

# Catalyst Project Progress Report

## Grower Information

<b>Grower Name:</b>	Wayne Scougall
<b>Entity Name:</b>	WP Scougall
<b>Trial Farm No/Name:</b>	F30074 & F30096
<b>Mill Area:</b>	Mulgrave
<b>Total Farm Area ha:</b>	58.48 Ha
<b>No. Years Farming:</b>	40+
<b>Trial Subdistrict:</b>	Gordonvale
<b>Area under Cane ha:</b>	58.48 Ha including fallow

## **Background Information**

**Aim: Utilize compost as an alternative form of Nitrogen**

**Background: (Rationale for why this might work)**

Previous research conducted by SRA, has shown the source of Compost that is available to growers in the Mulgrave is capable of sustaining plant and ratoon crops of cane. However the rates used were quite high.

Correct utilization of the Compost into the farming system could greatly reduce the reliance on the synthetic sources of Nitrogen, however, synthetic phosphorus and potassium may need to be applied, as these are not present at any significant levels in the compost, and over time, the soils will become depleted if only compost is used.

**Potential Water Quality Benefit:**

Significant reductions could be made in the quantity of synthetic N fertilizer being applied, thus greatly reducing the amount of nitrate that is able to be leached through the soil profile.

**Expected Outcome of Trial:**

Establish the rate of compost that is necessary for plant and ratoon crops on Wayne's farms.

**Service provider contact:**

Charissa Rixon – T.R.A.P. Services

**Where did this idea come from:**

Other growers and personal research.

<b><u>Plan - Project Activities</u></b>	<b>Date : (mth/year to be undertaken)</b>	<b>Activities :(breakdown of each activity for each stage)</b>
<b>Stage 1</b>	<b>Oct 2017</b>	Design and layout trial Apply Compost (3 rates) Plant/Replant trial block into the compost
<b>Stage 2</b>	<b>Mar 2018</b>	Tissue Sample
<b>Stage 3</b>	<b>Sept – Dec 2018</b>	Harvest trial Collect and Analyse Data Reapply Compost (Rates yet to be determined)
<b>Stage 4</b>	<b>Mar 2019</b>	Tissue Sample
<b>Stage 5</b>	<b>Sept – Dec 2019</b>	Harvest trial Collect and Analyse Data Reapply Compost (Rates yet to be determined)

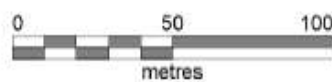
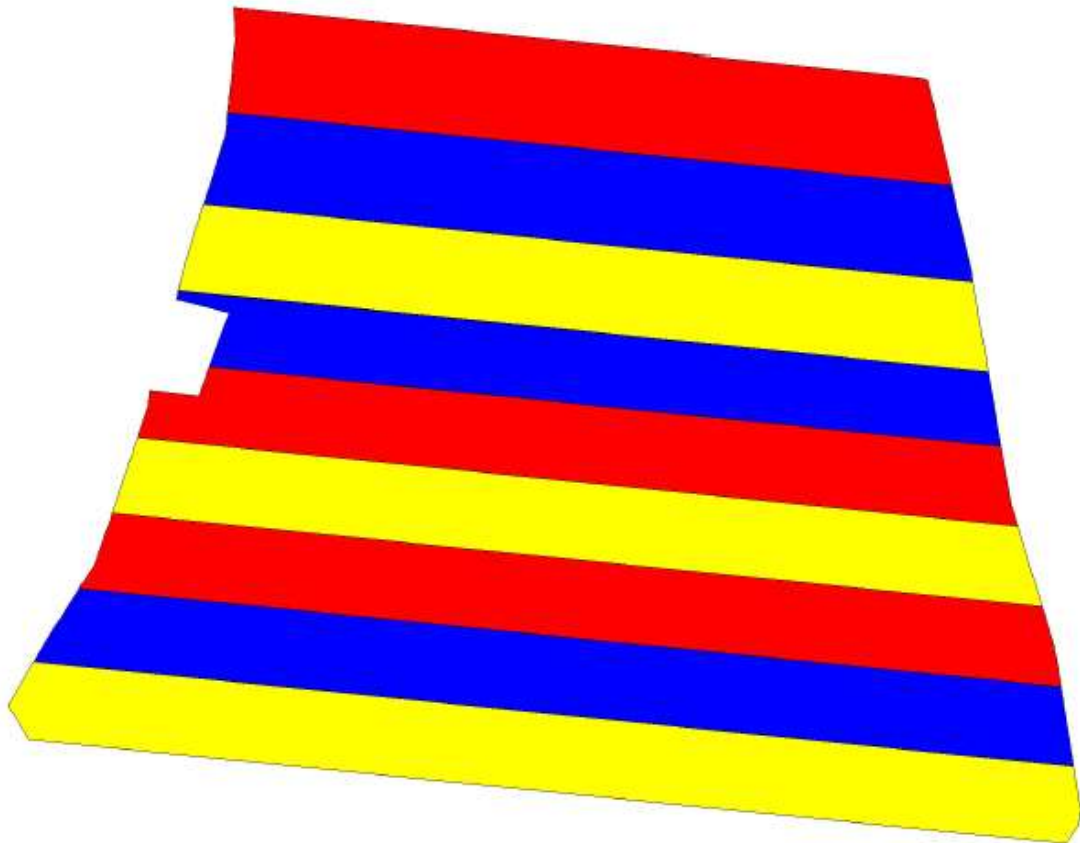
## Project Trial site details

