

11. SPECIFIC GUIDELINES FOR GROUP I HERBICIDES

GROUP	I	HERBICIDE
-------	---	-----------

Moderate resistance risk

Globally herbicide resistance to the Group I herbicide mode of action has been confirmed and documented in more than 30 grass and broadleaf weed species across more than 20 countries. Resistance to the Group I mode of action is common.

Group I herbicides exists in Australia in 4 weed species including capeweed, common sow thistle, more than 1,000 populations of wild radish and more than 50 populations of Indian hedge mustard. Resistance has occurred after a long history of use of Group I herbicides. The number of populations with Group I resistance is increasing.

Of particular concern is that apart from the resistance being in wild radish which is the most important broadleaf weed in broadacre agriculture, some populations may also have resistance to other modes of action eg. Group F herbicides which can be important for control of wild radish in lupins where other selective non Group I options are limited. Because of the long soil life of wild radish seed, measures to reduce seed return to the soil would be useful for this weed. Wild radish seed that is confined to the top 5 cm soil has a shorter life than seed buried deeper.

As a general rule in high resistance risk situations

1. Avoid applying 2 applications of Group I herbicides alone onto the same population of weeds in the same season. To assist in delaying the onset of Group I resistance, rotate and/or tank mix with herbicides from other modes of action.
2. Where possible combine more than one mode of action in a single application. Each product should be applied at rates sufficient for control of the target weed alone to reduce the likelihood of weeds resistant to the Group I herbicide surviving.

All the above recommendations should be read in conjunction with the Integrated Weed Management (IWM) strategies

GROUP I	Disruptors of plant cell growth (Synthetic Auxins)
<i>Arylpicolinate:</i>	Florpyrauxifen, halauxifen (ForageMax ^{®*} , Paradigm ^{®*} , Pixxaro ^{®*} , Rexade ^{®*})
<i>Benzoic acids:</i>	dicamba (Banvel [®] , Banvel M ^{®*} , Barrel ^{®*} , Casper ^{®*} , Lawnweeder plus ^{®*} , Mecoban [®] , Methar Tri-Kombi ^{®*} , Nuturf Millennium ^{®*})
<i>Phenoxycarboxylic acids:</i> <i>(Phenoxys):</i>	2,4-D (Actril DS ^{®*} , Amicide [®] , Fallow Boss Tordon ^{®*} , Methar Tri-Kombi ^{®*} , Pyresta ^{®*} , Vortex ^{®*}), 2,4-DB (Trifolamine [®]), dichlorprop (Lantana 600 [®]), MCPA (Agtryne [®] MA [*] , Banvel M ^{®*} , Barrel ^{®*} , Basagran [®] M60 [*] , Buctril [®] MA [*] , Flight ^{®*} , Lawnweeder plus ^{®*} , MCPA, Midas ^{®*} , Paragon ^{®*} , Precept ^{®*} , Silverado ^{®*} , Spearhead ^{®*} , Tigrex ^{®*} , Tordon 242 ^{®*} , Triathlon ^{®*}), MCPB (Legumine [®]), mecoprop (Mecoban [®] , Mecopropamine [®] , Methar Tri-Kombi ^{®*} , Multiweed ^{®*})
<i>Pyridine carboxylic acids:</i> <i>(Pyridines):</i>	aminopyralid (Fallow Boss Tordon ^{®*} , ForageMax ^{®*} , Grazon Extra ^{®*} , Hotshot ^{®*} , Stinger ^{®*} , Vigilant II ^{®*}), clopyralid (Lontrel [®] , Nuturf Millennium ^{®*} , Spearhead ^{®*}), fluroxypyr (Hotshot ^{®*} , Pixxaro ^{®*} , Starane [®]), picloram (Fallow Boss Tordon ^{®*} , Grazon Extra ^{®*} , Tordon [®] , Tordon 242 ^{®*} , Tordon Regrowth Master ^{®*} , Trinoc ^{®*} , Vigilant II ^{®*}), triclopyr (Garlon [®] , Grazon Extra ^{®*} , Tordon Regrowth Master ^{®*} , Tough Roundup [®] Weedkiller [*] , Ultimate Brushweed ^{®*} Herbicide)
<i>Quinoline carboxylic acids:</i>	quinclorac (Drive [®])

* **This product contains more than one active constituent.** List of chemical families, approved active constituents and, in parenthesis, the trade name of the first registered product or successor. Refer to the APVMA website (www.apvma.gov.au) to obtain a complete list of registered products from the PUBCRIS database.

This strategy is a guide only and does not endorse particular products, groups of products or cultural methods in terms of their performance. Always follow the product label for specific use instructions. While all effort has been taken with the information supplied in this document no responsibility, actual or implied, is taken for the day to day accuracy of product or active constituent specific information. Readers should check with the Australian regulator's (APVMA) product data base for contemporary information on products and actives. The data base can be sourced through www.apvma.gov.au. The information given in this strategy is provided in good faith and without any liability for loss or damage suffered as a result of its application and use.

Advice given in this strategy is **valid as at 22 June 2018**. All previous versions of this strategy are now invalid.

Phone: 02 62732733 Email: info@croplife.org.au Website: www.croplife.org.au