveness of crops;
- Always follow the herbicide label rate;
- Strictly adhere to maximum limits of active ingredient that can be used within a growing season;
- Match the most appropriate choice of droplet size, boom height set-up and choice of herbicide additive for each situation;
- Rotate alternate herbicide modes of action (MOA) groups within a growing season and/or across consecutive years.

Avoid crop injury:

- Use only registered herbicides and follow label directions of use;
- Ensure ALL herbicide tolerant canola crops are sown with proprietary, quality assured seed (genetic and trait purity).



HERBICIDES AND THE ENVIRONMENT:

Minimize spray drift:

- At no time should spray drift be allowed to enter waterways (herbicide application should not be closer than 60 metres from any water-course);
- Monitor conditions throughout the spraying operation;
- Follow all application directions on the registered herbicide label;
- Communication with neighbours is fundamental;
- Whenever conditions are unsuitable such as winds and waterlogged soils, spraying must cease to prevent spray drift and run-off causing off-target spray damage.

Manage residues in soil and grain:

- Always adhere to withholding periods of the registered herbicide and label 'Directions of Use';
- Adhering to label recommendations will reduce environmental contamination and adverse effects on following crops in the rotation;
- Keep accurate records of all pesticide applications;
- Managing maximum herbicide residue limits in grain is a priority.

Container management and disposal:

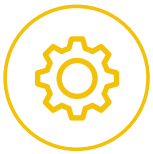
- Recycle empty pesticide containers through participation in the drumMUSTER program.
- Ensure disposal of obsolete chemical stocks in an environmentally safe way through the ChemCLEAR program.

HERBICIDE RESISTANCE RISK ASSESSMENT GUIDELINES

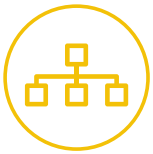
Herbicide resistance risk assessment contributes to best management stewardship. Strategically incorporate new technologies and alternate use of herbicide groups in canola rotations.

MANAGING HERBICIDE RESISTANCE FOR HERBICIDE TOLERANT CANOLA

3 key principles for preserving herbicides and herbicide tolerance plant traits

1 

Use in combination with other cultural practices

2 

Rotate and mix herbicide mode of action

3 

Integrate diversity through all phases of crop rotations

PROTECTING CANOLA CHOICES TODAY AND FOR THE FUTURE THROUGH STEWARDSHIP

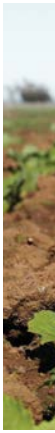
General objectives:

- Aim to enter the canola phase of the rotation with a low weed burden;
- Have a plan to manage surviving weeds in the crop season;
- Aim to leave the canola phase of the rotation with a low weed seedbank.

Recommended industry strategies:

- Use a long-term plan to diversify weed management practices (herbicide, hygiene and cultural) in paddock and across whole farm;
- Apply stewardship plans when growing herbicide tolerant canola including a herbicide resistance risk assessment;
- Always know before you sow – plant clean seed and increase crop competition by using hybrids in the canola phase;
- Use the 'double-knock' approach at key times of crop (pre-plant, pre-emergence and post harvest) and in non-crop situations (pasture ley, fallow phase, crop borders and fencelines). 'Double-knock' may include alternative herbicide groups and combination of herbicide with cultural tactics;
- Ensure the effectiveness of every herbicide application;
- Always monitor the results from herbicide application and use other integrated weed management practices to control weed seed sets;
- Consider late season weed control and in-crop spray-topping with alternative herbicide groups;
- Avoid over-reliance on stand-alone glyphosate herbicide knockdown where crop competition is absent. For example, crop borders, fence lines and roadsides;
- Test weed populations for herbicide susceptibility status to see what still works;
- Where herbicide resistance is suspected, confirm this status using herbicide resistance testing to support future weed management decisions;
- Incorporate weed seed capture practices at harvest;
- Plan to use alternate herbicide MOA groups in consecutive years throughout the crop rotation including pasture and fallow phases;
- Be vigilant and proactive to stop weed seed set including alternate control strategies such as patch spraying and Optical Spray Technology;
- Implement farm biosecurity and hygiene practices to prevent movement of resistant weed seed.

