



**AUSTRALIAN
AVOCADO
GROWERS'
FEDERATION**

Talking Avocados

—The Australian Industry
Newslines,
First Edition,
March, 1990.

AVOCADO NEWS TO PRESS

For some eight years we have discussed the problem of lack of communication throughout the industry. A national news sheet, newspaper or journal was proposed but never eventuated. Queensland C.O.D. greatly assisted the issues of Fruit & Veg News being devoted to Avocados. It was enormous, but highlighted even more the need for an industry publication. We have it, and I trust we have your full support to make it a successful.

'Talking Avocados' can assist everyone in numerous ways. One important aspect is to keep all growers up to date with research and technology; you will be within a short time of any new breakthroughs and this can be vital to orchard management. The practice of injecting trees with phosphorous acid was in common practice in Queensland some eight months before it became general knowledge in the other states.

Another aspect of 'Talking Avocados' is to provide a forum for growers, to air your views and to let us know your problems. Additionally, we shall publish extracts of your interest from avocado journals & newsletters from other countries — Israel, South Africa, U.S.A. and New Zealand.

I also wish to briefly mention the Biennial Federal Conference and in particular the Research aspect. Up till now our research projects have been directed to the obvious major problems. Phytophthora etc. have been tackled with a great success. Now I feel that many of the minor problems, particularly those confronting the smaller growers, need to be addressed. At the federal level we shall be compiling a list of those problems and allocating resources for the provision of research funds. There are further details on the conference in this issue. It will be important to you and all growers. Some of the major items of interest will be the research programme, with updates on current and continuing research and future research priorities; finance, with one of Australia's leading finance advisers; and export achievements and the future. Your attendance and participation could be of immense value to both yourself and your industry.

I look forward to renewing friendships and meeting many of you at the conference in July this year.

David Rankine
President, Australian Avocado Growers' Federation.

MANAGING QUALITY IN AVOCADOS

Terry Rudge and Simon Wathen
Davy Quality Management Services. BRISBANE.

Quality has become something of a buzz word in horticulture, but in spite of preaching of the industry leaders, there has been little guidance as to how quality can be achieved. There is even confusion as to what the word quality actually means. It is not a ridiculously high standard that is impossible to achieve, simply means meeting the customer's requirements.

A grower or packer must be certain that fruit will always satisfy his customer. To achieve this, a deliberate strategy is needed. The most important part of this strategy is a series of quality checks at all stages of growing and handling. These checks stop unsatisfactory fruit from incurring unnecessary packing and transport costs and backlash from customer dissatisfaction. Results of quality checks must be recorded to allow problems to be fixed and quality levels improved.

Steps required to truly manage quality are:

1. Set standards. These may be D.P.I.E. (Federal) standards or based on the

2. Determine when they should be checked. (eg. in the field, at the pack house, at the market)

3. Set up a monitoring and recording system, with clearly defined actions when product does not meet standards.

4. Use information from records along with research findings to solve quality problems and improve product quality.

5. Review and fine-tune the system regularly. Audits by both senior management and an independent auditor are needed to ensure that the quality system is working and continues to work.

COMMITMENT

For a quality system to work it must cover all aspects of production from growing through to the consumer. Management and all participants must be committed to having the product meet the customers specifications. A certain amount of formal training is needed, so all staff know the standards and their own roles.

BENEFITS

Quality management does have a cost. A quality controller must be recruited and trained. It is shown that only 1% of fruit will be rejected, but in the past over 10% of fruit has been rejected.

*More reliable market outcomes

*Greater buyer confidence.

*More return orders.

*The ability to promote an elite brand and receive a market premium.

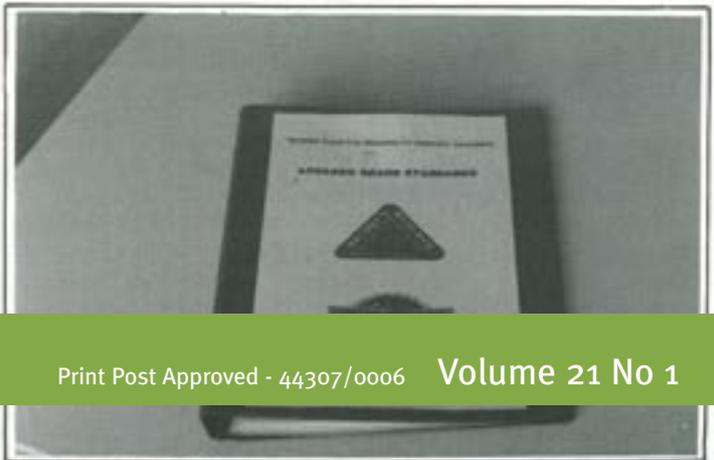
*A steadily improved level of quality.

*A higher percentage of marketable fruit due to awareness of problems and

20th
Anniversary
Edition



A quality assurance programme has been implemented at the Sunshine Coast fruit Marketing Co-Operative.



Chairman's Perspective

This being my first issue as Chairman has caused me to review the wisdom of our previous Chairman, and I can say with great confidence that all those good things Rodney Dalton and Henry Kwaczynski asked the industry to do, were done and done well. They were done so well that we have experienced the highest returns ever for summer avocados because of those things set in motion many years earlier.

The strategy set in the marketing program was to increase the consumption in very clearly identified consumer groups by way of magazine advertisements offering meal solutions. Well, the strategy has worked so well that demand has grown significantly and demand is still strong in spite of high retail prices. This increased demand has soaked up high volumes of fruit over the November to February period, leaving the market with little reserve stock when the North Queensland crop began.

The success of the Avocados Australia marketing program caught the eye of the New Zealand industry and they opted to continue their summer promotions using the same theme as we did in Australia. We certainly appreciated the New Zealand contribution to generic promotions of avocados in the Australian market, where the message has been focused on 'growing the market', rather than



stealing business from a competitor (national or local). In fact, at a recent grower meeting in New Zealand, of which Antony Allen and I were invited to attend, the growers there unanimously voted to continue with their program as it was this summer. Such is the success of this marketing program.

Our industry has one of the most powerful tools known to horticulture, and I believe that most growers have little or no understanding of it. It is something that has been built over the past four years and is so successful Avocados Australia has been able to sell it on to other industries that see the value in it. It now forms the platform where growers can plan harvest and dispatch schedules, understand the supply side of the 'supply and demand theory', and generally take control of the market gossip machine. I'm talking about *Infocado*, the forecasting and dispatch program that tracks about 85% of the avocado supply in Australia. And yes, New Zealand does contribute.

What do you know about Infocado? I would encourage you to participate and gain the rewards that will come with a better understanding of our market. Make the call to the Avocados Australia office and get yourself started on Infocado. There is one rule with Infocado, and that is: contribute and you will receive information.

While we bask in the rewards gained last summer I caution those who assume that demand is constant or even a certainty. Demand depends simply on a consumers desire to buy another avocado because the last one tasted good and fulfilled their eating experience. Demand is not fuelled by the desire to gamble another \$1 or more to see if the next avocado is better than the last one that got thrown away. Demand can quickly turn to disaster. In the quest to build demand we are all equally responsible.

Our industry has a clearly defined Strategic Plan that has overseen almost everything the board has done for the past five years, and it is up for review this year. Some of you have been 'dobb'd in' to participate because you showed that small spark of interest. I fully understand the excitement a strategic plan discussion can create but if you do have an interest in this industry please look on your invitation as a 'gong'.

For the board to continue to serve this great industry with success into the future we need the good advice from the growers who have ideas for the future. The past we have already got covered, it's the future we need to concentrate on.

Jim Kochi

Jim Kochi,
Chairman, Avocados Australia

WARNING

Avocados Australia has for a number of years paid a large amount of money for the industry's right to use the **Heart Foundation "Heart Tick"** on avocados.

If you are using a "Heart Tick" logo from anyone other than the label companies Label Press, Spicer Labels, Sinclair International and Warehouse Packaging and Design you are acting illegally.

No other label printers are able to legally print the "Heart Tick" for use on avocados. Avocados Australia is undertaking a clean up of the "Heart Tick" printing. We will lose access to the "Heart Tick" logo if it is used illegally.

Avocados Australia, AUF and the Heart Foundation will enforce their Registered Trademark rights to the fullest extent.

If you have non-genuine labels do not use them. If you know of label companies offering to print non-genuine "Heart Tick" labels for you please let us know on **1300 303 971**, so we can all help keep this valuable tool.

All growers could lose access to the "Heart Tick" logo if you don't act now.



CERT TM

Industry Matters

Written, edited and compiled by
Antony Allen, CEO of Avocados Australia

20th Birthday for Talking Avocados

Welcome to *Talking Avocados* twentieth year. Twenty years ago a group of avocado industry stakeholders implemented a long (eight years) talked about plan to have a national magazine to communicate directly with avocado growers, and from that *Talking Avocados* was created.

