

# The Effect of Pre Emergent Herbicides on Broad Bean Yield at Conmurra.



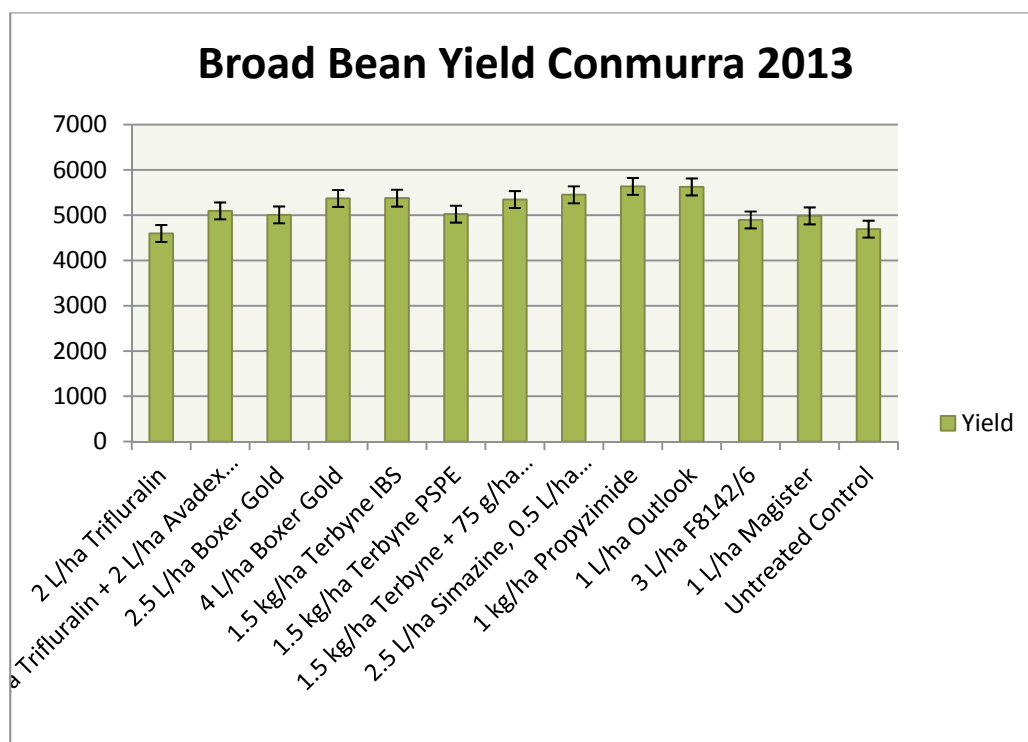
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**Trial Objective :** To evaluate the effect of existing and new chemistry on yield in broad beans

## Key Outcomes:

- Weed control in Broad beans in the SE of South Australia requires increased research to adapt new strategies to minimise resistance to herbicide technologies.
- Conmurra Trial Site was extremely clean in 2013 with lesser loosestrife being the only major weed observed.
- All treatments except Triflur X, Terbyne PSPE, F8142/6 and Magister significantly increased yield when compared to the untreated control.
- Triflur X, Terbyne PSPE, F8142/6 and Magister were not significantly different in yield when compared to the untreated control.
- Ensure to read and follow herbicide label before the application.
- Trial Photos Can Be found on the Mackillop Website.

## Results:



## Comments and Discussion:

Managing Broadleaf weeds in Broad beans in the Mid – lower south east is an increasing challenge. This trial showed significant differences between many of the treatments.

The Conmurra site had a relatively low weed burden with lesser loosestrife and vol cereal as the major weeds



Untreated Control 9/7/2013. 28 DAS.



Untreated Control 9/9/2013. 83 DAS.

Group B herbicide resistance particularly Spinnaker for Bedstraw and Radish control is driving the need for additional weed control chemistry. This trial explored alternative herbicide chemistry but due to low weed pressure a suitable Spinnaker alternative was not found.

