

Case Study: Vandy Yon, Virginia

Grower: Vandy Yon

Type of Production: Climate controlled soil based polyhouses

Crops Grown: Coloured Capsicums – Red, Green

Technology Implemented: Low Tech Computerised Irrigation and Fertigation Scheduling

Outcomes

- Bolivar Recycled Irrigation water applied more often in smaller quantities.
- Fertiliser as liquid injected with irrigation water.
- Nutrient balances corrected via leaf tests on crop every four weeks.
- Fertiliser applied directly used by plants and not stored in the soil. This has meant a cost saving and increased efficiency of fertiliser applied and used by the plants.
- Irrigation scheduling increased crop yields by 1.3 times.
- Fertigation allowed plants to have a 85% reduction in the incidence of Blossom Rot and fruit abortion. This meant that all flower blossoms have had a 90% increase in chance of producing healthy fruit.
- Individual fruit were bigger and heavier with thicker walls.
- Levels of plant disease were reduced by 75% with a 85% reduction in spraying of fungicides.
- The plants were able to survive and flourish when environmental temperatures went over 37°C with fruit wastage dropping from 25% to 15 - 18% due to burn marks.

Summary: The irrigation / fertigation scheduling has meant that more premium quality fruit has been able to grown longer realising increased returns.



Healthy plants of uniform size and height.



Large heavy Capsicum fruit.