Year after year the publication has grown in content, size and circulation. Avocados Australia has relied heavily on *Talking Avocados* to provide the industry with R&D, marketing, regulation and general industry information over the last twenty years.

Twenty years of *Talking Avocados* have seen just four editors: Ms Marie Piccone, 1990-1991; Mr Orf Bartrop, 1992-2001; Mr Col Scotney, 2001-2003; and Mr Antony Allen, 2004 to present.

The very first edition from March, 1990 has been reprinted in this edition on page 40.

Thank you for your support over the last 20 years.

Register Your Business for FREE in the 'Avocado Supply Chain Directory'

Avocados Australia has established an online directory of all businesses involved in the avocado industry. Our Supply Chain Directory is a valuable resource area for both buyers and suppliers of industry-related products. The directory enables buyers to find suppliers, while allowing suppliers to create and maintain a web presence on the Australian Avocados website for **FREE**. The Supply Chain Directory lists all registered suppliers, in alphabetical order. The directory is also searchable.

To view this directory, simply go to www.avocado.org.au and select the 'Supply Chain Directory' tab in the top right hand corner of the page.

To become a registered supplier in the directory, please complete the online application form found on the website. It is a **free service** for the whole avocado supply chain.

Infocado Update

Below are extracts from the January, 2010 Infocado quarterly report.

The market has been working very well for the first part of the season with volumes moving well through the market. Retail prices have also come back to a reasonable level after a period in January and February when retail prices were excessive because of the very low volumes of fruit on the market. Heavy rain in North Queensland and in the Bundaberg region did stall the beginning of the Shepard season, most particularly in the Bundaberg region, which has contributed to lower than expected volumes of fruit on the market for this time of the year.

2010 will see the '3rd Infocado Summit', repeating the events held in Brisbane, 2006 and Sydney, 2008. This year the event will be held in Melbourne during October. The Infocado Summit continues to be a 'contributor' only event. Only Infocado contributors are eligible to attend.

Jan 09 to Dec 09 Dispatches and Jan 10 to Dec 10 Avocado Production Estimates 5.5kg eqv trays

Region	Jan 09 to Dec 09	Jan 10 to Dec 10
North Queensland	1,090,587	1,268,940
Central Queensland	3,085,925	3,702,992
Sunshine Coast	549,041	489,313
Southern Queensland	987,363	1,167,155
Northern NSW	206,582	216,611
Central NSW	686,426	763,474
Tri State	92,287	77,673
WA	1,086,924	1,058,117
Total	7,785,135	8,744,275

Source: Avocados Australia





New Strategic Plan for the Avocado Industry

Avocados Australia, on behalf of the Australian avocado industry and Horticulture Australia (HAL), are about to embark on the development of a new five year strategic plan for our industry.

The purpose of the plan is to provide clear strategic direction for the avocado industry, and in particular, the Avocado Levy Investment Program managed through HAL. The current industry strategic plan was developed in 2005 and has served the industry well, providing strong guidance for industry development activities and levy investment. The process to be undertaken will include a review of the current strategic plan and will build on existing industry information to develop a snapshot of the performance of the industry in 2010. A series of workshops will be held with a range of industry stakeholders to develop a draft plan, which will then be provided to all industry stakeholders for comment and feedback.

One of the workshops to be held will focus on future scenario planning for the industry. This workshop will consider possible future longer-term events that may impact on the ability of the industry to meet its true potential. The aim is to make uncertainty about the future more tractable, so that the industry can be better prepared for different possible futures. As a result, processes can be developed to monitor early warning signs of emerging trends in the business environment which may impact on the performance of the industry.

The planning process will also involve economic analysis of high priority areas to provide a level of justification for the recommended objectives and strategies, and support the implementation of the plan.

p2p business solutions has been engaged to facilitate the strategic planning process, AgEconPlus to undertake the economic analysis of the plan, and Ecolnsights to facilitate the future scenario planning workshop.

The draft strategic plan will be available to industry stakeholders for comment in August, 2010.

Growers Encouraged to Pick Up Tools to Navigate Urban Encroachment

As the great Aussie 'quarter-acre block dream' and inner city housing affordability put even greater pressure on the city fringes, understanding the issues around peri-urban land use planning and its impacts on horticulture are increasingly important. The concept of agricultural land 'awaiting urban development' via an ad hoc process of conversion is often regarded as an inevitable outcome of population and economic growth.

The avocado industry is among the horticultural industries effected by the expansion of cities into traditional agricultural growing areas. As urban expansion continues to grow, horticultural industries find themselves sharing the environment with lifestyle farmers and non-rural residents. The issue is particularly important to many intensive agricultural industries, and has been on the government planning radar as a result of land use conflict in peri-urban areas.

Conflict can arise over such things as noise from dogs, trucks and farm equipment, odour from fertilisers and sprays, health concerns about spray drift, access to water, and visual intrusion from things such as hail netting.

While growers face the challenge of continuing to make a living in an increasingly urbanised environment, planners must balance the demands of population growth with the need to maintain agricultural businesses, protect the environment and ensure food supply.

The responsibility for assessing development and subdivision proposals generally falls on the local government, who by their own admission are in many cases under-resourced and not well placed to address such issues. Input from existing landholders would serve to assist planners in their decisions.

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Ph: 07 5442 2424

Birdwood Nursery

Peter and Sandra Young
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Nambour Qld

Ph: 07 5442 1611

Turkinje Nursery

Peter & Pam Lavers
100 Henry Hannam Drive

Walkamin Qld

Ph: 0419 781 723



Industry Matters continued

To help growers understand and address issues related to peri-urban planning, a study was commissioned in 2007 as part of the HAL Across Industry Program.

The project comprised of a literature review on peri-urban horticulture and land use planning, and a 'tool-kit' made up of practical guidelines to help growers navigate through land use planning jargon and the system itself.

The planning system can be a minefield, and the report 'Peri-urban horticulture and land use planning: Literature Review & Tool-kit', can help people to understand how Federal, State, and Local governments work to put the whole planning system in place.

It also provides some practical information about buffers. Having buffers in place will reduce the potential for conflict with those neighbours.

The tool kit provides a series of fact sheets designed to help users understand the planning process, and equip them to become involved in the land use debate at a local level.

The following topics are featured:

- **Understanding the land use planning system** – a quick guide to the Australian planning system which outlines the various levels of legislation and how it affects peri-urban stakeholders.
- **Zoning** – helps those seeking to develop their land or preserve it for agricultural use to understand how governments use zoning controls, and the limitations of the current system.
- **Land use conflict** – an outline of some of the sources of disputes between neighbours in peri-urban areas and some possible practical approaches to address them.
- **Buffers** – examines the pros and cons of using land buffers between neighbours to reduce conflict.
- **Urban growth boundaries** – looks at the urban containment policy designed to protect peri-urban horticulture.
- **Transfer of development rights** – examines the system by which landowners can transfer the right to develop one parcel of land to another parcel of land in order to protect both investment opportunities and horticultural production.
- **'Right to farm'** – outlines a legislative approach that's used in the US and Tasmania to deal with land use conflicts.

¹A peri-urban area is commonly understood to be land adjacent to the edge of an urban area, extending from the built up edge of the city to the rural hinterland.

The report and tool kit can be accessed at: www.horticulture.com.au/industries/across_industry_final_reports.asp?src=side

This across industry project was funded by HAL using industry levies and voluntary contributions with matched funds from the Federal Government.

IPM Boosts Yield by 60 per cent

An Integrated Pest Management system developed for the citrus industry to control Kelly's citrus thrips (KCT) has also resulted in water savings and yield increases. While the approach was developed to control a particular citrus pest, the approach taken could be transferred to other industries, particularly perennial fruit and tree nut crops, purely for the productivity gains.

The use of a 5cm layer of green compost to boost the beneficial insect population not only reduced the incidence of thrips by 90 per cent, it resulted in significant water savings and increases in fruit yield and size of up to 60 per cent.

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(SARDI) researchers Greg Baker and Dr Peter Crisp say the system has already been used in onions, lettuce and an almond orchard with similar results.

“It was excellent that we controlled the thrips, but the real bonus was the yield gains and water saving,” Dr Crisp said.

“We attribute a lot of our gain to improved soil moisture holding capacity. If you’re irrigating weekly in summer we estimate you can stretch it out by two additional days using green compost. These findings are likely to benefit other perennial fruit and nut tree crops as well - we’re keen to talk to other industries about the findings.”

The trials were conducted on several sites including Primary Industries and Resources SA Loxton Research Centre. Gary Grigson, Farm Manager at Loxton Research Centre, says it’s worth growers taking a look at the system.

