

Increase Profitability While Reducing Pesticide Application

Background

Anthony and Julie Ferlazzo farm with their sons in the Mount Charlton/Mt Ossa areas on the Mackay North Coast. Their farms are some distance apart, with operations such as chemical spraying having to be planned carefully.

In the past, PS11 chemicals, which can be hazardous to the environment, were used because of their long-lasting effectiveness and the geographic problem of spraying all the farms in the ideal spray window. The herbicides used were residuals to avoid having ongoing weed problems and were applied straight after harvest. Most of the farms are dryland or at best, had only supplementary irrigation so herbicides were not always incorporated by irrigation or rain.

QUICK FACTS

- **Grower:**
Anthony Ferlazzo
- **Project Focus:**
Chemical Management
- **Project:**
\$20,000 incentive contributed to the purchase of a high-rise spray unit
- **Outcomes**
Reduction of residual pesticides, increasing profitability and maintaining productivity



Activity

in 2021, MAPS filled out an application alongside Anthony for the proposal of a high-rise spray unit. Once approved, he approached Donnelly's Engineering in Mackay to build the sprayer which was completed in mid-2022.

The unit is adjustable for different row spacing, has two tanks, 1400 litre and 750 litre, has a broad acre boom as well as spray legs for spraying in the cane inter-row. The sprayer was used in the 2022-23 season especially in the late harvested crops, which would not have been possible with his old equipment.

Outcome

Ratoon blocks which have a thick trash cover are only sprayed later, not straight after harvest, so that the chemical efficacy will have a longer effect. Those blocks with lower weed pressure will have no residual chemicals applied, with only knock-down chemicals used in the out-of-hand cane stage. Not only will this practice change be cost effective, but with a reduction in the use of residuals this will also reduce the risk of these chemicals being caught up in run-off water and damaging the environment.

"This new spray equipment is part of my new chemical management plan to be able to control weeds later in the crop cycle"

- Anthony Ferlazzo

Where residuals are used in high pressure weedy blocks, the new suite of chemicals are UV stable; they will be rotated between crop cycles, so there is less chance of resistance build up. The high-rise unit's versatility also ensures that there is a much bigger spray window available for spraying on all the farms.



Figure 1: High-rise spray tractor

The Targeted support to maximise soil, biodiversity and vegetation outcomes in the O'Connell and Proserpine basins of the Mackay Whitsunday NRM region Project is funded by the Australian Government's Reef Trust.

