

Dual Cropping at the Beacon –

Mackay Regional Botanic Gardens

November 2018



Sugarcane (foreground) and sunflowers (background) planted together: Photo by Lucas Ihlein

Sunflowers are blooming here at The Beacon - you can't miss them!

But look closely - can you see something else growing in between the sunflower rows? This is a dual crop of **sugarcane** and **sunflowers**.

The idea of growing these two plants together was developed by local farmer, Simon Mattsson. Planting different species in the same field is a way to improve soil health.

Each plant species supports a living underground community in the soil - microbes, nematodes, worms and fungi. And the healthier that community is, the better the soil is at holding moisture and sharing nutrients with plants. This means less need for adding fertiliser and pesticides, and less run-off to the reef.



Companion Planting for Regenerative Agriculture





Sunflowers and Sugarcane at Simon Mattsson's farm, Marian: Photo by Cherrie Hughes

Sunflowers and sugarcane are good companions. The sunflowers grow very quickly compared to the cane (both species were planted at the same time, on August 26, 2018).

The sunflowers shade the soil, allowing for soil moisture retention and weed suppression. When harvesting time arrives, the sunflowers are harvested over the top of the sugarcane without causing harm to the cane, with the sunflower stalks turning into mulch for the soil.

Once the sunflowers are harvested, the sugarcane receives increased exposure to sunlight, and continues to grow to maturity, with all the soil health benefits of the dual crop.