“The fruit was pretty good and the trees looked healthier,” Mr Grigson said.

“Overall we saw a 25 to 30 per cent size increase compared to other years – even the packing shed was impressed.”

While the cost of building a 5cm layer of top soil from green compost is not cheap at \$50 per cubic metre, a benefit-cost analysis shows that through increasing yield

and fruit size and achieving better pack outs, growers could expect economic returns that cover inputs in the first year¹, and would see a five-fold return on the investment over five years.

South Australian grower Humphrey Howie was also involved in the trial. He grows navels, Valencias, mandarins and grapefruit on his 23 hectare property at Renmark West. While Mr Howie endorses the approach taken to manage KCT, he has adapted it to work with his business model.

“It worked well. What used to be a major problem is not at all anymore,” Mr Howie said.

“But the rates at which the researchers used the compost was very expensive in one go. You could aim at doing a small area each year. We’re doing it more often but using a lot less compost. We spread compost two times a year at maybe one tenth of the rate.”

Compost treatments used in this project included recycled green waste, grape mark and animal manure. The benefits achieved through green recycled waste were more robust and long term than the other composts used.

¹Using 40 cubic metres per hectare of green waste compost
The project was funded by HAL using the citrus levy, a

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Industry Matters continued

voluntary contribution from industry and matched funds from the Federal Government.

Australia Falls From Grace as Agricultural Research Leader

Australia is lagging behind the rest of the Western world in agricultural (ag) research. In the 1970's, Australia had one of the highest expenditures on ag research as a share of gross domestic product. It has now dropped to number 18.

Geoff Thomas, from the Australian Institute of Agricultural Science and Technology, says the decline in research is likely to have a dramatic effect on Australian agriculture. "We used to be up there on a per capita basis, up there with the leaders. We are now well down the pack," he says. "We've been virtually using up our intellectual feedstock over recent years, which was generated when expenditure was higher. So the impact on farming will be that new technologies will not be coming through." Source: ABC

Pacific Workers 'Too Expensive'

The Federal Government's Pacific Seasonal Worker Pilot Scheme is proving too costly for some employers. The three-year trial began last year to examine whether bringing workers into Australia could boost economic development in Pacific nations, while also filling labour shortfalls in Australian horticulture.

But Scott Lancaster, whose contracting company took on 30 Tongan workers last year to pick fruit in Queensland, says he can't afford any more Pacific workers. "If I was to employ Pacific Islander workers, I would have to guarantee them a certain number of hours a week at a certain pay rate which is actually higher than what the pay rate guarantee for the average Australian worker is," he says. "So I'm having to charge my farmers and my clients more to use the Pacific Islander program."

The Department of Education, Employment and Workplace Relations is yet to comment, and the National Farmers Federation says it has some concerns about the trial and will raise them with the Federal Government this week. Source: ABC

Rural Business to Suffer as Workers Return to the Mines

It was a dire warning for rural business and the flip-side to Australia's economic resilience. The head of the powerful Australian Workers Union (AWU) is foreshadowing a return to the skills shortage that's plagued rural employers in recent years.

National Secretary, Paul Howes, has put the issue on the

agenda claiming the mining boom is back and looking for labour. "Skills shortages and infrastructure snarls and bottlenecks, for instance, will be back with a vengeance," he says.

"The work is picking up so quickly and we're seeing employment projections at the same number as we saw before the (economic) downturn, which ultimately will lead to the same shortages that we saw in the past." Paul Howes says the agricultural workforce, and in particular horticulture, is again being targeted by mining companies offering inflated salaries. The union warning is without evidence.

Earlier this month employers in Mackay in Queensland's north expressed concern after the revelation of a coal export deal with China that's expected to create about 7000 jobs. BHP also recently announced the approval of plans for a \$2 billion expansion of its iron ore operations in Western Australia.

And then there's this rosy outlook from Rio Tinto chairman Jan du Plessis. "Looking forward, we believe that the factors that drove price recovery in 2009 will continue through 2010... We expect China will grow at over nine per cent and the emergence of the OECD from recession will provide further support."

So while it all looks fairly encouraging for those in the market for a job, more broadly it's a worrying sign for rural Australia. In 2006 a New South Wales Parliamentary inquiry into the rural and regional skills shortage found the problem caused 'profound' effects. "The skills shortage often means that positions go unfilled, leading to loss of income to a region, and in turn loss of essential services, particularly in health and education," the report stated. "In turn, such problems can become cyclical as reduced community infrastructure inhibits a region's ability to attract and retain skilled professionals."

The report also found that existing workers who stay in their towns face additional job demands leading to increased family stress. Danita Wawn from the National Farmers Federation is aware of the predictions, and says the recent rain across parts of Australia could accelerate the problem. "We therefore may well find ourselves in the particular shortages that we were anticipating 12 to 18 months ago, where we were quoting 80,000 (worker) shortages in agriculture, we believe that is going to be likely." "Even more so given that some areas of Australia have had some good rains in the last few months which means that there are more jobs available."

The NFF says there's growing urgency to prevent a repeat of the past skills shortages, and it wants the Federal Government to fast track new policies, such as tax breaks

that encourage workers to the bush. Source: ABC

Macadamia Industry Dismisses Claims Chemical Use is Unsafe

The music in the commercial network media report was ominous, the claims were alarming... two-headed fish embryos, a shaking dog apparently with a nerve disorder, a woman and her animals 'poisoned' by deadly spray drift from a nearby macadamia farm.

In January, 2009 the Queensland Government established a taskforce to investigate claims that animals had been exposed to, and the Noosa River had been contaminated by, toxic levels of the pesticide endosulfan and fungicide carbendizam.

The final report will be handed down next month.

Two interim reports state the investigators were unable to find evidence of chemical contamination, and the taskforce has established that endosulfan hasn't been used on the property for five years.

None of that information was included in the Nine Network's investigation.

Whether the specific and sensational claims of Sunshine

Coast woman Gwen Gilson are proved or not, the claims have raised concerns about pesticide use.

Cath Ford is a member of the NSW Ministerial Advisory Council for Organics and owns the largest certified organic macadamia farm in Australia.

"I thought it was typical 60 Minutes, it obviously didn't present the other side but it did present a very damning picture of endosulfan spraying."

Endosulfan and carbendizam have been banned in many countries but are used in horticultural crops and cotton in Australia.

Mrs Ford says while the industry is making progress, the pace of change is too slow. "I think that this last foray into a bad public relations exercise is timely and an indication for our industry and the AMS board to have a new plan of action, to make sure that we are sustainable, and the only way we can be is to change with the times, and on a personal basis I don't think they've gone fast enough."

The macadamia industry regularly participates in the national residues survey. For 10 years the industry has achieved 100 per cent compliance, meaning there hasn't been any residue found in randomly selected samples



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Industry Matters continued

of kernels. The Australian Macadamia Society's Jolyon Burnett says endosulfan and carbendizim are important weapons in a grower's armoury. "These chemicals are only used when professional pest scouts surveying the orchard determine that the pest of the disease load has got to a point where control with a chemical is necessary" he said. "For chemicals that are deemed high hazard, scheduled chemicals, you need to have a Farm Chemical Users Course Certificate to purchase and to apply them."

One grower who contacted the ABC said without endosulfan fruit-spotting bug would destroy 30 to 50 per cent of the crop, losses no farm business could sustain.

Last year the AMS completed a review of all the chemicals that are registered for use on macadamia plantations. Jolyon Burnett says the review will be used to prioritise funding for research into alternatives. "Obviously endosulfan and carbendazim are two products that are at the top of that list."

The macadamia industry isn't the only one to use endosulfan and carbendizim. They're used in many horticultural crops at some point, as well as cotton. But research into alternatives is funded on an industry-by-industry basis and the competing list of priorities for each is long.

Cath Ford says the macadamia industry should be doing more to lobby government for more research money. "It's important that the AMS with the determination of all their board members and the members at hand, lobby the Federal Government for extra R&D money" she said.

"There's a group organised by Soil Care Australia to seek out further research and development for fruit-spotting bug, which is a huge problem down the eastern seaboard costing millions and millions of dollars; but at the moment we are very light-heartedly going about being terribly politically correct."

The Federal Government matches industry research funding dollar for dollar.

The macadamia industry spent about \$1 million last year on research. However Jolyon Burnett says it's the state governments, rather than the Federal Government that bear much of the responsibility for declining agricultural research.

"Many of the state governments are reducing their investments through their own departments of primary industries, and in fact many of them no longer have departments of primary industry; so whereas industry and the Federal Government could invest perhaps a million dollars each and have that matched by the state

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government's own resources, that is very rapidly being whittled away."

