

Grower Story

Sugarcane — Water Efficiency Gains

Grower: Dean Cayley

Location: Bundaberg, QLD

Significant Water Efficiency Gains

Dean Cayley, treated his plant cane in Bundaberg with Petrik Evergreen and its activator Green Manure Plus, in spring at row closure. He left six rows untreated as a test strip.

The gains in sugarcane productivity stood out with water efficiency gains being an obvious benefit.

In the Burnett region it was a very testing season with hot, dry conditions throughout summer. In fact, the year saw the hottest February day on record combined with very little rainfall.

It was the crops grown with biological inputs and good soil health, that stood out in these conditions. Agronomists see these **water use efficiency gains** from Petrik soil inoculants across diverse crops.

The trial showed that despite the crop having a full industry rate of nitrogen and phosphorus, the untreated six rows were noticeably shorted, thinner and less green.



Treated



Untreated

Above Photos

The leaves in the untreated section showed signs of stress that were not evident in the treated section.

Of the six untreated rows, only the middle two were not improved by the biology due to this expanding colonisation. This shows the importance of having significant buffer areas when laying down trials involving biology.



Biology Moves Through Roots

Looking at a cross-section of the cane in the above picture, you can see evidence of how the Evergreen biology has moved out through the plants' root system into the untreated area. The middle two rows of the untreated section was the most water stressed, where the biology had not yet expanded out to colonise.

This gradual sloping in height difference highlights the mobile nature of soil biology. Beneficial microbes colonise intertwining root systems and affect the untreated areas that are adjacent.

Visible Soil Difference

A field day was held on the property, where it was obvious that the untreated section was suffering more from water stress, than the treated section. The soil moisture was visibly different when you walked over the ground.