

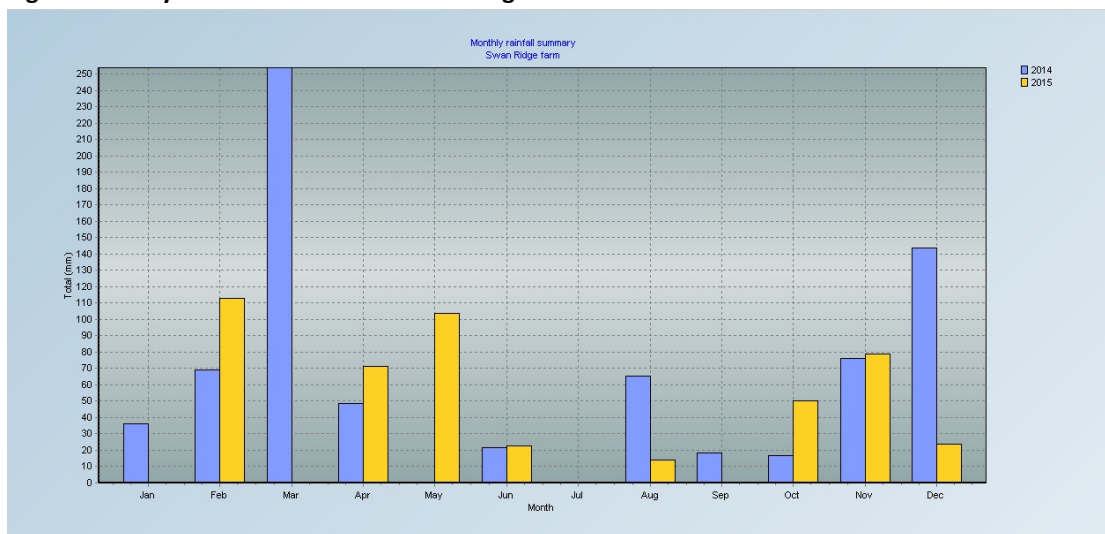
2007 Macgrove Project

July to December 2015 Orchard Services Report

Weather and Irrigation

Total annual rainfall for the 2015 calendar year on the Swan Ridge orchard was only 600mm, this sets a new low benchmark following last year's dry. Average rainfall for the Bundaberg region is now 1,018.9mm per year. Following the upgrade to the infield irrigation, a new system of water requirement calculation has been trialled with impressive results within the orchard.

Fig 1 - Monthly rainfall for 2015 for Swan Ridge Orchard



The new water regime has increased tree vigour but has also seen a dramatic increase in water used per hectare with 1.8ML of irrigation water used in the six-month period. By Christmas all dams were virtually empty with only reserves of emergency water retained. Since Christmas significant falls have refilled all dams.

Tree nutrition

Large scale applications of Mill Mud and composted cow manure were applied across the entire project orchards. Cow Manure was used in areas where tree size prohibited access for the Mud trucks. All areas that were mudded also were profiled to shift the mud and inter row organic matter back up under the tree.

The regular fertigation program was maintained as planned for the year and was supplemented with several folia applications. A product called "Flower Mate" was applied at the time of bud formation, it contains calcium, boron and other trace elements essential to flower formation and health. This was followed with two applications of seaweed based fertiliser as well as zinc and copper as required.

Table 1 - Nutrient additions by product

Name	Active Products	Volume applied
Solubor	Boron	325kg
Composted Cow manure	NPK Calcium zinc boron etc	800,000Kg
Mill Mud	NPK Calcium zinc boron etc	9,520,000Kg
Potassium Sulphate	Potassium	17,800Kg
Urea	Nitrogen	9,900Kg
Zinc Biomin	Zink	240Kg
Copper Biomin	Copper	120kg
Zink	Zink	675Kg
Flower Mate	Calcium Boron Zinc	1000ltr
Seasol	Broad spectrum trace	1880ltr

Irrigation Upgrade

The upgraded irrigation continues to promote excellent tree health. The next stage is to automate the new system potentially saving 320 man hours per year and enabling the use of off peak electricity. Part of the proposed system is state of the art moisture monitoring which will greatly increase the efficiency of water used.