Mr Burnett says the NSW Government's plan to shut down the Tropical Fruit Research Station at Alstonville is a major setback to the effort that will reduce reliance on dangerous chemicals. "Much of the work on alternative pest control strategies is being done by two entomologists at that research station, and should that research station close it is very likely that we will lose access to those two essential researchers."

However, NSW Industry and Investment says research into Integrated Pest Management will continue at the Wollongbar Research Station once the Alstonville complex is closed. Source: ABC

Avocados Australia is working with the Australian Macadamia Society to get the best options for control of fruit-spotting bugs into the future.

AVO: the Healthier Spread Alternative

The latest butter alternative to hit supermarket shelves is AVO spread. Made with 20% avocado oil, the new spread claims to have 45% less fat and 55% less salt than butter. Approved by the National Heart Foundation, AVO spread

is being marketed as the "only cholesterol free easily spreadable spread on the market... comprising less than 1% trans fats".

AVO is designed for daily consumption, and can be spread onto bread or toast as well as used in cooking, just like margarine or butter. It contains vitamins A and D, and has received 'red tick approval' from the National Heart Foundation. Tammy Fenner, creator and Managing Director of Avo Pty Ltd said "Having this recognition from the Heart Foundation means that AVO has undergone extensive testing to ensure you are getting a truly healthy product through a strict standards process."

"As Australian obesity levels intensify there is an escalating demand for more wholesome products. By replacing your normal spread with AVO you are choosing a healthier alternative without having to sacrifice flavour or cost."

AVO joins other spread alternatives claiming to be healthier, such as those made from nuts or olive oil. AVO is available from Woolworths and Coles supermarkets nationally. Source: Australian Food News

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Industry Matters continued

Beetles Cause Havoc with Avocados

The monolepta beetle is back in town and has been causing havoc in avocado orchards across the Northern Rivers. The beetle, which attacks flowers, leaves and fruit, has been feasting on local orchards throughout the region. "I haven't seen anything like this number of beetles in 12 years," Tuckombil avocado grower Bonnie Walker said. "They can be very vicious." A dry spring last year, high temperatures and humidity have been blamed for the infestation.

Mrs Walker said she expected the damage caused by the beetle would reduce the yield of avocados when harvest started on her farm next month. "We prefer not to use sprays to control them because we have neighbours about," Mrs Walker said. "It's a last resort." This year, huge consumer demand for avocados has led to prices as high as \$55 a tray; Mrs Walker is hoping the price will hold until she gets her fruit off.

Avocados Australia Northern Rivers' representative Tom Silver agreed monolepta numbers this year had been high. However, not all orchards have been effected. In fact, avocado grower Mr Silver reported an expectation that this would be his best year yet. Avocados have an 'on year' and an 'off year,' he said.

The fact that this has been an 'on year' may make up for the destructive beetle and result in an average yield across the region. The Northern Rivers normally produces about 400,000 trays of avocados, while Australia produces about nine million trays. About two million trays are imported to Australia from New Zealand each year.

Mr Silver said Australians loved avocados, but not as much as South Americans who on average consumed 10kg of avocados per person each year. Source: The Northern Star

Atherton Avocado Prices Rocket

Avocado farmers on the Atherton Tableland have been

enjoying enormous returns on their produce, with prices topping \$45/tray during the first two weeks of the 2010 season.

That price jumped from the normal \$20/tray for the Shepard variety of avocados, due to shortages in the Western Australian crop because of adverse seasonal conditions. Although the high prices have since wavered, with trays currently selling around \$25 for quality avocados, one Mareeba grower, Etienne Theart, got exceptional returns when his crop matured at just the right time.

Mr Theart's season started strong with an early flowering, but was followed by a smaller than usual crop. The past two seasons have seen severe water-logging bring on disease in many avocado plantations on the Atherton Tableland. Mr Theart has lost 1000 trees in the past two seasons, during which 1.5 metres of water surged through the plantations each year. Profits from the high returns will go towards replanting lost avocado trees on Mr Theart's farm. With only 381mm falling over this year's season, he remains somewhat reassured. "It has been a nice change to see a smaller amount of rainfall," he said. Mr Theart said many farmers were stuck with a lot of small fruit this year because of returns for less than optimum-sized avocados.

The Shepard variety of avocado is finishing up its season, which will be followed by large production lines of the Hass avocado, with those to wrap up in April/May. Alan Poggioli's harvest at Kairi is about to start next month when 3500 Hass avocado trees will be ready for picking. He said his season has been "pretty good" and that the only factor working against him is the declining price. While he has not yet started harvesting, his packing shed has been fully utilised with the packing of Shepard avocados for a nearby farmer. Source: North Queensland Register

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Around Australia

Central New South Wales Report

By Chris Nelson, Avocados Australia
Director for the Central New South Wales
Growing Area



The crop hanging in Central New South Wales is mixed in terms of fruit set. The early coastal areas are patchy with some orchards carrying a reasonable set, while others are very light. It is certainly the case that what fruit has been set was set early and size is looking great. For the cooler tableland areas the crop is looking good and growers are hoping that favourable growing conditions continue.

The Freshcare Version 3 update that was detailed in the last Talking Avocados was very informative, and I believe something that should be of interest to all growers. The scrutiny that horticultural production in Australia is under will only continue to increase, and so we must be prepared to defend ourselves. Buyers of our produce will insist on higher standards, and from a grower point of view we also should be prepared to take on a level of responsibility to ensure that we are providing a safe product to our consumers. Although Freshcare is not required for the

sale of fresh produce to all markets, I believe it is a great way to ensure our production systems are safe and reliable. Given the reliability of federal funding these days, I encourage all growers to either become certified or upgrade their certification while the Farmready reimbursement is available. A list of certified training and auditing organisations along with upcoming planned course dates is available on the Freshcare website.

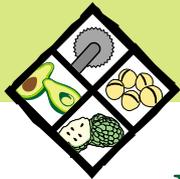
As this issue is published, Central New South Wales growers will potentially be analysing dry matter results to determine the start of their harvest. I would urge growers to ensure that they conduct thorough and accurate testing in the lead up to the start of their planned harvest to ensure that industry recommendations are adhered to. This will help continue to grow customer satisfaction with our product and support the fantastic work that the industry is doing to promote our great fruit.

Orchard health in the area has been improving over recent months following considerable disease pressure due to a very wet autumn last year. The weather over this recent summer was quite warm, without any extremes, and orchards are generally showing strong summer flush.

Best wishes to all for the season ahead.

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Around Australia continued

Tamborine and Northern Rivers Report

By Tom Silver, Avocados Australia Director for the Tamborine and Northern Rivers Growing Area



Northern Rivers and Tamborine growers will remember summer 2010 as hot and buggy (yes buggy). Temperatures throughout December, January and February were above average, rainfall was adequate for February and March, though well below average during December and January. Those growers with irrigation had it working overtime, and that was simply just trying to hold the crop let alone try and size it. Hass sizes appear to have suffered, though with a few months until harvest there is still hope of an improvement. There has been some sunburning on heavily fruiting, exposed branches.

On the bug front, monolepta activity, especially at Alstonville has been rife. Growers have endured countless swarms damaging both fruit and shoot. Growers who have never witnessed such swarms were shocked by the way a pretty little beetle could chew its way through an orchard, leaving only sticks behind it. Growers need to monitor diligently until autumn brings cooler drier air.

A field day and orchard walk has been proposed for June or July before the Hass harvest revs up. Could growers please contact me regarding any topics for the day that would interest them and any other input they might have. We would also be chasing a host orchard, so please remember that when it comes to host orchards, variety is the spice of life.

I wish to congratulate Australian Avocados staff, past and present, as well as all contributors on the 20th Anniversary of Talking Avocados. Originally printed on stone tablets Talking Avocados is a brilliant resource for our industry and a great record for research, development and change. May it never be recycled!

South Queensland Report

By Daryl Boardman, Avocados Australia Director for the South Queensland Growing Area



Firstly, I would like to wish that you all had a great Easter in Southern Queensland, and I hope that you got time to have a break with your families. Well, what a wet start to the 2010 season. We have recorded over 900mm up to date for the year in Ravensbourne, and some trees are starting to show signs of the stress this has caused them. The east coast season has begun and prices have so far been well above normal up to Easter, with fruit selling well and being bought at high prices. The

hope is that this trend continues into our picking season and that we too have a smile on our face like the Western Australian, Northern Queensland and Central Queensland growers would currently have. These prices have continued for about six months and I would doubt that these levels have been seen for many years for this period. It again shows what an excellent product, with good promotion and consumers getting a good result when purchasing, does to the grower's bottom line.

Something that we all need to consider this season with the wet conditions is fungal diseases on our fruit. The conditions that we have experienced will be ideal for disease to build up and cause post-harvest problems in the market place. These problems are very hard to detect at the point of harvest or packing, and generally don't show up until the fruit is ripening. I urge everyone to do all you can do to ensure that we continue to give customers the best experience we can, and keep them buying avocados.

