



EP Offshoot

ISSUE 28 | JULY 2013

GROWER UPDATE



Read Offshoot online | Visit www.eastpack.co.nz to view all EastPack newsletters and your EastPack reports.

As this is the first Offshoot Update for sometime it is appropriate I should detail some of the changes that have taken place recently.

John Bird's departure as Avocado Manager has led to some rearranging of personnel in the Bay of Plenty.

I have taken up this position for this season so as to allow for some continuity and I hope to catch up with as many of you as possible in the coming weeks.

Heather Spencer has also left the company and her responsibilities will be taken up by Marie Stieller who many of you will already know.

The new season's packing contracts are now available, having been approved by the AIC.

You will note a minimal increase in charges this year; however our service offering is once again one of the most competitive in the industry.

I wish you all a successful season and look forward to meeting with as many of you as possible at the upcoming field days both in the Bay of Plenty and Northland.

Bruce Lyford
AVOCADO MANAGER

Northland Report

Welcome to a new cropping season in the North where growers are experiencing mixed fortunes and differing levels of optimism for the harvest months ahead.

Far North

Despite a long hot dry summer Far North growers are generally looking at a good cropping season with the trees hanging some exceptionally large fruit profiles, a feature perhaps resulting from high sunshine hours.

Some growers have experienced a disappointing level of crop loss owing to fruit drop from vicious early-June winds which affected some orchards more than others. Surprisingly even after the winds tree condition is generally very good. The trees have obviously enjoyed hot dry summer growing conditions and reflect the fact that many growers have increased the efficiency and effectiveness of their irrigation systems by extending the wetted areas around trees.

The extensive plantings of Dusa in the district are looking encouragingly vigorous and healthy and promise a strong resurgence of crop volumes in the future for many older orchards. Also cause for optimism, is the focus and continuation of heavy pruning regimes to rejuvenate older trees which is already showing fruitful dividends in many cases.

As regards pest control, growers have been alert to the likelihood of outbreaks of thrips and mites on the back of a long hot dry autumn. The fruit looks particularly clean especially of mites owing to the widespread use of Paramite in the district to great effect.

Picking for local market has already been underway for the last three weeks with maturities now coming up after heavy rain stalled them at the start of the month. Growers are now cautiously waiting for the market prices to firm up again after large volumes went on the market two weeks ago. Some are keen to select pick their larger fruit before it drops.

Most growers are looking at a two-to-three-pick harvest plan with lessons learnt from strip-picking smaller-size fruit too early last season. Most growers are looking to pace their season with staggered picks to take advantage of 'market windows'.

Mid North

Around the Whangarei district most growers do not have sufficient crop to warrant registering for export and will rely on maximising returns on the local market with the small amount of fruit they have. Some local market harvesting has already taken place with some maturity levels reaching required levels early. Despite such a generally dismal fruit set in the region, in some warmer pockets such as Glenbervie, orchards have reasonably good crops as they perennially do. It is good to note that growers have continued to feed their trees and many look well set-up for what is hoped to be a good flowering and fruit set this spring.

Meanwhile I am happy to report that the packhouse has already packed some local-market fruit and is ready and functioning with the waterblaster installed, and Warren and Debbie and our regular team of packers are eager to maximise your export fruit packouts.

Good luck for the months ahead.

Mike Schwed
GROWER SERVICES – NORTHLAND

Why is winter vital for avocado production?

It is important to monitor and fertilise avocado trees over the winter to early spring period.

Why?

- Starch levels are building up and peak at flowering.
- Fruit size increases at approximately 1 gram per day.
- Flower bud break and panicle extension takes place.
- Root flush before flowering.
- Natural decline in nitrogen and magnesium over the cold winter period.
- Normal tree processes are still taking place as they are not deciduous.
- Soil temperatures seldom dip below 10°C.

It appears that higher starch levels are required for successful pollination and fruit set. Spanish research shows that flowers with higher starch levels are the ones most likely to successfully complete fertilisation and lead to harvestable fruit.

When a pollen grain lands on a stigma in the female receptive phase, it uses carbohydrates from the flower to germinate and to grow its pollen tube before fertilisation can take place.

Therefore it makes sense that strong flowers have a greater capacity to set fruit (given the results of the Spanish research).

Conversely, it follows that flowers low in starch will be less likely to set fruit despite otherwise favourable conditions.

In simple terms, autumn flowering may be seen as an indicator of probable high starch levels in an avocado tree. This usually leads to good spring flowering but it is even more critical that these trees are fertilised. Autumn flower extension, flowering, fruit set and fruit sizing will draw on tree reserves so maximising winter starch production is even more important if spring flowering is to be successful.

New Zealand winters are not ideal for starch accumulation.

Why?

- Most avocado growing countries have dry winters and wet summers.
- New Zealand has wet winters and dry summers.
- This means our winter rains come with limited sunshine as well as cooler temperatures. This severely limits photosynthetic production which creates 'food' and starch.
- New Zealand's cooler winters have a greater detrimental effect on chlorophyll as well as nitrogen and magnesium leaf levels. Leaves with higher nitrogen and magnesium contents have greater photosynthetic activity.

Because of the activity over the winter to early spring period we recommend some level of fertiliser application dependent on leaf condition, flowering potential and temperature.

Dark green leaves *must* be maintained to maximise photosynthetic activity and starch accumulation.

