

The number of glyphosate resistant weed species present in northern Australian grain and cotton systems is increasing.

You can reduce the risk of glyphosate resistance in weeds

Best practice

- **Monitor** weed control escapes and prevent them from setting seed
- **Plan and implement** an IWM strategy to reduce the weed seed-bank
- Use **alternative knockdown** herbicides and tillage strategically in fallows and prior to sowing
- Use alternate herbicide modes of action, including **residual herbicides**, in crops and fallows
- Use the **double knock***
- **Apply stewardship plans when growing glyphosate tolerant crops**
- **Prevent the movement** of resistant seeds on vehicles, machinery and livestock, and in water, planting seed and hay



High risk practices

- Frequent glyphosate-based chemical fallows
- Continuous reliance on glyphosate as a knockdown prior to sowing
- Inter-row use of glyphosate in grain crops (unregistered)
- Lack of tillage
- Lack of alternative herbicide modes of action used in fallows and crops
- Allowing survivors of glyphosate applications to set seed
- High weed numbers
- Lack of crop competition on weeds
- Over-reliance on glyphosate tolerant crops



All Group M herbicides are glyphosate herbicides.

If you suspect you have a resistance problem – get plants or seed tested to see which herbicides still work. The best strategy is to ensure that no further seed set is allowed to occur, and to drive down the weed seed-bank using a number of diverse weed management tactics.

Optimal management techniques for different weed species will vary.

*The double knock technique is defined as using a full cut cultivation OR the full label rate of a paraquat-based product (Herbicide Group L) following the glyphosate (Herbicide Group M) knockdown application.