Farm food safety programs, such as Freshcare, are now very important for growers to have in place to show that your farm practices are being done correctly to produce a safe product for consumers. All markets are requiring this and I urge you all to take the opportunity to enrol in a course and either update or get something in place. Funding from Farmsafe is still available so the course will generally be reimbursed, and it's just a day of your time to get yourself up to date.

The avocado industry is currently going through and reviewing the five year strategic plan for the industry. This is important to get as correct as we can as this is our map for the way forward for the next five years. This is what the industry looks at when deciding projects, our future direction and needs for the industry. This is a time consuming job for all concerned and will take most people away from their businesses for up to a week, let alone all the emails etc. If you have any ideas or concerns that you would like me to take to these meetings, which you feel the industry should look at for the next five years, please give me a call to discuss it and I will make sure that your ideas are considered.

That's all folks.

Tri State Report

By Nick Hobbs, Avocados Australia Director for the Tri State Growing Area



The start to 2010 has been very kind to the region. We have had a relatively mild late summer, in that we have not had a repeat of the severe extended heat waves that plagued us over January to

March of the previous couple of years. This has resulted in minimal fruit loss through the February drop period. Some reasonable rainfall and the prospect of water down the Darling River resulted in predicted irrigation allocations for the start of the year at 35%, with the winter still to come.

Why have some orchards carried fruit and others dropped? Is it just grower management? Talking with growers in the Sunraysia/Robinvale districts it seems that significant success in holding crops has been achieved in the past three heat waves using over canopy orchard misting systems. In fact one grower suggested if you are not using some sort of cooling system you are not really in the game.

Therefore, with interest from South Australian growers and the organisation of Lisa Martin and Robinvale growers, a field day has been planned to look at heat control in orchards to minimise damage and fruit drop. Sunscreens, canopy management and misting setup and use are the main focus of the field day. The field day idea follows on from the very successful Tri State days that we had over the past three years, and although they may not be as technical without Simon Newett's input, they should allow for good hands on information and most importantly a cross fertilisation of growers ideas during the farm walks.

The field day is being held on Thursday, 27 May, 2010 in

Robinvale, starting at 10am. It looks like a group of South Australian growers are going to stay on Thursday night in Euston for some R&R, and then visit Greg and Sue Chislett's orchard at Boundary Bend on Friday morning for further exchange of ideas.

You should have already received notice of the day via post or email, but if not then please contact myself for field day details (see inside front cover for contact details).

The orchards we are visiting were successfully cropped last season and enjoyed the high prices. Did you? Can you afford not to come? See you there!!

Central Queensland Report

By Lachlan Donovan and John Walsh,
Avocados Australia Directors for Central
Queensland Growing Area



When our last report went to print we were antagonising about how dry it was, how quick that was to change!! Since Christmas we have hardly irrigated and have had more than enough rain. This certainly has the potential to cause some headaches. We have all probably seen different areas within our orchards not taking too kindly to the drenching, and we will have to be very vigilant with phytophthora control in the coming months.

The up side of all the rain is that Paradise Dam is finally full for the first time since it was built in 2005, and we are on 100% water allocation. It would also appear we could start the new water year on full allocation, if not full than very close, and that is a great start when you have surety of water.

The Shepard crop, by all accounts, has been of very good quality, both from Central Queensland and Northern Queensland. This has given customers renewed confidence to continue buying, and has resulted in very good market prices right up until Easter. Hopefully this will continue and we can all look forward to a very good season. The Central Queensland Hass crop is looking very promising, with a small increase overall from last season.

Co-ordinated marketing is a catch phrase often used, and one that is very apt for the avocado industry at this point in time. Suppliers, retailers and wholesalers are all working together, along with the promotional spend of industry levies, to increase consumption and ultimately maximise our returns. Lets all keep this going!



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Around Australia continued

Sunshine Coast Report

By Henry Kwaczynski, Avocados Australia Director for the Sunshine Coast Growing Area



In the last issue of Talking Avocados, I mentioned that expectations of production for this region were lower than normal. Many theories abound. Some properties show a good fruit set while others show up to 75% reduction in expected production. This is true for many commodities other than avocados.

The start of this year has been marked by weather patterns reminiscent of 15 to 20 years ago – we have experienced heavy rain from January right through to the present. This brings me to a very important point – I expect that the level of phytophthora will be an issue for the Sunshine Coast region.

The saga of the pressure for increased and significant housing development in this area continues unabated. I mention particularly the area known as Palmview, on the southern edge of the region. There is state government pressure to release land for a significant housing development and the tussle continues between the local and state government regarding the planning for this development. Whoever wins this battle, it is inevitable that this area will move from farming land to residential land, with a population of at least 14,000 with a projected figure of in excess of 6,000 dwellings. The State Government is looking for ‘high density, affordable housing.’

Another point of contention in this region is the construction of a water pipeline grid to transport water from various dams throughout South East Queensland to Brisbane. It appears that landowners are not being appropriately compensated for encroachment on

their land. As I write this, our local independent state government politician is calling for a meeting to establish a united entity to lobby for appropriate outcomes and compensation for degradation of land, which is mostly agricultural.

What is the future of substantial and viable agricultural practice in this area?

North Queensland Report

By Jim Kochi, Avocados Australia Director for the North Queensland Growing Area

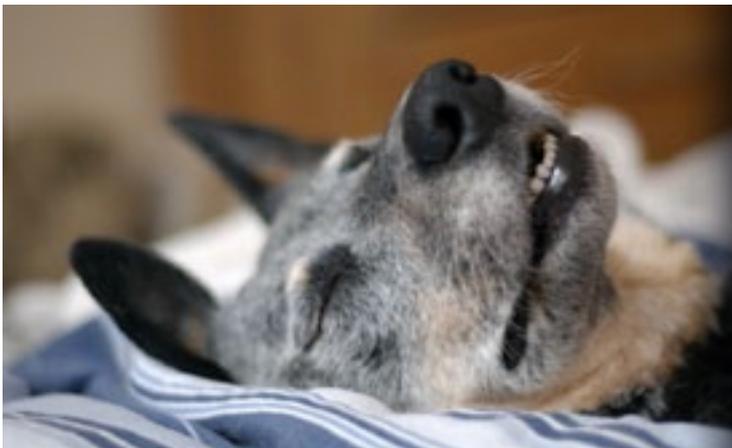


The North Queensland area has certainly had one of its most memorable years. On the back of record prices paid for Hass from Western Australia and New Zealand, the growers here were encouraged to start their harvest early to meet the requirements of market agents who were starved of supplies of Hass, with the chance of getting returns never seen before. I can not blame any grower for trying to maximize his returns and especially not in a 'once in a living memory chance'.

I did write rather harshly about the quality of the very late Hass and the very early Shepard, and those who followed the market are well aware of the results.

The market certainly recovered from the quality issues and is still powering on in March and hopefully into April, May, June and the rest of the year.

It is certainly a year of recovery; recovery from the devastating losses of Cyclone Larry in March, 2006 and the deluge of rain from the summer of 2009. I hope growers here have been rewarded sufficiently to make up for these past losses, and are able to plan ahead for the next year without financial burden.



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Evaluation of Sustainable Orchard Management

By John Leonardi
Avocados Australia

Introduction

The objective of this project 'AVo8o2o: Evaluation of sustainable orchard management practices for extension into general industry standards to reduce costs' is to:

- identify sustainable practices that are currently employed by avocado growers across Australia
- conduct trials to evaluate the effectiveness of these strategies against current industry standards
- provide recommendations on the most promising practices for inclusion into a revised orchard management system

Evaluate Orchard Management Sites

A total of 23 sites from the major production areas (including North, Central and Southern Queensland; Northern and Central New South Wales; the TriState; and Western Australia) have been selected as case studies (Table 1). At these sites a range of orchard management practices and products are being used including: mulching, natural mineral fertilisers, compost teas, molasses, kelp and fish concentrates.

Growers from each site provide information on tree age and spacing; the timing of flowering, vegetative flushing and harvesting; and details on their nutrition, irrigation, pest and disease and other management practices. The effectiveness of each orchard management system in terms of cost of operation (\$/ha), impact on tree health, yield (t/ha), fruit size and quality (pack-out figures and reject percentages) and the net return per hectare will be determined.