### Herbicide Treatment Key Points

#### Trifur X 480

- Registered in Faba Beans upto 800ml/ha
- Key Weeds - ryegrass and wireweed.

- Must be incorporated for full efficacy Avadex Extra

- Registered in Faba beans upto 1.6L/ha
- Key weeds – Wild Oats and Ryegrass
- Avadex Extend Trialed.

#### Boxer Gold

- Registration pending in Faba Beans.
- Registered in Wheat and Barley
- Key Weeds – Ryegrass, Barley Grass, Toad Rush

#### Terbyne Extreme

- New High Loaded Formulation
- Registered in Faba Beans
  - IBS upto 1.2kg/ha
  - PSPE upto 860gms/ha.
- Key weeds – Radish, Milk Thistle, lesser Loosestrife
- Terbyne 750WG Trialed

#### Spinnaker 700WDG

- Registered in Faba Beans upto 140gm/ha
- Key Weeds – Wild Radish, Lesser Loosestrife, Bedstraw

#### Simazine 900WG

- Registered in Faba Beans upto 1.4kg/ha
- Key Weeds – Broadleaf weeds and suppression of Grasses.

#### Diuron 900WG

- Registered in faba Beans upto
  - IBS upto 1.1kg/ha
  - PSPE upto 830gm/ha
- Key Weeds – Wild radish, Toadrush

#### Propyzimide 500WG

- Not Registered in faba bean.
- Registered in Clover and Lucerne Seed Production for annual ryegrass control.

#### Outlook

- Not Registered in Faba Beans
- Registered in Chickpeas, lupins and Field peas for annual ryegrass control in Low Populations.

#### F8142/6

- Experimental Product not Registered in Faba Beans

**Magister**

- Not registered in Faba Beans

- Registered in Rice for control of specific Grass weeds

- Registered in Poppies for Broadleaf weed control.

**Treatment Information:**

**Crop Type/Variety:** Broad Beans cv. Aquadulce

**Trial Duration:** 2013 Season

**Location:** Conmurra, South Australia.

**Farmer Co-operators:** Lachie Seears

**Soil Type:** Black Clay over Limestone

**Paddock History:** 2012 Wheat

**Trial Co-Operators:** Mackillop and Sardi New Agronomy Group.

**Herbicide Application Information**

Application No	T1	T2
Date	11/06/2013	11/06/2013
Experitmenter	SARDI	SARDI
Crop Stage	IBS	PSPE
Application		
Water Rate lt/Ha	166	166
Pressure	4 bar	4 bar
Droplet size	Fine	Fine
Nozzle Type	Flat Fan	Flat Fan
Nozzle Size	01	01
Ground speed	3.6Km/hr	3.6km/hr
Weather & Soil Conditions		
Wind	9	9
Direction	NWN	NWN
Temp C	13	13
Delta T	4.1	4.1
Soil moisture	Good	Good

**Sowing Date:** 11/6/13

**Harvest Date:** 9/1/2014 (218 days)

**June Rainfall:**

Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
60.4	1.6	1.6	0.6	0.4	6.2	1.8			2.2	2.8	17.4	3.8	1.2	0.4	0.2	3.2	0.8	0.2	0.2	6.0	0.2		0.2	0.2	0.2	0.2		8.6	0.2	

Key Rainfall Events: 12/6 - 17.4mm 24hrs after T1 and Sowing.

**Data Limitations:** Low weed pressure site.

**Type of Trial:** Replicated Plot Trial

**Trial Design:** 8m Long plots x 8 rows x 15cm Spacing's  
Randomised block Design with 3 replicates

***Disclaimer:***

The purpose of this trial is for research only. Research is necessary to screen new products for their potential use and to generate data necessary to support product registration. In this trial the research being undertaken may be illegal through the use of a registered product off-label or involve the use of an unregistered product.

Information in this report may contain off label use and therefore individuals should seek professional advice or always refer to label before using any of the chemicals in this report on farm.

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