Pruning and Skirting

All pruning and skirting was done by a third party contractor. Skirting and pruning operations were limited by availability of contractors and the need for access to the orchard for the Mill mud and cow manure spreading.

Six Monthly Pest Report for 1/7/2015 to 31/12/2015

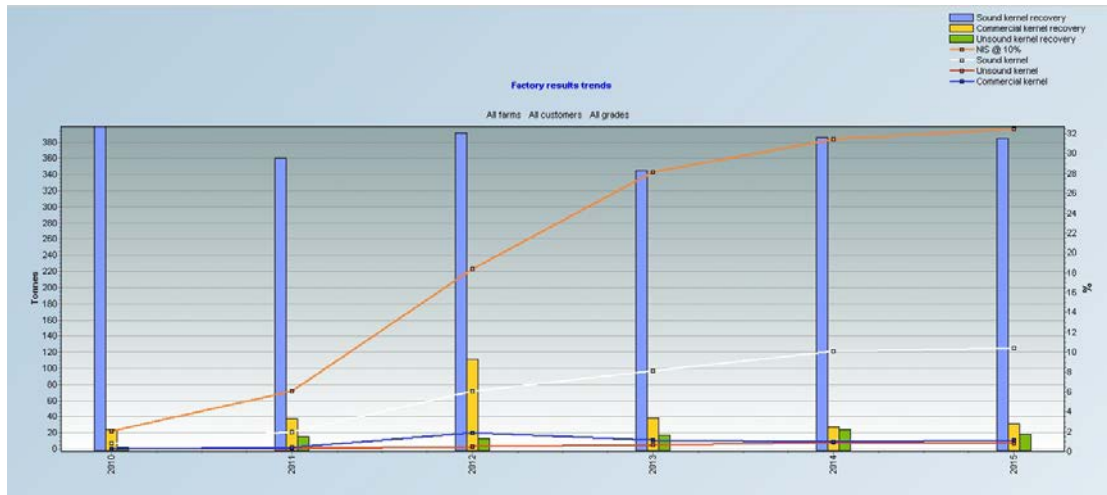
Green Vegie bug (GVB) was evident in the orchard well before flowering this season and so pest pressure started early in the year. No evidence of flower caterpillar was found and the flowering levels were good, with nut set at a satisfactory level. Three rounds of pesticide were applied to the total orchard area over the season of October to December to control mainly GVB pressure. After Christmas nut borer started to emerge, so parasitic wasps were released throughout the orchard to control them.

2015 Harvest Report

The 2015 harvest was finished in September with the last Nut In Shell (NIS) leaving the orchard for the processor on the 2nd of October. In total 402,683.9kg (@10%) of NIS was delivered to the two processors. Approximately half of the crop was delivered to Macadamia Processing Co (MPC) in Alphadale Northern NSW and the other half to Consolidated Nuts Australia (CNA) a local Bundaberg factory. MPC's notional 33% price was \$4.70 and has since been lifted to \$5.00 with a 30 cent final payment, CNA had a 33% final price of \$5.00. The average farm gate price received by the project for the 2014 calendar year including kernel recovery (KR) and quality bonuses was \$5.54.

The overall tonnage harvested was well below expectation and is believed to be a direct result of inadequate water application from the old drip tape system. This has only become apparent after the upgrade with the increase in vigour.

Fig 2 - NIS Results trend chart



The highest per kilo price for the season was for a load of A4 at \$6.76 per kilo and the highest load total value was \$190,656.00 for 35.8tn of mixed varieties 660, 741.

Annual reject levels fell from 2.4% KR in 2014 to 1.9%KR in 2016, with insect damage falling to 0.3% from a high of 1% last season.

2016 Flowering and crop set

A good consistent flowering has led to excellent pollination and nut set for the 2016 harvest.

Crop levels in all varieties are up significantly with early forecasts suggesting a 25% increase in overall

Labour Usage

No Major changes to labour use over this period. The move to automation of the irrigation system is expected to result in significant saving s in this area.

Fig 3 - Labour use chart for July - December 2015

