

It's time for new thinking about herbicide resistance

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Summary The increasing number of species and populations of weeds being selected for resistance to herbicides appears to continue unabated. Globally there are currently 249 species resistant to one or more herbicide modes of action. Australia now has 45 species resistant to one or more of 13 of the 19 known modes of action.

Despite herbicide resistance being first confirmed in Australia 34 years ago the majority of farmers still wait for a spray failure, and sometimes repeated spray failures, before reacting to a resistance problem. Surveys of growers have shown that formal testing for resistance is very low and this is corroborated by the demographic data from testing services.

Decisions to manage herbicide resistance are often made by the adviser or farmer with little hard data. Spray failures can be the result of poor spray practice combined with stressed and or high weed densities.

So what are the reasons for the low use of testing by growers? Previous farmer surveys have shown that many growers think there will be a new herbicide to solve the problem and or resistance is imported from somewhere else. They think it is largely out of their control and therefore fail to act. Also have weed researchers and extensionists promoted a largely negative message that promotes inertia in farmers? Is the collection of samples for testing too difficult and or the testing too expensive?

This presentation investigates these questions and suggests turning the herbicide resistance message on its head and promoting the maintenance of herbicide susceptibility as a positive message that gives farmers hope and see herbicide resistance as a problem to be managed, not ignored.

Keywords Spray failure decisions.