Table 1 Summary of orchard management sites used in this project

Site	Growing Region	Orchard Management Practices
1	North Qld	Conventional grower mulching with Rhodes grass hay and avocado woodchip
2	North Qld	Conventional grower mulching with Rhodes grass hay and avocado woodchip
3	North Qld	Conventional grower using fish & kelp products and mulching
4	Central Qld	Conventional grower mulching and using brewed microbes, molasses and natural mineral fertilisers
5	Central Qld	Conventional grower mulching with filter-press and avocado wood chip
6	Central Qld	Conventional grower mulching and using humic acid, brewed microbes, molasses and natural mineral products
7	Central Qld	Conventional grower mulching and using natural mineral products
8	Southern Qld	Organic grower mulching and using natural fertilisers, herbicides and pesticides, and brewed microbes
9	Southern Qld	Biological grower using compost teas, brewed microbes and mulching
10	Southern Qld	Conventional grower using natural mineral products, fish & kelp concentrates and mulching
11	Northern NSW	Organic grower using natural fertilisers, herbicides and pesticides, brewed microbes and mulching



Photo 1: 2½ year old Hass tree mulched with cane-tops



Photo 2: 2½ year old Hass tree mulched with avocado woodchips

Practices

12	Northern NSW	Biological grower using natural mineral nutrients, fish & kelp concentrates, compost teas and mulching
13	Northern NSW	Conventional grower using branch scoring to reduce tree vigour and promote cropping
14	Central NSW	Biological grower using brewed microbes, natural mineral fertilisers and mulching
15	Central NSW	Conventional grower using natural mineral fertilisers and fish & kelp products
16	Central NSW	Conventional grower using branch scoring to control tree vigour and minimise biennial bearing
17	Central NSW	Organic grower using natural fertilisers, herbicides and pesticides, brewed microbes and mulching
18	Central NSW	Organic grower using natural fertilisers, herbicides and pesticides, brewed microbes and mulching
19	Tri-State	Conventional grower using overhead irrigation to reduce heat stress and branch scoring to promote cropping.
20	Tri-State	Biological grower using natural mineral fertilisers and fish based products
21	Western Australia	Conventional grower using microbial enhanced fertilisers, kelp concentrates and branch scoring to reduce tree growth and reduce biennial bearing
22	Western Australia	Conventional grower using microbial enhanced fertilisers and fish & kelp products
23	Western Australia	Organic grower using natural fertilisers, herbicides and pesticides, brewed microbes and mulching

Conduct Orchard Management Trials

The effectiveness of a range of products and orchard management practices either being used by growers or recommended by various companies/consultants will be evaluated.

Mulching Trials

Trials investigating the effect of mulching treatments on tree health, fruit yield and quality were established in Central Queensland during September, 2009. 2¹/₂ year old Hass trees were mulched with filter-press (a sugar industry by-product), avocado woodchip and cane-tops to a depth of 5, 10 and 20cm, respectively. Treatments will be compared with trees receiving the grower treatment (inter-row slashings with a thin layer of filter-press of less than 2cm) (Photos 1 & 2). Shoot and root growth measurements

and leaf and soil nutrient analysis will be made during the course of the trial. Trees will be harvested in June, 2010 and the effect of mulching treatment on fruit yield, size and quality (incidence of fruit diseases and disorders) will be determined. Additional mulching trials will be conducted in other regions during 2010.

Soil & Foliar Treatments

A range of soil and foliar treatments were established at sites in Central and Southern Queensland during September/October, 2009. Trees will be harvested in June, 2010 and the effect of treatment on shoot growth, fruit yield and quality will be determined. Further trials will be established in other regions during 2010.

Branch Scoring Trials

Scoring involves cutting a groove around the branch to sever the phloem using a knife or pruning saw. When successfully carried out the wound will produce callus tissue and eventually heal, thereby restoring the normal function of the branch (Photo 3). Healing of the wound can occur within two to four months depending on the growing conditions. Branches are scored in the autumn to reduce vegetative growth and increase flowering and fruit set the following spring (Photo 4).

The effect of branch scoring on fruit size and yield was investigated in Hass trees in Central New South Wales and south-west Western Australia, and Shepard trees in Central Queensland.



Photo 3: Healing of the scoring wound

Evaluation of Sustainable Orchard Management Practices - continued

Central NSW: A single branch was scored in three and four year old Hass avocado trees in May, 2008. The effect of branch scoring on fruit yield was assessed in 10 and 15 trees respectively in October, 2009 (Table 2). Fruit yield assessments were made on the scored branch and a similar non-scored branch within the tree. Total fruit yield in each tree was also collected.

Table 2: The effect of branch scoring on the number of fruit, total fruit weight and mean fruit size in Hass avocado trees grown in central New South Wales

Treatment	No. of fruit	Fruit weight (kg)	Mean fruit size (g)
4 ¹ / ₂ year old trees*			
Scored branch	41.9	11.8	282.2
Unscored branch	2.8	0.8	289.6
Total Tree	98.9	28.6	288.2
5 ¹ / ₂ year old trees*			
Scored branch	56.1	15.4	277.0
Unscored branch	3.9	1.1	286.8
Total Tree	136.3	39.2	287.5

* Trees were 4¹/₂ and 5¹/₂ year old at the time of harvest in October, 2009



Photo 4: Three year old Hass tree scored in April showing increased flowering on the scored branch

South-West Western Australia: A single branch was scored in three year old Hass avocado trees in April 2007. The procedure was repeated in April, 2008 when another branch was scored. The effect of branch scoring on fruit yield was assessed in 15 trees in October, 2008 and December, 2009 (Table 3). Fruit yield assessments were made on the scored branch and a similar non-scored branch within the tree. Total fruit yield in each tree was also collected in the 2009 harvest.

Table 3: The effect of branch scoring on the number of fruit, total fruit weight and mean fruit size in Hass avocado trees grown in south-west Western Australia

Treatment	No. of fruit	Fruit weight (kg)	Mean fruit size (g)
2008*			
Scored branch	77.2	20.3	264.9
Unscored branch	29.6	7.9	275.2
2009*			
Scored branch (April 2007)	13.5	3.1	248.9
Scored branch (April 2008)	82.3	16.6	211.3
Unscored branch	31.4	7.1	231.8
Total Tree	185.2	39.9	220.0

* Trees were 4¹/₂ and 5¹/₂ year old at the time of harvest in 2008 and 2009 respectively



Photo 5: Excessive leaf drop on the scored branch can expose fruit and branches to sunburn

Central Queensland: A single branch was scored in five year old Shepard avocado trees in April, 2009. The effect of branch scoring on fruit yield was assessed in seven trees in March, 2010 (Table 4). Fruit yield assessments were made on the scored branch and a similar non-scored branch within the tree. Total fruit yield in each tree was also collected.

Table 4: The effect of branch scoring on the number of fruit, total fruit weight and mean fruit size in Shepard avocado trees grown in Central Queensland

Treatment*	No. of fruit	Fruit weight (kg)	Mean fruit size (g)
2010*			
Scored branch	102.4	24.6	243.8
Unscored branch	36.6	9.5	260.9
Total Tree	250.7	63.2	252.5

* Trees were six years old at the time of harvest in 2010

Warning: Branch scoring is still experimental and may not necessarily work under your growing conditions. It is important to note that these trials were conducted on vigorous, healthy trees. In some situations yellowing of leaves and leaf drop may occur which can expose fruit and branches to sunburn. Also, due to the increase crop load on the scored branch fruit size can be reduced.

Acknowledgements

Thanks to all growers who have provided information on their orchard management systems and have assisted in conducting trials. This project was funded using avocado grower R&D levies which are matched by the Australian Government through Horticulture Australia.



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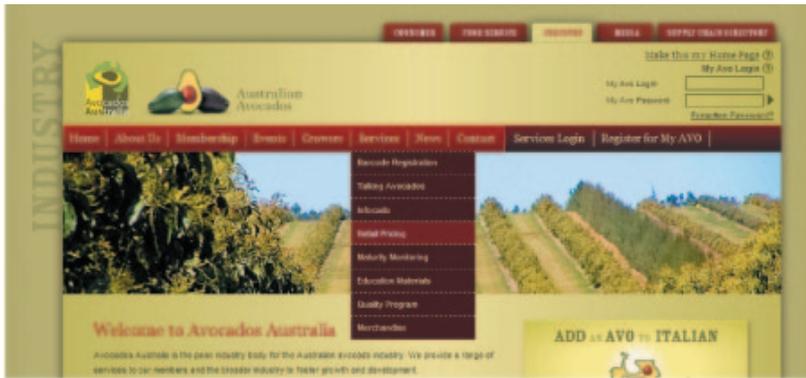
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Keeping Up To Date with Avocado Retail Prices



Current and historical avocado retail price data is now available to you from the Avocados Australia website.

Retail price and other relevant avocado marketing information have been collected on a weekly basis from

Brisbane, Sydney, Melbourne and Perth for the past 18 months. The information collected from stores in each of these cities includes variety, price, fruit weight, display location, country of origin and type of special (if any). The information is collected from retail outlets including Coles, Woolworths, independent supermarkets, independent fruit and vegetable stores, and chain fruit and vegetable stores.

