# Verigrow Turf Trial (2024)

#### Location: Betta Turf in Wattleup

**Duration:** The trial was run from Early January (1<sup>st</sup> App on the 10/1/24) through until Mid-May 2024) for 18 weeks

#### Treatments:

Treatment		Total
No.		Actual N
		(kg per
		ha)
1	Untreated control	0
2	2 applications of Sir Walter granular	107.6
	fertiliser at 2kg/100sqm every 9 weeks	
3	6 applications of Verigrow liquid	14.4
	product at 20 L/ha every 3 weeks	
4	6 applications of Verigrow liquid	28.8
	product at 40 L/ha every 3 weeks	
5	2 applications of Sir Walter granular	122
	fertiliser at 2kg/100sqm every 9 weeks	
	plus 6 applications of Verigrow liquid	
	product at 20 L/ha every 3 weeks	
6	6 applications of Verigrow liquid	28.8
	product at 40 L/ha plus 6 applications	
	of Verigrow soil wetter at 10 L/ha	
	every 3 weeks	

Sir Walter granular fertiliser contained 26.9% N, 0.9% P and 2.7% K.

### **Maintenance Practices:**

The plots were mowed fortnightly and watered every second day with approximately 10mm of irrigation.

### **Discussion:**

The turf at the northern end of the trial was generally in a poorer condition than the southern end of the trial throughout the duration of the trial.



The soil at the southern end of the trial was observed to have a higher level of organic matter in the surface 50mm of the root zone.



#### Trial Layout



Soil moisture readings taken on the day of the assessment found a significant difference in the soil moisture levels in each area.

Soil Moisture (0-50mm)					
North End (6 plots)	South End (10 plots)				
19.7%	26.9%				

The soil was found to be quite compacted in all areas of the trial (10 drops or more is considered be a compacted root zone).

Penetrometer (Number of drops to penetrate to 150mm)

North
13
15
13
13
10
10
13
11
South

The surface 50mm of the root zone across the trial area was found to have moderate to severe water repellency. This water repellency issue would have caused some of the variable outcomes on some of the plots.

## Main Findings from the final assessment (15/5/24)

Given the variation in the soil condition across the trial site, the main assessment of the fertiliser and wetting agent treatments was made on the 10 plots at the southern end of the trial.

The turf condition was assessed using the FieldScout GreenIndex+ Turf app, which utilizes the latest advancements in technology to measure plant health via the chlorophyll content (relative greenness) of turf using a smartphone camera. The app captures turfgrass images with a smartphone, calculates the Dark Green Color Index (DGCI), and displays a visual rating. In this case the visual rating calculation was setup for couch. The measurements were used to compare the turf condition across the trial.

Treatment		FieldScout Ratings for various plots	Average Rating
1	Untreated control	4.8, 4.8	4.8
2	Granular	6.2, 7.2, 6.6	6.7
3	Low Verigrow	5.2	5.2
4	High Verigrow	6.1, 5.3	5.7
5	Granular plus low Verigrow	7.0, 7.3	7.1
6	High Verigrow plus Wetter	5.5, 6.2	5.8

Turf Condition (South End)

These results showed that the best performing treatment was the Sir Walter granular fertiliser plus low rate of Verigrow followed by the Sir Walter granular fertiliser alone. The high rates of Verigrow treatments (both plus and minus the wetting agent) gave a significant improvement in the turf condition as compared to the untreated control. The low rates of Verigrow treatment only gave a marginal improvement over the untreated control.



Treatment 3				A States		
Low rate of Verigrow						A ANA
	The second					
						<b>各兴豪的</b>
		N	No P			
Treatment 4						
High rate of Verigrow						
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# **Recommendations**

- The label rate of Verigrow should be increased to 40 litres per hectare per application.
- The label rate of Verigrow soil wetter should also have its label rate increased.