<b>Trial Crop:</b>	Sugarcane
<b>Variety: Rat/Plt:</b>	Q250
<b>Trial Block No/Name:</b>	F30074 Blk 5
<b>Trial Block Size Ha:</b>	6.46 Ha
<b>Trial Block Position (GPS):</b>	17.0126°S 145.8221°E
<b>Soil Type:</b>	?

## Block History, Trial Design:

Was previously 2 blocks. 2.19 Ha on the Northern side was fallow, and 4.27 Ha on the Southern side was Q160 8R and was ploughout replant. 1 replicate in the plant and 2 replicates in the replant.

Block was planted on 4<sup>th</sup> October 2017.



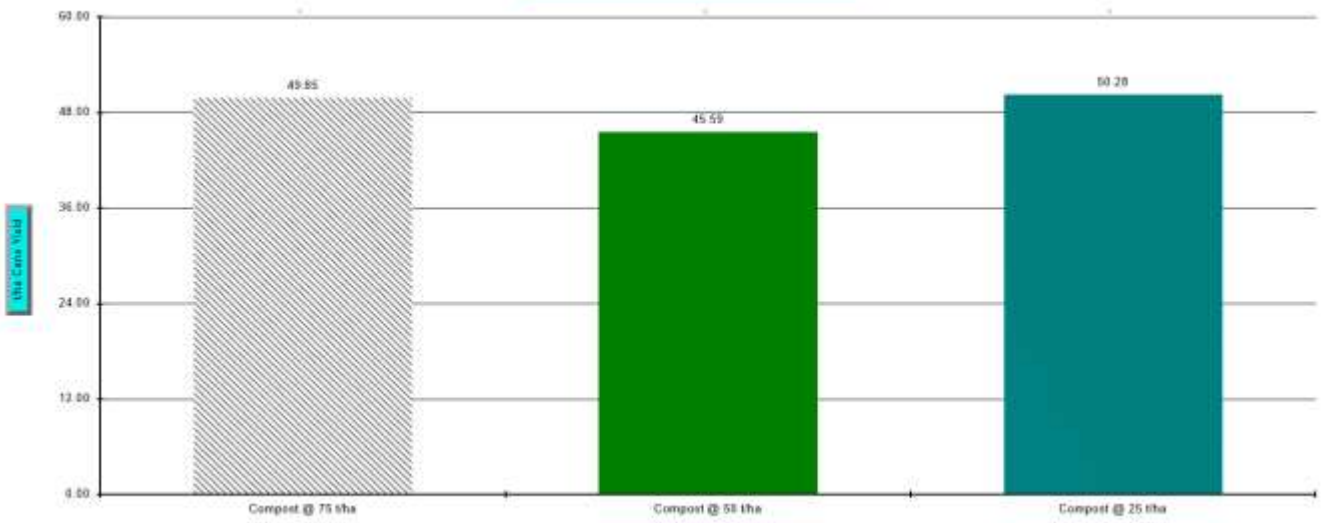
	T1 - 25 t/ha Compost
	T2 - 50 t/ha Compost
	T3 - 75 t/ha Compost