It is published on a weekly basis on the Avocados Australia website in two formats.

Average retail prices, as well as the highest and the lowest price reported that week for both Hass and Shepard, are reported in a graphical format. Graphs are also presented displaying the catalogue prices in

Coles and Woolworths for both Hass and Shepard varieties. These graphs illustrate price trends for the last 52 weeks so that you can compare this week's price with the same period last year.

More detailed information for this week's price data is reported in a tabulated format. This includes specific information for each display of avocados including the variety, the size of the fruit, the store type, whether the fruit is on special or not, and the country of origin of the fruit.

Both sets of data are collected and collated on Monday and then uploaded to the website every Monday evening. To view and/or download retail price data go to <http://industry.avocado.org.au/RetailPricing.aspx>

The graphs and table provide a snapshot of some of the retail price information that is available.

Shepard Avocado Average Retail Prices - Brisbane



Shepard Avocado Average Retail Prices - Sydney



Shepard Avocado Average Retail Prices - Melbourne



Retail Prices by City, Store and Variety - 5th April 2010

State	Var	Av wt (kg)	Unit Price	Special	Locality of Origin	State	Var	Av wt (kg)	Unit Price	Special	Locality of Origin
SYDNEY						MELBOURNE					
Woolworths	Shepard	210	2.48	Stone	Aus	Woolworths	Shepard	240	2.29	Stone	Aus
Woolworths	Shepard	215	2.46	No	Aus	Woolworths	Shepard	240	2.29	No	Aus
Coles	Shepard	215	2.46	No	Aus	Coles	Shepard	225	2.29	No	Aus
Coles	Shepard	285	2.48	No	Aus	Coles	Shepard	285	2.42	No	Aus
IC	Shepard	215	2.50	No	Aus	IC	Shepard	240	2.42	No	Aus
IC	Shepard	250	2.50	No	Aus	Selfridges	Shepard	225	2.42	No	Aus
IGA	Shepard	210	2.70	No	NZ	Selfridges	Shepard	225	2.42	No	Aus
Woolworths	Shepard	275	2.28	No	Aus	Coles	Shepard	285	2.42	No	Aus
Woolworths	Shepard	285	2.99	No	Aus	IGA	Shepard	290	2.59	No	Aus
Foodworks	Shepard	210	2.99	No	NZ	Woolworths	Shepard	255	2.49	No	Aus
Woolworths	Shepard	285	2.50	No	Aus	Woolworths	Shepard	305	2.80	No	Aus
Woolworths	Shepard	210	2.99	No	Aus	Woolworths	Shepard	290	2.80	No	Aus
Woolworths	Shepard	210	2.99	No	NZ	Woolworths	Shepard	250	2.99	No	Aus
Woolworths	Shepard	295	3.99	No	Aus	Woolworths	Shepard	300	3.25	No	Aus
Woolworths	Shepard	285	3.99	No	NZ	Woolworths	Shepard	295	3.25	No	Aus
BREKIDALE						PERTH					
Coles	Shepard	205	3.50	Stone	Aus	Woolworths	Shepard	240	3.09	Stone	Aus
Coles	Shepard	215	3.50	No	Aus	Coles	Shepard	240	2.25	Stone	Aus
Coles	Shepard	200	3.50	Stone	Aus	Coles	Shepard	300	2.25	No	Aus
Coles	Shepard	200	2.79	Stone	Aus	Coles	Shepard	225	2.25	Stone	Aus
Woolworths	Shepard	210	3.99	Stone	Aus	Woolworths	Shepard	200	2.68	Stone	Aus
Woolworths	Shepard	240	3.99	No	Aus	Woolworths	Shepard	200	2.68	No	Aus
IC	Shepard	180	3.99	No	Aus	Woolworths	Shepard	215	2.68	No	Aus
IC	Shepard	180	3.99	No	Aus	Woolworths	Shepard	215	2.68	No	Aus
Woolworths	Shepard	210	2.25	No	Aus	Woolworths	Shepard	215	2.68	No	Aus
Woolworths	Shepard	185	2.24	No	Aus	Woolworths	Shepard	215	2.68	No	Aus
Woolworths	Shepard	240	2.25	No	Aus	Woolworths	Shepard	215	2.68	No	Aus
IGA	Shepard	180	2.49	Stone	Aus	Woolworths	Shepard	215	2.68	No	Aus
IGA	Shepard	210	2.75	No	Aus	Woolworths	Shepard	215	2.68	No	Aus
Woolworths	Shepard	245	2.99	No	Aus	Woolworths	Shepard	215	2.68	No	Aus
Woolworths	Shepard	300	2.99	No	NZ	Woolworths	Shepard	215	2.68	No	Aus
Woolworths	Shepard	285	2.99	Stone	Aus	Woolworths	Shepard	215	2.68	No	Aus
Woolworths	Shepard	210	3.99	Stone	Aus	Woolworths	Shepard	215	2.68	No	Aus

Notes:
 * Independent Fruit and vegetable stores
 IC = Independent Fruit and Vegetable store Chain
 B = Independent Supermarket
Special Codes:
 C = Full & independent special for retail, the main store
 S = Full & independent special for the main store
Quantity of Origin Codes:
 NZ = Supply origin indicates that it is New Zealand
 AU = Supply origin indicates that it is Australia
 NZ & AU = Supply origin indicates that it is New Zealand or Australia
 NZ & AU = Supply origin indicates that it is New Zealand or Australia

Size ranges based on 5.5kg trays
 Size Weight Range
 20 180 - 200g
 25 210 - 230g
 30 240 - 260g
 35 270 - 290g
 40 300 - 320g
 45 330 - 350g
 50 360 - 380g



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Putting Avocados on the Map

An avocado grower workshop was recently held near Denmark, Western Australia, on Peter and Ron Cocking’s Jamakarri Farm property. This meeting was part of a series of workshops. About 50 growers attended to learn more about nutrient management. Sponsors were HAL (Horticulture Australia Limited); Avocados Australia; the Department of Employment, Economic Development and Innovation, Queensland (DEEDI); and the Department of Agriculture and Food, Western Australia. Guest speakers included Principal Extension Horticulturalist, Simon Newett (Agri-Science Queensland; DEEDI; Maroochy Research Station, Queensland), and Data Analyst and Agronomy Modeller, Dr Andreas Neuhaus (CSBP Limited), Kwinana, Western Australia).



Figure 1: The above satellite image was taken on 1 August 2009. It displays the Normalized Difference Vegetation Index (NDVI).

Simon illustrated nutrient deficiencies and toxicities and spoke about ‘effective nutrition’, which can be achieved using a scientific approach with attention to detail. While he explained the principles for good nutrient management in general, Andreas used CSBP soil and plant test data from different avocado orchards in Western Australia to point out local conditions. The topic of this workshop was timed very well, because April to June is the best time for taking plant tissue samples in Western Australia. CSBP offers a plant testing service and can also interpret test results using ‘NUlogic’. Accredited NUlogic advisers for horticulture in Western Australia include Brooke Anderson (CSBP), as well as Stephen Poole and Linda Viviers (Landmark).

given for a spatial analysis to plan a sampling strategy. CSBP can now offer such a service to growers to help get truly representative samples of an area, so that sound nutritional advice can be given.

In horticulture, plant tests are generally the main analytical tools for making fertiliser decisions. Soil tests are often only used at the planting stage to monitor pH and salinity levels. However, in both cases a decision has to be made about where representative plant or soil samples should be taken. Based on those samples test results, and their interpretation and recommendation, growers may invest a significant amount of money in soil amendments and/or fertilisers. In terms of sampling strategy, growers tend to treat each paddock as uniform, but Andreas showed that this is not always true. Thus sampling across one paddock and combining all the leaves into one sample bag may not always be a good idea. While avocado growers are given some help in interpreting soil and plant tests using crop consultants, interpretive books or software tools (i.e. AVOMAN, NUlogic), there has so far been little help

Variability within a paddock, as revealed by satellite biomass imagery, needs to be further investigated. If the causes for the variance are understood it can improve the paddock management (i.e. more efficient use of nutrients, water supply). To demonstrate this, Andreas explained a biomass image of Peter and Ron’s avocado paddocks where the field walk would be later that day (see Fig 1). Paddocks are uniform in tree age, variety and management.



Figure 2: Management Zone Map based on 2 years of biomass images.

Images from previous years underlined the pattern of less near-infrared to red reflectance from leaf surfaces of the top part of the left paddock (red) compared with the bottom part of that paddock (green). This correlates well with a change in soil type (red: heavy clay loam over clay subsoil; green: sandy loam over clay subsoil). Peter also noticed that it reflects consistently lower yields in the red area when compared with the green area. The next step is to create a Management Zone Map. Management zones can be mapped by statistically analysing biomass images from at least two years of data. In Peter's case the map only shows two management zones (see figure 2). The red area varies a lot, but is clearly distinguishable from the green area.

