



## Grower Story

### Papaya Productivity

#### MackKay Estates

## Integrated Practices in Papaya Bring Whole System Gains

MackKay Estates moved into Papaya production in 2007 with integrated practices from the onset, developed over years in conjunction with Total Grower Services.

They started on clean fields that had previously used for sugarcane production.

The advanced agronomy approach is achieving outstanding results with quality production - all with reduced insecticide use, reduced chemical inputs and reduced environmental impact.

Director Shane Fitzgerald of Total Grower Services says "The integrated approach brings whole system gains. The fields are monitored for plant health, productivity and insect and insect, mite and predator numbers."

Mackays use the TGS Bio-Mineral Program which involves maximising soil health with specific biological and mineral balancing.

Petrik soil inoculants have brought many gains with soil health benefits, soil structural improvements and increased nutrient availability.

The inoculants solubilise phosphorus and allow significant reductions in nitrogen rates. These nutrient availability changes also assist pest management and overall health.

'Plant health is maximised by optimising soil nutrition. The combination of practices has ensured the plantation is relatively free from phytophthora root and fruit rot, which is another major production limitation across industry" explains Shane.

Fruit Spotting Bug is the major insect pest of papaya and other subtropical crops.

Through integrated strategies of soil health, use of Anastasia wasp and mite control with P Californicus, the papaya system is achieving optimal results in fruit quality and production.

Mackay Estates utilises the full integrated production system including beneficial insect releases wherever possible to reduce chemical load.



Photo: Barry MacKay with agronomy soil scientist Shane Fitzgerald