EXAMPLES OF IWM PRACTICES IN HERBICIDE TOLERANT CANOLA SYSTEMS



Be proactive using diverse weed managment tactics to ensure no further weed seed set allowed to occur, and drive down the weed seed bank.

	HERBICIDE	CULTURAL	OTHER
Pre-Planting	• Herbicide resistance testing • Sow later – more knockdown opportunities before sowing • 'Double-knock' (glyphosate followed by paraquat) • Alternate pre-emergent herbicides used in other crops in rotation	• **Farm hygiene,** avoid: - feeding hay on cropping area - spreading weed seeds with livestock/ equipment • Autumn tickle • Full disturbance cultivation • Farm hygiene (clean seed)	• **Crop rotation sequence:** - pasture manipulation - long spray fallowing - green/brown manure crops - double break cropping - crop topping - pulses - oaten hay crop
In Crop	• Post-emergent herbicide tactics (sequences/tank mixes) • Carefully manage spray application (label rates and directions of use) • Alternate herbicide MOA to control weed escapes	• **Increasing crop competition** E.g. row spacing/seeding, rate/row, orientation/use hybrid vigour in canola phase • Graze and grain (dual–purpose) • Cutting canola for hay/silage	• Tramline/precision cropping system • Variable-rate nutrient mapping • Prevent weed seed transfer from crop borders/fence lines • Hand roguing and patch control • Weed mapping to target SSWM*

* Site-specific weed management

	HERBICIDE	CULTURAL	OTHER
Harvest	• Pre-harvest application with herbicide e.g. Weedmaster® DST* • Chemical crop desiccation e.g. Reglone®	• Swathing/windrowing • **Harvest weed seed capture:** Chaff carts, Bale direct • Harrington Seed Destructor™	• Farm hygiene (grain) • Cleaning and transport of equipment • Herbicide resistance testing
Post-Harvest	• Chemical fallowing • Optical spray technology in fallow phase • Different MOA group herbicides across crop rotation sequence	• Narrow windrow burning - canola • Grazing stubble	• Minimise burial at depth of weed seed • Strategic tillage to control weeds and volunteers in fallow

* The effectiveness in weed control and prevention of weed seed set measured following use of different integrated weed management practices in Australia may vary across regions and farming systems. Refer to manufacturers' websites for herbicide label 'directions of use'.

WHOLE FARM STEWARDSHIP PLANNING CHECKLIST

Plan and implement a whole farm stewardship program including pre-season and post-season practices.

Pre-season stewardship check list

- [ ] Have a paddock plan for managing weeds on crop borders including fence lines and roadsides.
- [ ] Use a farm rotational planner to provide an overview of crop and herbicide history.
- [ ] Consider potential herbicide soil residues from previous crops grown and fallow phase.
- [ ] Assess the weed species present and herbicide resistance status in the paddock.
- [ ] Ensure paddocks sown to HT canola are clearly identified to prevent accidental herbicide application:
  - on farm maps;
  - at the boundaries of these paddocks and;
  - including entrance gates.
- [ ] Consider adding alternative IWM options (e.g. green/brown crop maturing) for effective in-crop weed control across cropping rotations.

In-crop stewardship check list

- [ ] Always source quality-assured seed for trait purity and confirm seed identification: All Pioneer® brand canola seed packaging is marked with "**Herbicide Resistant Technology System**".
- [ ] Clean-down all equipment used in the planting and growing of crops (e.g. fertiliser spreaders, spraying equipment and transport vehicles bikes).
- [ ] Managing outcrossing:
  - Talk to your neighbours about crop separation options.
  - The recommended minimum separation distance for HT canola systems in Australia is five (5) metres between GM and non-GM canola.
- [ ] Have a plan for managing weed escapes and have zero tolerance for weed seed setting in the crop season including control of late-season flushes.
- [ ] Take care to thoroughly empty seed bags and dispose of properly. Seed bag labels should be retained to record accurate details of hybrid/variety, seed lot number and quality information. Any surplus seed may remain identifiable and be stored separately in good condition.
- [ ] Always follow industry safety guidelines and wear appropriate personal protective equipment when handling treated seed and for herbicide application.

