

10. SPECIFIC GUIDELINES FOR GROUP H HERBICIDES

GROUP	H	HERBICIDE
-------	---	-----------

Moderate resistance risk

Resistance to the Group H herbicide mode of action is known for a number of populations of *Amaranthus* species in the United States, which demonstrates the potential for weeds to develop resistance to this mode of action. Continuous usage of Group H herbicides in the United States has resulted in resistance in *Amaranthus* species in a relatively short time.

There are currently no known weeds resistant to Group H herbicides in Australia however resistance to this mode of action is inevitable given its continued usage

1. Broadacre cropping

Of particular concern in Australia is the potential for development of Group H resistance in wild radish. In some areas, because of a lack of alternate herbicide options growers are heavily reliant on Group H herbicides for control of wild radish populations. It is essential to integrate additional cultural weed control techniques to reduce the seed bank and minimise seed set, thereby decreasing the selection pressure on Group H herbicides.

2. Fallow

In high summer rainfall areas, weed control in fallow is heavily reliant on herbicides. Multiple sprays are often required to maintain a clean fallow between winter crops. Integrated Weed Management principles should be incorporated wherever possible, including cultivation - the double knock technique, grazing and combining more than one mode of action in a single application.

To assist in delaying the onset of Group H resistance, rotate and/or tank mix with herbicides from other modes of action.

3. Rice

Where benzofenap has been applied to rice, a follow-up application of MCPA or bentazone and MCPA is recommended where appropriate to provide a secondary mode of action. To reduce the likelihood of resistant weeds developing it is recommended that products containing benzofenap (eg. Taipan®) not be used in consecutive rice crops.

Synergistic interactions have been documented for several Group H and Group C herbicide combinations. Where possible, apply a Group H herbicide in combination with a Group C herbicide to maximise efficacy. Always use the label rate of herbicide whether or not a single active ingredient (eg. isoxaflutole) or combinations of active ingredients are applied (eg. isoxaflutole + simazine, pyrasulfotole/bromoxynil).

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

Herbicide Resistance Management Strategies

Developed by the CropLife Australia Herbicide Resistance Management Review Group
and industry researchers – **Valid as at 22 June 2018**



CHEMICAL FAMILY	ACTIVE CONSTITUENT (FIRST REGISTERED TRADE NAME)
GROUP H	Bleachers: Inhibitors of 4-hydroxyphenyl-pyruvate dioxygenase (HPPDs)
<i>Isoxazoles:</i>	isoxaflutole (Balance® Palmero TX®*)
<i>Pyrazoles:</i>	benzofenap (Taipan®), pyrasulfotole (Precept®*, Velocity®*)
<i>Triketone:</i>	Bicyclopyrone (Talinor®*)

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