



Case Study

Using Pendimethalin (Stomp Xtra) in place of Metolachlor (Dual Gold) for residual weed control



LANDHOLDER	Anonymous
LOCATION	Kalamia
CATCHMENT	Lower Burdekin
RAINFALL	984mm (2019)
PROPERTY SIZE	182ha
ON-GROUND PROVIDER	Farmacist - Burdekin

Project Catalyst is a grower led, sugar cane innovation and adoption project that explores, develops and validates farm management practice change to improve the enduring water quality of the Great Barrier Reef.

BROADER ADOPTION VALIDATION & GROWER SUPPORT

Founded in 2009, the project operates in the Mackay Whitsunday, Burdekin and Wet Tropic regions to deliver valued practice change outcomes and develop methods for industry adoption. Under the Broader Adoption and Grower Support program, professional on-ground service providers assist selected growers to adopt and validate appropriate change practices. Service providers continue to monitor implementation benefits and derived environmental performance improvements. Through targeted extension activities, the program seeks to accelerate the uptake and broader adoption of improved farming practices at local, regional and industry levels.



Great Barrier
Reef Foundation



●●●● Goal

To trial Pendimethalin (Stomp Xtra), S-Metolachlor (Dual Gold) and standard cultivation for weed control in early plant cane.



●●●● Overview

In 2017, Farmacist implemented trials comparing the efficacy and runoff characteristics of two popular residual herbicides used in plant cane: Pendimethalin and S-Metolachlor.

The trials found that Pendimethalin (Stomp Xtra) had a lower runoff risk than S-Metolachlor (Dual Gold), whilst having a similar efficacy. There was data to suggest that Stomp Xtra may have better control of wild sorghum, which is a major weed of plant cane particularly on this farm.

Following the release of this data, there was a large shift in the purchase of these herbicides - from roughly 50/50 to 90/10 in favor of Pendimethalin.



●●●● Action

The grower has a history of using cultivation and S-Metolachlor herbicides (Dual Gold) to control weeds in his plant cane. Based on data collected by Project Catalyst, he decided to trial using Pendimethalin (Stomp Xtra) on some of his paddocks in comparison to paddocks treated under his traditional methods.

Even though Stomp Xtra is a more expensive product, there has been very good weed control in the paddocks where Stomp was applied, compared to the paddocks that were cultivated. Where the grower only worked the paddock for weed control, there has been multiple cultivation events (increased risk of sediment loss) and the grower has had to spray the paddock using multiple knock-down sprays.

●●●● Outcome

The above photos show the comparison between Pendimethalin (Stomp Xtra) (left) and standard cultivation (right) treatments. The successful weed control can be clearly observed against the 150mm+ weeds in the other treatment following cultivation and irrigation.

This weed pressure is expected to be felt in years to come.

Moving forward into the next planting season, the grower aims to use Pendimethalin (Stomp Xtra) on all problem plant blocks for production and water quality benefits.