

SRA's Meringa Station hosted a field day with a water quality focus on May 1, supporting several projects underway in the Wet Tropics.

BY GAVIN RODMAN AND PHIL ROSS

The field day supported three projects based in the Wet Tropics: Russell-Mulgrave growers and the nitrogen story (Cane to Creek), Protecting our chemicals for the future and Developing an alternative herbicide management strategy to replace PSII herbicides in the Wet Tropics.

Growers and advisors from Tully to Mossman heard from the Queensland Department of Environment and Science about the Great Barrier Reef water quality monitoring program and from Cairns Regional Council about their local water quality program.

Other information stalls provided information and updates from a number of local activities:

- SmartCane BMP, "Project 25" and nutrient management planning: CANEGROWERS Cairns Region and the Wet Tropics Sugar Industry Partnership (WTSIP). These programs are recognising growers' efforts in managing the environmental impacts of farming.
- Enhanced efficiency fertiliser trials:
 Jacob Fries and Nikita Tahir from The Department of Natural Resources,
 Mines and Energy spoke about

- trials at Silkwood that are looking at nitrogen losses through drainage and how losses vary depending on the form of nitrogen fertiliser used.
- Protecting our chemicals for the future: Run by SRA's Belinda Billing, this project encourages growers to think about different strategies in using pesticides to minimise their environmental impact,
- Stoolzippa® imidacloprid press wheel: In a project led by Department of Agriculture and Fisheries (DAF), EHS Engineering in Mackay designed and built a new type of spiked wheel to close the slot in the ground left after the application of the canegrub insecticide imidacloprid. Bayer have invested into a number of these units that growers can try out on their own farms.
- Legume fallow crops: DAF and MSF Sugar have undertaken a number of trials to promote the use of legume rotations to assist in improving soil health. DAF Principle Agronomist Derek Sparkes was on-hand to show how the nitrogen fixed by legumes is available for the subsequent cane crop.

Unmanned Aerial Vehicles (UAVs):
 There is increasing interest in how drones can help farmers manage their crops. Markus Bulstrode from DAF is looking at how drones can be used to identify and spray patches of weeds and to find other problem areas in crops.

A live survey conducted on the day showed support for the range of water quality focussed projects currently being undertaken and also provided insight into possible future activities. The survey indicated that growers in the Wet Tropics have reduced the usage of diuron-based herbicides and are moving to other preemergent herbicide options with more favourable environmental outcomes.

 SRA acknowledges the funding contribution from the Queensland Government toward this research activity.

(Above) Marcus Bulstrode from DAF demonstrates the potential for drones in agriculture.