



Central West Farming Systems

FARMERS ADVANCING RESEARCH

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YOUR QUESTIONS ANSWERED

Choose Herbicides to Prevent Resistance:

With most of the district's crops now emerging from the recent wide spread rainfall in the central west region post emergent spraying programs are now being established and implemented. When establishing and applying any herbicides for salvage bed preparation, pre-sowing applications or at this time of the season post-sowing, the effect of herbicide resistance in the developing paddock, property and region needs to be highlighted.

Resistance to chemicals (i.e. herbicides) is defined as a weed possessing the capability to continue to grow and complete its life cycle after an acceptable rate of herbicide control has been applied which would normally suppress or eradicate the plant.

Resistance occurs when the plant develops 'immunity' against the same group of herbicides or individual products active ingredients by restricting the effectiveness of the herbicides mode of action.

To prevent chemical resistance it is advised that a wide range of herbicide groups are used in regular rotations each year to treat ongoing weed burden thresholds in cropping areas.

Herbicides are classified according to their mode of action e.g Group A, B, C, D, E, F,G, H, I, J, K, L, M, N and incidence of herbicide resistance developing (see Table 1). At high risk of forming resistance are Groups A & B, the most commonly used herbicides, e.g Logran, Hoe-grass that act on ryegrass or black oats. Cross resistance to a number of chemical groups may also occur, for example between Groups A & C. This season we are seeing a prevalence of Group B usage which has the potential to increase resistance occurrences for the coming season if not managed properly.

For more information regarding chemical resistance, how to manage its effects or prevention, please pick up a copy of the New South Wales Department of Primary Industries 2006 Weed control in winter crop manual, contact your local chemical reseller, chemical company or your local Agronomist as they are also available to answer any questions.

Table 1: Herbicide Groups (NSWDPI 2006).

Know Your Herbicide Groups	
HIGH RISK	Group A Fopse Hoegras [®] , Negrax [®] , Digrax [®] , Verdes [®] , Limp [®] , Puhale [®] , Fote, Titer [®] , Advanco, Comex [®] , Shogun [®] , Topik [®] , Wildcat [®] , Gallant [®] , Puma [®] , Progress [®] , Spear [®] , Wildcat [®] , Dime Sertin [®] , Select [®] , Achieve [®] , Falcon [®] , Armo [®] , Fopse & Dime Raico [®] , Decison [®] , Mica [®] , Des Azail [®] .
	Group B Glean [®] , dikoukiron, Oust [®] , Spinnaker [®] , Azeal [®] , Aly [®] , Associate [®] , Logran [®] , Negrax [®] , Loodax [®] , Broadbent [®] , Edipe [®] , Express [®] , Harmsco [®] M, metalflurox, Momet [®] , Rapex [®] , Oudury [®] , Mida [®] , Flame [®] , Husar [®] , Adiant [®] , Titu [®] , Bounty [®] , Lightning [®] , Eske [®] , Sempex [®] .
MODERATE RISK	Group C simazine, atrazine, Black [®] , Igna [®] , emburya, metribuzin, duxon, karon, Tibonal [®] , Talarox [®] , 700 WP, Buctil [®] , bocoxynal, Jagan [®] , Tough [®] , Agryne [®] MA, Geagr [®] , Baagr [®] , Barnacid [®] , Genox [®] FW, Pimoxa [®] Gold.
	Group D Stomp [®] 330E, Surflan [®] , Cactol [®] , Rik [®] , Dux [®] 250 EC, Tifin [®] X, infanilin, Yek [®] , Dactol [®] .
	Group E Avader [®] Xtra, Avamiz [®] Elite [®] , chlorpropham, Epsur [®] , Sann [®] , modrate, Butrac.
	Group F Tigres [®] , Jagan [®] , Sciper [®] , Pangon [®] , Balance [®] 750 WG, Bredal [®] Negrax [®] , Barnacid [®] , Gint [®] , Boony [®] , armitok, Command [®] , Tapur [®] , Viper [®] , Magister [®] .
LOW RISK	Group G Gol [®] , Blazer [®] , Affinity [®] , Sailer [®] , Spri [®] , Logran [®] B-power, Router [®] , Harmsco [®] .
	Group H Satur [®] .
	Group I 2,4-D, MCPA, 2,4-DB, dicamba, Torden [®] , Bimol [®] , Lomel [®] , Saurax [®] , Garbon [®] , Pangon [®] , Surpas [®] , Kambo [®] , Tigres [®] , Genox [®] DS, Tifolaxine [®] , Bures [®] , Trooper [®] , Gint [®] , Buctil [®] MA, Mida [®] , Benagrax [®] .
Group J Haloproprate, 2,2-DPA.	
Group K Kerb [®] , Matron [®] L, Carbenthoz [®] , Atrak [®] , Dural [®] Gold, Pimoxa [®] Gold.	
Group L Reglone [®] , Genoxone [®] , Noquat [®] , SpynSeed [®] , paraquat, Siqueur [®] W.	
Group M glyphosate, Roundup [®] CT, Touchdown [®] Hi Tech, Crack [®] , Roundup Power Max [®] , Roundup Ready [®] .	
Group N Bora [®] .	

List of product does not necessarily imply State registration. Therefore, check that product is registered in your State before use.

Some practices that may be used to manage chemical resistance:

- Keep good chemical records.
- Use selective herbicides.
- Use rotation systems that target different chemical groups and weed problems each year.
- Choose crop varieties carefully to maximise range of choice of herbicide chemicals throughout the growing season.

Cheers Wendy Gill

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