

Future Orchards 2012
2nd of April 2008
Batlow

After talks were given at the Batlow Bowling club, the group moved on the Batlow Co-op Vanzella orchard.

Block 1 – Cripps pink (1993) in M9, 1.2m x 3.5m



RG Regalis has been used on this block. We are expecting an average fruit size of 165g, 5.5 fruit/kg (old 100 count). 65 to 71 tonne crop.

JW It's very easy to miss-count apples when they're still on the tree, the canopy makes a huge difference. Allow 20% difference between trees.

RW What about next year's return crop?

JW Shouldn't be a problem next year; it's hard to make this variety biennial. It's possibly the off crop this year anyway.

RG We've taken out lots of heavy wood out over the last 3 years

RC Were aiming to only have light wood.

JW What to do if a variety is a dog? Lop off the tree at 1.2m, graft over to better variety.

JD *They have done that across the road, which we'll look at later in the day*

JW The P series Gala are on the way back in NZ. Smart growers will go out of Royal Gala in 2 years. Braeburn's only going to survive in Central Hawke's bay only. Thinning is the key NAA + Carbaryl = Biennial. Use Ethrel, BA or ATS + BA for stunted blocks.

Block 2 94/95 Block. Cripp's Pink (Scion rooted)

RW When this block was planted you could only get low grafted trees from the nurseries
RG We will change this block over to Red Delicious soon
JW Vigour on a developed canopy is the enemy.

The block has a pretty poor crop this year

JW Netting could be causing pollination problems, there's only half a crop here
RG We are putting our bees in before the net goes up to minimise problems
JW (Cutting open some fruit) There's only half the seeds in these. Try applying the Regalis at full bloom at the full label rate; you need to keep on top of it (vigour).
RG There are hardly any pollenisers at this end of the block. Braeburn are four rows over.
JW Bees will naturally fly down rows not across
?? What is the pollination ratio?
GB Ideally you want one every 10 trees (1 per 20m)
JW 15m is the maximum pollination effect, but if you alternate the spacing across rows then 20m works well. You MUST plant the pollenisers with the orchard. It takes too long (6-8 years) to correct a poor ratio. It takes 3 years to notice there's a problem, 3 years for the pollenisers to grow and do the work.
?? Suitable varieties?
JW Triploids such as Jonagold are not good. Ideally you will pick a variety that does the following:
 1. Flowers slightly earlier than the crop variety
 2. Looks different to the crop variety- pickers need to easily sort them out as they go.
Crab apples do a good job, but the variety recommendations can be dodgy.

Red Delicious is self-infertile. For other varieties, bud strength and temperature are often the cause of poor pollination. Braeburn is self-fertile in the off-crop year. Self pollen tubes grow slower than donor pollen tubes. Pollen tube growth is temperature driven.
Cox's Orange Pippin can be self fertile if it is warm enough. Golden Delicious is self fruitful except in cold springs. In France, where lots of Golden's are grown Temperature= Fruit set.

It is critical that pollenisers are not biennial. In NZ Granny Smith is the most popular polleniser variety.

RG We use Manchurian Crab on M27, alternated with Golden Hornet at every trellis post.
BW Colour is poor here, why?
RG Vigour.
JW Regalis shuts down vigour, but also increases nitrogen per shoot length. This leads to poor colour. Regalis is good for increasing Calcium levels in fruit, but is a double-edged sword. Growers need to understand what you really want to achieve when you use this product. It's not a great tool where vigour is lower, as you will get reduced sugars, size etc. I'd like to compare the use of thinners against Regalis.
RG NAA and Regalis use is a problem.
JW Results are variable with fruit size. See the "Good Fruit Grower (US Journal) article on thinning.

Block 3 – Monitor block

RG This block was frosted this year, 4th year of drought. We want to get our N levels down to 1.8 to control vigour. We have also tried cincturing with cable ties on the scion rooted trees.

JW You'll see the effect next year

GB You might increase internal browning on those cabled trees

RG We have stored CP's until January at 4°C with no problems (used SmartFresh??)

Block 4- Young (non bearing) monitor block- Rosy Glow on M26

RG We didn't fumigate here, and it's caused problems. Contractors are difficult to come by for small jobs.

GB? Basamid is user friendly; C35 Telone is not so flash. Formalin's used in Europe, but not legal here.

JD Note: NSW state legislation limits the use of some fumigant chemicals to registered fumigation contractors with a Fumigation applicators licence. Some products can not legally be applied by growers, even though they hold a chemical users certificate in NSW. The regulations are very much likely to be different in other states such as Tasmania.

RG We used 100 units of N to try and force growth

JW Continue an annual MAP program

RG We took all the blossom off to try and get better growth, we will use the 4:1 ratio on this variety. String was done early. Next time we will fumigate.

GB MAP is only a short term solution to replant disease

JW Chook manure can be good, but it can burn trunks if not applied carefully

RG This block was hand planted, but it's too expensive. We will use a machine next time.

Block 5 Grafts

RG This block was Firmgold on M26, we used two scion sticks, cleft grafted (not sure of new variety). Cost \$1.20 a tree

The grafts have taken and grown really well. They have done a good job.

JW If you are re-grafting, keep some low branches on the tree to keep the sap flowing and the grafts alive

RG We will need to crop the trees next year to control vigour.