

# THE BIG 6



## Increase crop competition

### Optimise crop growth

- Adopt at least one competitive strategy, but two is better.
- Target higher plant populations using increased seeding rates, weed-free seed tested for germination, vigour and 1,000 seed weight.
- Aim for even seed distribution and establishment.
- Sow competitive crop types and varieties.
- Improve soil health (fertility and structure) and crop nutrition, e.g., soil amelioration (if necessary), no-till, stubble retention, nutrient budgeting.
- Utilise early sowing and adopt East/West sowing if practical.
- Reduce row spacing where possible.



## Rotate crops and pastures

### Crop and pasture rotation is the recipe for diversity

- Use break crops and double break crops, fallow and pasture phases to drive the weed seed bank down.
- In summer cropping systems, use diverse rotations of crops including cereals, pulses, cotton, oilseed crops, millets and fallows.
- Add greater diversity to weed management strategies by adopting herbicide tolerance traits.

## Mix and rotate herbicides

### Rotating buys you time, mixing buys you shots

- Rotate between herbicide modes of action.
- Mix different modes of action within the same herbicide mix or in consecutive applications.
- Always use full label rates.
- Incorporate multiple modes of action in a double knock e.g., glyphosate/Group 1/Group 2 knockdown followed by paraquat and Group 14 and pre-emergent herbicide.
- Test weeds for resistance to know what herbicides will and won't work for you.
- In cotton systems, aim to target both grasses and broadleaf weeds using two non-glyphosate tactics in crop and two non-glyphosate tactics during the summer fallow, and always remove any survivors (2 + 2 & no survivors).

## Optimise spray efficacy

### Make every droplet count

- To maximise efficacy and reduce spray drift, follow spray application guidelines and ensure the correct speed, nozzles, water volume, boom height, and adjuvants are used. Avoid antagonistic tank mixes.
- Always use the largest spray droplet feasible that gives the highest efficacy and consider water quality.
- Avoid spraying during inversions (particularly from evening through to early morning), in high temperatures, frost and dew conditions, and when the wind speed is below 5km/h or above 20km/h.



## Stop weed seed set

### Take no prisoners

- Aim for 100% control of weeds and diligently monitor for survivors in all post weed control inspections.
- Crop top or pre-harvest spray in crops to manage weedy paddocks.
- Consider hay or silage production, brown manure or long fallow in high-pressure situations.
- Use all appropriate strategies in the pasture phase to reduce the weed seed bank prior to cropping phase.
- Consider shielded spraying, optical spot spraying technology, targeted tillage, inter-row cultivation or chipping.
- Windrow (swath) to collect early shedding weed seed.
- Use two or more different weed control tactics (herbicide or non-herbicide) to control survivors.
- In cotton farming systems, consider late season strategic tillage operations for better overall weed and Helicoverpa pupae control.

## Implement harvest weed seed control

### Capture weed seed survivors

- Capture weed seed survivors at harvest using weed seed impact mills, chaff lining, chaff tramlining/decking, chaff carts, narrow windrow burning, or bale direct.
- Ensure optimal harvester set-up.