Harvest stewardship checklist

- [ ] Plan targeted weed seed capture tactics in advance of harvest.
- [ ] Harvest obviously weedy paddocks after clean paddocks.
- [ ] Know the market your grain is going into to meet contract specifications including market pesticide maximum residue limits (MRL's).
- [ ] Ensure pre-harvest chemical applications adhere to the Australian Grain Industry Code of Practice, see Supporting Resources.
- [ ] Clearly identify the hybrid/variety grown in vendor declarations on grain delivery from the industry designated canola listing, see www.australianoilsseds.com.au.
- [ ] Pay attention to good hygiene practices for minimising the risk of contamination and/or Low Level Presence (LLP):
  - Harvest (clean windrowers, harvesters, chaser bins and field bins);
  - Transport (clean augers, machinery and vehicles);
  - Delivery (properly fit tarpaulins, key time for inventory reconciliation);
  - On-farm storage (inspection, cleaning and signage of grain silos).
- [ ] All clean down procedures should be conducted in designated areas and/or in the paddock that contains the specified technology system.
- [ ] At all times, adhere to Occupational Health and Safety criteria.

Post season stewardship checklist

- [ ] Use appropriate record keeping systems to meet trait regulatory and stewardship requirements.
- [ ] Ensure all records are easy to access, secure and "audit ready" to meet compliance, trade segregation and/or traceability requirements for supply chain management schemes.
- [ ] Managing crop volunteers:
  - Inspect the paddock post-harvest for crop regrowth and/or volunteers;
  - Target measures early to control volunteer plants when small (prior to four leaf stage);
  - Know in advance what herbicides are registered and the best options for volunteer canola control for each HT canola system.
- [ ] Monitor the resistance status in the paddock through paddock records and herbicide testing.
- [ ] Review outcomes of IWM management practices used in paddock plans at end of season.
- [ ] Implement stubble management tactics to protect seedbed and control weeds utilizing herbicide, grazing, strategic burning and/or cultivation options.
- [ ] Develop future cropping plans where herbicide tolerant canola is grown incorporating alternate mode of action group herbicides, diverse IWM practices and competitive crops for effective weed management across cropping rotations.

SUPPORTING RESOURCES

More information

GenTech Seeds Pty Ltd (Australia):
www.pioneerseeds.com.au

Contact your local Area Manager or Promoter Agent for planning your on-farm stewardship programs in herbicide tolerant canola farming systems.

Useful links

Accredited agronomists are recommended to provide supporting herbicide and integrated weed management advice for your local conditions.

Integrated weed management:

The 'Big 6' of the WeedSmart Plan:
www.weedsmart.org.au

Australian Glyphosate Sustainability Working Group (AGSWG):
www.glyphosateresistance.org.au

Australian Herbicide Resistance Initiative [AHRI]: www.ahri.uwa.edu.au

CropLife Australia:
www.croplifeaustralia.org.au

Grains Research and Development Corporation: www.grdc.com.au/IWMhub

Grains Research and Development Corporation (March 2016): *"Impact of weeds on Australian grain production"* **www.grdc.com.au**

Supply chain stewardship:

Australian Grains Industry Code of Practice:
www.graintrade.org.au/node/670

Australian Oilseeds Federation [AOF]:
"Canola volunteer control in summer fallow"

Australian Oilseeds Federation:
"Delivering market choice with GM canola"
www.australianoilseeds.com

Grain Research and Development Corporation (July 2015): *"Growing Australian grain -safely managing risks with crop inputs and grain on farm"* **www.grdc.com.au**

General stewardship:

Excellence Through Stewardship® program:
www.excellencethroughstewardship.org

Farm Biosecurity:
www.farmbiosecurity.com.au

Canola management:

Grain Research and Development Corporation (October 2013): *"Herbicide tolerant canola in farming systems - a guide for growers"* **www.grdc.com.au**

Lancashire PD, Bleiholder H, Van den Boom T, Langelüddeke P, Stauss R, Weber E, Witzenberger A (1991): *"A uniform decimal code for growth stages of crops and weeds". Annals of Applied Biology 119: 561-601*

GenTech Seeds:
"The benefits of F1 hybrid canola"
www.pioneerseeds.com.au

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