

AUSTRALIAN

GROWER



CANEGROWERS

April 2021 Price \$9.95



BALANCING ACT

HOW SMALL AND MEDIUM-SIZED GROWERS MANAGE SECOND JOBS TO KEEP CANE FARM DREAM ALIVE

GRANT ASSISTANCE FOR GROWERS HIT BY TROPICAL CYCLONE NIRAN



AUSTRALIA WARNS WTO SUGAR CASE COULD LEAD TO LOOPHOLE



TULLY GROWERS CELEBRATE AT SUSTAINABILITY SHOW DAY



CENTRAL GROWERS COMPARE

LATE SEASON HERBICIDE STRATEGIES

Growers recently inspected a herbicide trial conducted as part of SRA's Cane to Creek Mackay Whitsunday project. The project involves three demonstration sites within the region where nutrient and pesticide strategies are compared for water quality and productivity. The project aims to assist growers with management decisions around farm practices to increase production, profitability and environmental outcomes.



The results of the herbicide demonstration were presented to growers at a workshop on Friday 12 February at the trial site paddock just outside Sarina, in the Alligator Creek sub-catchment.

"We set up a trial comparing two residual controls and an enhanced knockdown application, with the aim of measuring water quality and effectiveness of weed control," said SRA Adoption Officer Steph Roberts.

"The aim was to see how a knockdown application compared to more traditional residual herbicide treatments.

"Being late in the season we reasoned that a knockdown application would offer less risk in terms environmental impact from run-off losses from the wet season. Shortly after the spray application, a heavy rain event reinforced the weather risk at this time of the year."

The trial involved two herbicides commonly used for the control of broadleaf weeds and vines - Bobcat i-maxx, Spark and the newer product Valor 500 WG. All were combined with paraquat.

Treatments were repeated twice across five dual rows each of 470 m in length.

Bobcat i-maxx (imazapic/hexazinone) was applied at 3.8 L/ha for residual control; Spark (imazapic) at 400 mL/ha also for residual control and Valor 500 WG (flumioxazin) at 120 g/ha for enhanced knockdown.

The treatments were applied on 8 December 2020 with a storm on 10 December 2020 resulting in 91mm of rain and subsequent run-off from the paddock.

Samples of paddock run-off revealed relatively high concentrations of imazapic and hexazinone (Spark and Bobcat i-maxx), whereas there was little flumioxazin (Valor 500 WG).

Further, the weed control nine weeks after the storm event was found to be better in the Valor 500 WG treatment as compared to the Spark and Bobcat i-maxx treatments.

The results are most likely due to the chemical characteristics of the active constituents in the herbicides. Imazapic (Spark) and imazapic/hexazinone (Bobcat i-maxx) are more soluble and mobile than flumioxazin (Valor 500 WG) therefore more susceptible to being washed away in heavy rainfall events shortly after being applied, as happened in this trial.

The key message from this work is that for late season herbicide applications, the risk of environmental impact due to heavy rain events can be minimized by selecting herbicides with active constituents less prone to being washed away by rainfall, and by considering whether a knockdown strategy can replace residual herbicides when applied this late in the season.

Attendee growers were presented with the water quality data measured from the paddock and had the opportunity to walk through the paddock examining the weed control of the different herbicide treatments.

The Cane to Creek Mackay Whitsunday project is funded by the partnership between the Australian Government's Reef Trust and the Great Barrier Reef Foundation with support from Sugar Research Australia, Mackay Area Productivity Services and Plane Creek Productivity Services. ■

Pictured above: Weed control results nine weeks after application for Spark (left) and Valor 500 WG (right). Note: heavy rain on site two days after herbicide applications.

***Knockdown and
residual weed control
that stays where
you put it***

VALOR® 500WG is the herbicide for cane and bean growers that stays where you put it. It can be used with knockdown herbicides for improved control of emerged weeds, or at higher rates for extended residual control in-crop.

VALOR
500 WG HERBICIDE

 **SUMITOMO CHEMICAL**
AgroSolutions Division



***Scan here to see more information
about Valor 500WG Herbicide***

www.sumitomo-chem.com.au

© Valor is the registered trademark of Sumitomo Chemical Company, Japan.