

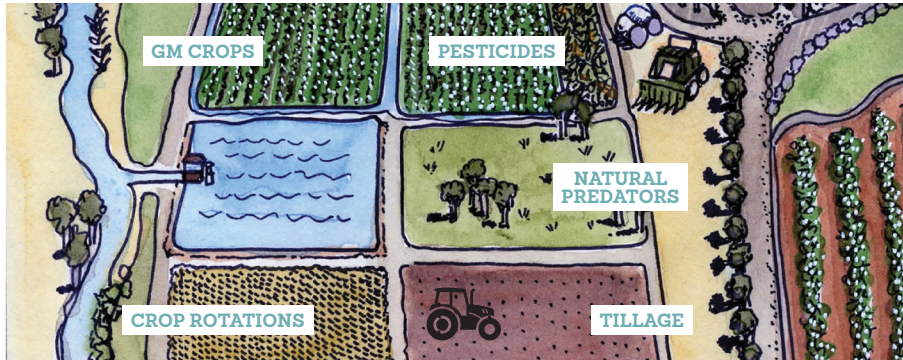


PLANET PESTICIDES

| efficient, responsible pest control



OUR GOAL is pesticide use that supports optimal crop production while having no negative impact on human and environmental health. This aligns to UN Sustainable Development Goal 12.4: achieve the environmentally sound management of chemicals.



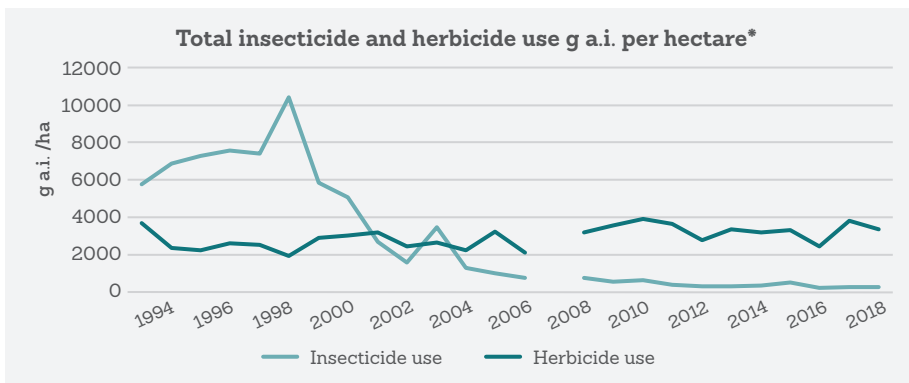
Pesticides are one tool used to control pests

Pesticides (including insecticides and herbicides) are part of a cotton grower’s pest control toolbox called Integrated Pest Management (IPM). IPM is a management approach to choose the tool that best controls pests with the least risk to human and environmental health. All pesticides in Australia are approved by a government regulator: if a grower chooses a pesticide to control a specific pest, it has been assessed as safe to use as directed by the label.

The amount of pesticides used has changed over time

Australian cotton growers reduced insecticides by 95 per cent per hectare between 1993 and 2019 as GM cotton and IPM was introduced. In the same period, a move to less tillage to control weeds increased herbicide use by 20 per cent. However, less tillage has also likely increased soil carbon and moisture, and reduced fuel use.

**Survey not conducted in 2008 due to drought*



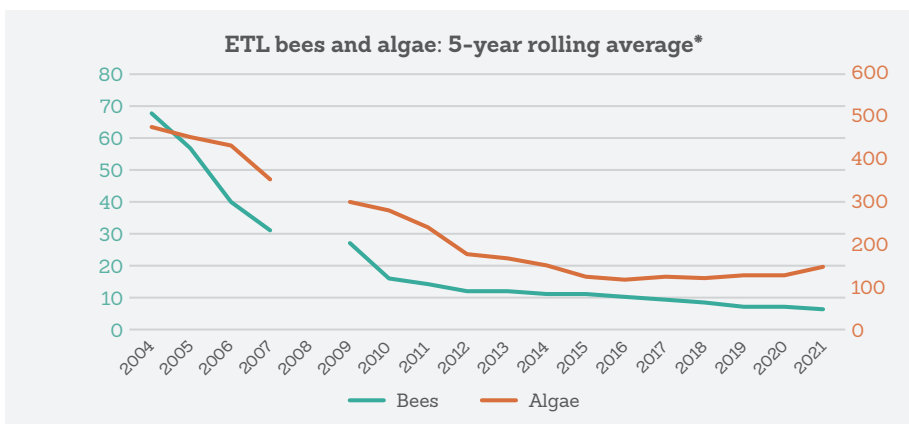
The environmental impact of pesticides has reduced

Measuring pesticide volume is not a good indicator of environmental impact because it doesn’t take into account the differing toxicity of pesticides.

We use Environmental Toxic Load (ETL) to measure environmental impact. Our target is based on the ETL bees for insecticide hazard, and the ETL algae for herbicide hazard.

Source: CRDC commissioned research.

**No data was collected in 2008 due to drought.*



OUR TARGET is to reduce the environmental impact of pesticides by five per cent, every five years. This may not seem much but the significant ETL reductions already achieved make it a real challenge. If new pests, unusually wet seasons (that lead to more pests) or other unexpected scenarios emerge, this target will be difficult to achieve.

OUR PATHWAY TO ACHIEVE THE TARGET IS:

1. More tools (new technologies, targeted application, new crop protection methods)
2. R&D for better decision-making
3. Extension of tools and decision-making to growers.