

# Catalyst Project Report

## Twin N

### Grower Information

<b>Grower Name:</b>	Joe Linton
<b>Entity Name:</b>	LINTON A & JG PTY LTD ATF FAM TRUST
<b>Trial Farm No/Name:</b>	BKN-01273A
<b>Mill Area:</b>	Inkerman
<b>Total Farm Area ha:</b>	58.92
<b>No. Years Farming:</b>	
<b>Trial Subdistrict:</b>	Home hill area
<b>Area under Cane ha:</b>	26.51

## **Background Information**

**Aim: To investigate the potential of the Twin N product in reducing the amount of fertiliser required for Sugarcane production**

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

The Burdekin area has one of the highest yield potentials in regards to the sugarcane industry in Eastern Australia. As a result of this the nitrogen application rate is higher than most regions. Whilst many efforts are being made to reduce the amount of nitrogen applied, as well as the associated reef runoff, nitrogen rates are still high. There is a product that has been available on the market for many years now that falls under the biofert category. Twin N is a liquid product that is applied to sugarcane which works by injecting nitrogen fixing bacteria into the soil. It is a combination of selected microbial species (Diazotrophs) that act synergistically to increase crop yield by supplying nitrogen and plant growth factors. In addition to providing nitrogen the plant growth factors drive improved root growth that the TwinN treated plants capture any additional applied nitrogen more effectively. The microbes also act to increase the availability of other soil nutrients such as phosphorus that are present but not available for use by the crop.

If the product does what it is claiming to do then there could be some very beneficial savings to be made in regards to fertiliser applications.

### **Potential Water Quality Benefit:**

If the TwinN product proves successful then the potential for reducing application rates in sugarcane greatly increases. With reduced application rates we can have a reduced amount of runoff coming from the farms.

### **Expected Outcome of Trial:**

Whilst we are hopeful for the outcomes of the TwinN trial, there is no way to know whether or not it will be successful in the Sugarcane environment.

**Service provider contact: Alice Warner (0402 924 955, [alicew@farmacist.com.au](mailto:alicew@farmacist.com.au))**

**Where did this idea come from: The grower Joe Linton**

<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>Nov 2018</b>	- Design and implement a trial comparing differing Nitrogen rates and twin N application
<b>Stage 2</b>	<b>August 2019</b>	- Harvest trial (1R)
<b>Stage 3</b>	<b>Dec 2019</b>	- Analyse Data

## Project Trial site details

<b>Trial Crop:</b>	Sugarcane
<b>Variety: Rat/Plt:</b>	Q240- 1R
<b>Trial Block No/Name:</b>	BKN-01273A-06-01
<b>Trial Block Size Ha:</b>	2ha
<b>Trial Block Position (GPS):</b>	147.391765° -19.680782°
<b>Soil Type:</b>	BUfb, CUmb



## Results:

There are currently no results from this trial. It will be harvested during the 2019 crushing season.

## Conclusions and comments

**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 :**