### Treatments:

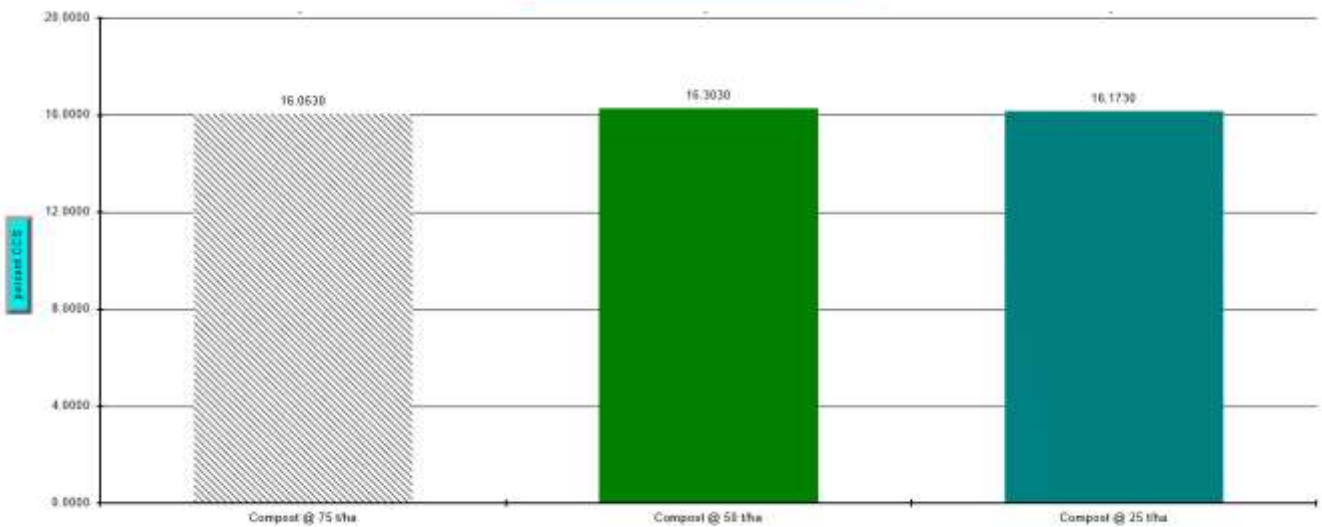
1. 25 t/ha Compost
2. 50 t/ha Compost
3. 75 t/ha Compost

## Results:

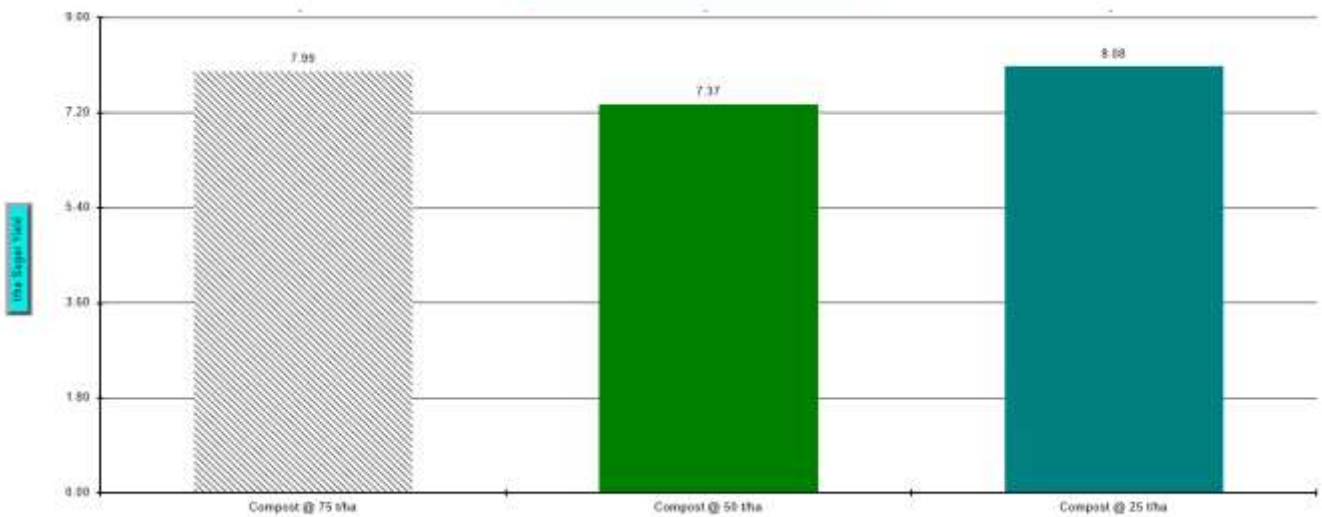
**Scougall - Compost Trial**



**Scougall - Compost Trial**



**Scougall - Project Compost Trial**



## Conclusions and comments

For the plant crop of cane there was no difference in yields and CCS between the treatments.

**Advantages of this Practice Change:**

**Disadvantages of this Practice Change:**

**Will you be using this practice in the future:**

**% of farm you would be confident to use this practice :**