BAY OF PLENTY AVOCADO FIELD DAY

Thursday 25 July, 1.00-3.00pm

**EastPack packhouse
Marshall Road canteen
Katikati**

Tony Hawken – CEO EastPack

**Bruce Shepherd
Technical Manager – Katikati**

Looking forward to a successful pollination
What has to be done | Increasing orchard income
Northland Fieldays to be announced



The controversies of pruning

Pruning is certainly the new buzz word in the industry, despite it being practiced in various forms in the last decade.

Growers should have an open mind to pruning strategies and ideas as they are still evolving. Adaption and adoption of a regime on your orchard will depend on such things as current tree spacing and height, cropping potential, age, access to machinery, shelter, time and the ultimate plan for the orchard.

What we want from a scientific point-of-view, is to understand what the plant responses are when we remove limbs. These will involve architectural, physiological and environmental considerations.

Some questions are:

- What is the influence of more light reaching formerly shaded parts of the tree?
- How much is the balance between shoots and roots altered?
- What are the hormonal impacts of this change in balance on fruiting and flowering potential?
- Leaf growth from cuts will be a drain on resources initially – how much and for how long?
- What timing of a pruning regime is best to manipulate shoot regrowth and/or reduce starch drawdown?
- What is the impact of limb removal on starch reserves and fruiting potential?
- How can regrowth be manipulated to reduce vigour and get it to fruit at the earliest time?

Orchardists will prune for various reasons but ultimately they must focus on fruit production. Cheaper picking, more effective spraying

and hydalada access are all admirable objectives but these are all saving costs whereas increasing fruit production and hence income should be the immediate priority, particularly getting more consistent crops.

Recently, flower pruning has been used in an attempt to create vegetative growing points while lowering crop load, at the first signs of an upcoming heavy flowering. This is labour and machinery intensive. Fewer but larger cuts are now being used.

We do know that the avocado tree has a natural vegetative bias due to its evolution. For a grower this means that the above ground canopy easily dominates the smaller root mass. The issue here is that the roots produce vital hormonal signals that are involved in the flowering process. The pictures below, taken from the NZAGA 2003 Annual Research Report, graphically show the imbalance of Hass scions on Zutano and clonal Duke 7 rootstocks.

Pruning will help to initially reduce the dominance of the above ground canopy over the roots. It is speculated that this alters the hormonal balance which may benefit flower initiation.

The first prune normally begins with moderate cuts on the sunny side of a tree. This is then left to respond before pruning other areas in later seasons.

The focus must still be maintained on fruit production during pruning by considering how each cut will potentially affect:

- Fruit and flower numbers.
- Leaf area for fruit sizing.
- Production of spring initiated wood for flowering the following spring.
- Starch reserves.

Bruce Shepherd
TECHNICAL MANAGER – KATIKATI



Hass on Zutano seedling rootstock



Hass on clonal Duke 7 rootstock

Picking requirement checklist

With export packing still some time off it is opportune to remind growers of the requirements needed before picking.

- AIC grower registration.
- Contract with your designated exporter and local marketer.
- Contract between grower and EastPack.
- Copy of current GrowSafe certificates related to work on the orchard which includes each spray contractor employee who has sprayed.
- Updated spray diary – this has implications for exporters should there be some market restrictions.
- Spray diaries must be signed by grower before harvest but this only lasts 14 days before it has to be cleared again by the grower. Each spray diary clearance must also be verified by the packer (EastPack).
- Update fertiliser diary.
- Copy of pest monitoring records to justify spray applications.
- Food safety declaration.
- Independent dry matter test pass before regional blanket Industry dispensation comes into place. EastPack is still required to have an internal dry matter pass test until a blanket Industry dispensation for **all** regions comes into place, for the first pick of a PPIN.
- Map required with block names matching blocks for other orchard operations, eg. spraying.
- GlobalGap or NZGap if appropriate.
- Residue test where required.

As well as the above, each delivery of bins to the packhouse must be accompanied by the appropriate harvester declaration stating blocks and bins picked. Individual bin cards must be filled out with the correct block numbers or description.

At first this looks a bit onerous but these are industry requirements and are the same for all packhouses.

If you require any assistance do not hesitate to contact EastPack.

Contacts

Management

Kerry McCree
Western Bay/Northland Operations Manager
027-212 5048

Bruce Lyford
Senior Relationships Manager
027-612 7450

Marie Stieller
Payments
07-573 0904

Glenbervie
Phone 09-437 3003
Fax 09-437 3013

Warren Herriott
Site Manager
027-212 5608

Mike Schwed
Grower Services (Northland)
027-212 5739

Debbie Meyer
Administration
09-437 3003

Katikati – Marshall Road

Phone 07-549 0008
Fax 07-549 1299

Bruce Youngman
Site Manager
027-212 5619

Roger Hoebbers
*Manager – Grower Services/EKO
(Katikati/Coromandel)*
027-702 6221

Bruce Shepherd
Technical Manager – Katikati
027-212 5630

Joe Brophy
Grower Services (Katikati & Coromandel)
029-549 1422

Rudi Nunes
Grower Services/EKO (Coromandel)
027-212 5593

David Shoosmith
Grower Services/EKO
027-224 0742

Greg Wild
Grower Services/EKO
027-742 8402



EastPack
WORLD CLASS ORCHARD TO MARKET

www.eastpack.co.nz