

## Aim

The trial was conducted to demonstrate the effectiveness of Diuron alternatives for pre-emergent weed control in plant cane.

## Site Details

Location	Brightly
Crop variety	Q208
Soil type	Grey-Black Vertosol
Site history	Fallow prior
Planting date	22nd September 2021
Row Spacing	1.63m

## Treatments

No.	Treatment	Application rate (/ha)	Burndown	Application Details
1	Untreated Control	-	Paraquat 250 @ 1200 mL/ha	08 Nov 2021 267 L/ha 300 kPa AIXR 110020
2	S-Metolachlor	1800mL		
3	Experimental	1100g		
4	Pendimethalin	3300mL		
5	Isoxaflutole	200g		
6	Metribuzin	1500g		
7	Atrazine	2000g		
8	Valor	350g		
9	Bobcat iMaxx SG	600g		
10	S-Metolachlor + Metribuzin	1450mL + 1000g		
11	S-Metolachlor + Atrazine	1450mL + 1500g		
12	Pendimethalin + Metribuzin	3300mL + 1000g		
13	Pendimethalin + Atrazine	3300mL + 1500g		

Rainfall (22mm) the day of application, which also stimulated a significant germination of weeds, provided optimal conditions for all the applied pre-emergent treatments to perform to their potential.



Figure 1- (Left) Commercially applied Pendimethalin + Metribuzin after hill-up in plant cane compared to an adjacent untreated section (Right) Weed spectrum in the untreated section of the commercial site.

## Results

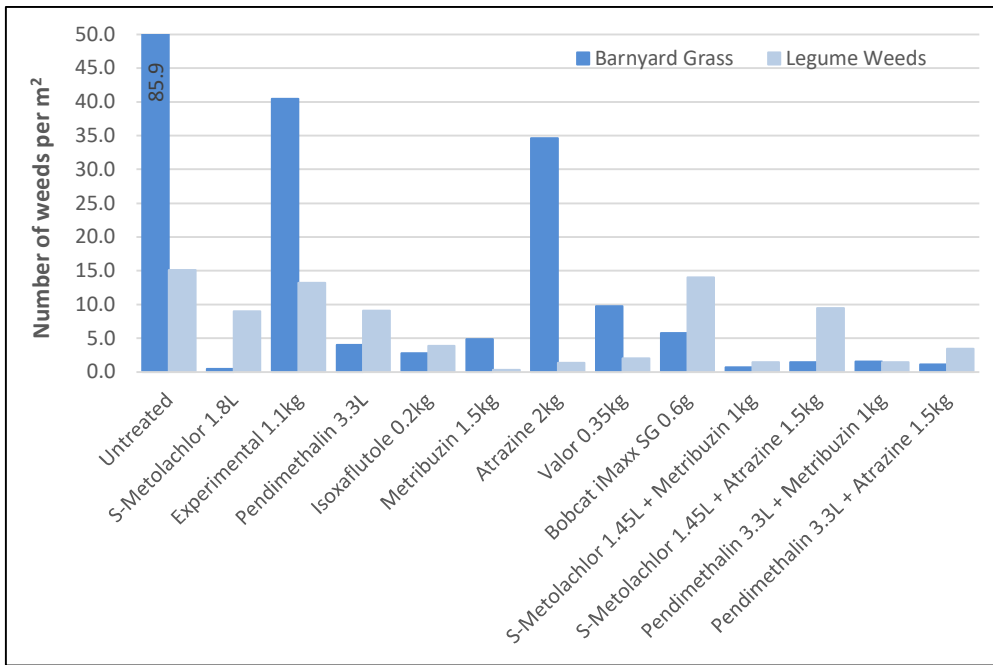


Figure 2- Results of the effectiveness of the treatments upon density of weeds (m<sup>3</sup>) measured in the plant cane.

Figure 2 demonstrates that:

- Grass Control - S-Metolachlor, Pendimethalin, Isoxaflutole, Metribuzin and the combination treatments provided the best control of Awnless Barnyard Grass by trial completion at this site.
- Legume Weed Control – Metribuzin, Atrazine and Metribuzin combination treatments provided the best control of Legume Weeds by trial completion at this site.
- Overall Weed Control – Overall, Metribuzin and the combination treatments provided the best overall control of weeds at this site out to 30 days after treatment.

The results highlight the importance of choosing an appropriate product for the weed spectrum on your property. Few products provide control of the complete weed cohort on their own, highlighting the importance of combining products at critical timings for broadening the target spectrum from a single pass. When combining actives, there is also the added benefit of protecting individual actives against weed resistance development.

### Disclaimer

*This article presents the results from one season at a single site. Information provided in this article should not be used as the sole source of information when making agronomic decisions for your crop.*

## Rate controller demo

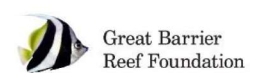
Far North growers met at Farmacist Gordonvale to get the low down on DICKEY-john rate controllers recently. Mike Wright (Cambut Holdings) and Charissa Rixon (T.R.A.P Services) talked growers through setting-up and optimising rate controllers using DICKEY-john simulator. Participants ranged from growers interested in purchasing for the first time through to those seeking to get more value from their existing equipment.

### What is a DICKEY-john Rate Controller?

The DICKEY-john rate controller system integrates with existing granular fertiliser boxes applicators too improve the precision of fertiliser application and the ease of changing rates. No more changing cogs.

Like other rate controller options, the DICKEY-john system utilises a hydraulic motor with a matched hydraulic PWM valve which drives the fertiliser delivery shaft, and an application rate sensor which works with a fertiliser rate control. A range of options exist to set the rate including dials, touch screens or the system can interact with a GPS system.

Rate controllers are a useful way for farmers to implement their nutrient management with ease and to take steps into intra-block nutrient management.



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