The above pattern was 'ground-truthed' on the field walk. Peter shared his knowledge and experiences not only about nutrients, but also about irrigation, and canopy and pest management. With those management practices in mind it is helpful to look at each paddock for sampling sites. For growers who have non-uniform paddocks in terms of biomass, it is advisable to plant sample not only each paddock separately, but also each management zone within a paddock. It may be that there is a nutritional imbalance in the red area that is causing a reduced tree

vigour or growth. However, many scenarios are possible (i.e. too much or too little water for the trees on that soil type, Phytophthora, salt burn etc.), and therefore the images need to be taken as a first step towards finding out the underlying causes.

If the biomass imagery for avocados is linked to productivity, as seen in the given example, then this would be good news for the avocado industry. It means that Nutrient Application Maps can be customised and specifically created for each paddock. The avocado industry could strengthen its reputation to be environmentally sustainable, and maximise fertiliser-use efficiency for its growers, which is based upon nutrient placement, timing, source and rate.

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More 'Take Home Messages' from the Avocado Study Group

Peter Rigden and Simon Newett

Department of Employment, Economic Development and Innovation, Nambour, Queensland

Only two more meetings, one in North Queensland and one in Western Australia, remain to be held in this three year study group project. This article features more 'take home messages' from the meetings held around the country.

***Phytophthora cinnamomi* root rot, *Phellinus noxius* brown root rot and Avocado Post Harvest Fruit Diseases (North Queensland)**

- Good drainage for *Phytophthora* root rot control is essential and should be your first priority.
- Use an integrated approach for controlling *Phytophthora* root rot, *Phellinus* and fruit diseases. Relying on chemicals alone is not sufficient and is not good practice.
- *Phytophthora* spores can remain viable in the soil for six years.
- Wet conditions and the presence of fresh feeder roots stimulate *Phytophthora* spores to germinate. Damage is sustained within 24 hours and gets exponentially worse with time.

- Correct timing of phosphorous acid applications is essential in order to achieve effective control and to avoid exceeding MRL levels.
- Anthracnose only appears on fruit after it starts ripening – fruit that is blemish free on leaving the orchard does not necessarily mean that it is free of anthracnose.
- Amistar® has some 'reach back' effect on anthracnose that has recently invaded fruit.



*The North Queensland group inspects a dead tree on the farm walk; it was thought that in this instance death was most likely caused by *Verticillium* wilt rather than *Phellinus noxius*.*

Back-pack battery operated pruning equipment was demonstrated at the West Moreton meeting on canopy management; new battery technology enables eight hours work without a re-charge.

Group Meetings



Two species of beneficial insects were found in the orchard where the meeting was held: lacewing eggs (left) and a ladybird (right)

- Be on the look out for *Phellinus noxius* which causes sudden tree death and spreads from tree to tree. Measures need to be taken as soon as possible to stop it spreading.

Canopy Management (West Moreton)

- “Avocados grow like weeds – get into them!” – a grower’s comment on canopy management.
- Canopy management can be viewed as ‘light management’.
- Cincturing or scoring can be useful tools but you should experiment with them on a small scale to start with. The same can be said about the use of Sunny®.
- Carefully consider the timing of your canopy management practices.
- Canopy management strategies will vary from orchard to orchard, even between those in close proximity to each other.
- There’s a lot to be said for selective limb removal.
- If the grass in the inter-row has died out, your trees are overdue for canopy management.
- Trees that are stumped or staghorned take several years to get back into production, whereas with most other pruning systems some yield is maintained each year.
- In frost susceptible areas consider leaving the skirts low and pick at least some of the fruit before frosts are expected.

Integrated Pest Management (Northern NSW)

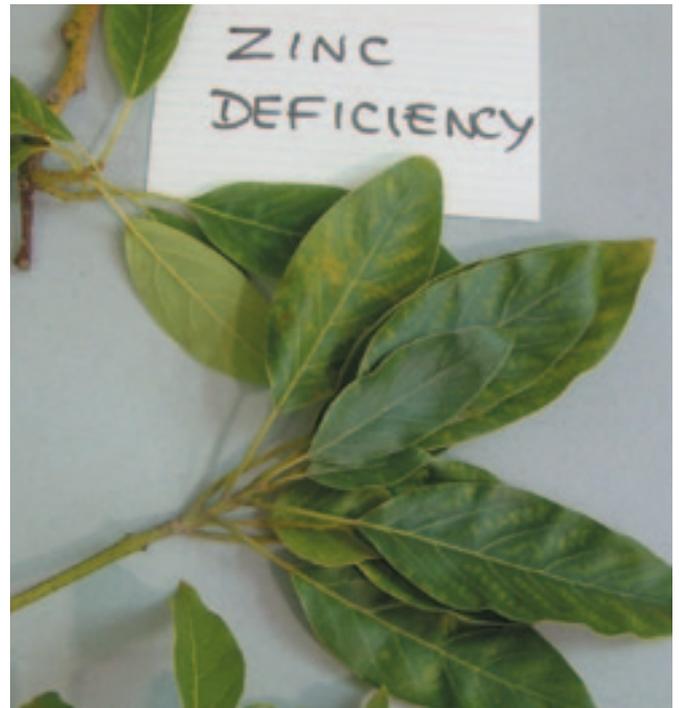
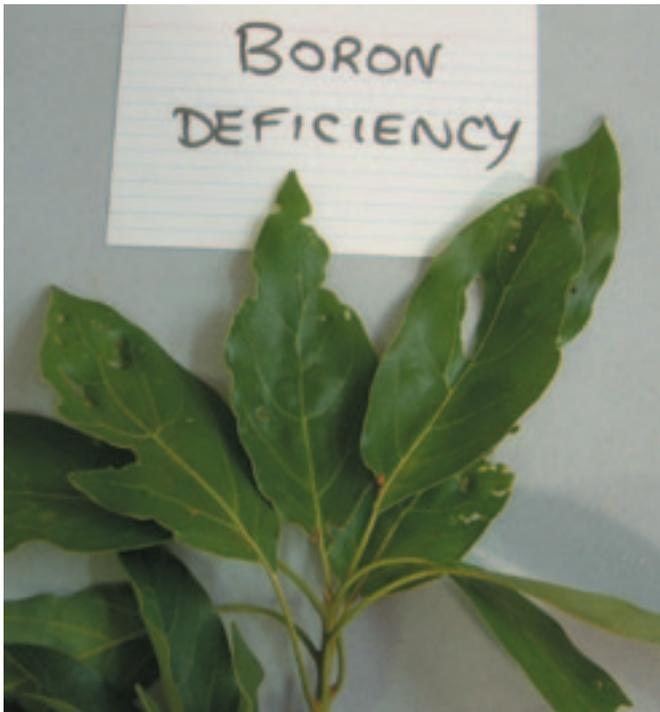
- Keep good records relating to insect pests in your orchard – hotspots, dates of insect invasions, sprays etc.
- Learn to correctly identify pests and beneficials.
- Undertake some form of regular monitoring.

- Insects are more active in the upper, more sun exposed parts of the canopy.
- Capitalise on naturally occurring control methods (e.g. beneficial insects) by only spraying when you really have to.
- Use narrow spectrum insecticides where possible – minimise the use of broad spectrum insecticides such as pyrethroids, dimethoate and methidathion.
- The appearance of pests such as scale insects and mites are often the inadvertent result of killing off beneficial insects whilst spraying for other pests.
- Spotting bugs have a very large number of alternate plant hosts – both native and exotic.
- Investigate other control measures you can take such as removing other host plants near the orchard and planting a trap crop (for monitoring and spraying purposes).
- Spiders and ants may be important predators of spotting bugs.
- It is likely that spotting bugs are attracted to avocado orchards by volatile chemicals given off by green fruit.
- Within a few years we may not have access to endosulfan, so in the meantime try and reduce your reliance on this pesticide.

Avocado Nutrition (Western Australia)

- First control *Phytophthora* root rot; the tree needs a healthy feeder root system to access soil nutrients.
- Ensure your irrigation system delivers water evenly to every tree in the paddock and is scheduled effectively.
- Regularly monitor your leaf and soil nutrient status - results of leaf analysis show the end result of your nutrition practices.
- Avocados are surface feeders – look after the feeder root zone.

More 'Take Home Messages' from Avocado Study Group Meetings - continued



Specimens showing deficiency symptoms were on display at the nutrition workshop in WA.

On the left, shot-hole and incompletely formed leaves are a sign of boron deficiency at the time that these leaves were growing.

On the right, the small leaf and short internodes which give the 'witch's broom' effect are symptoms of zinc deficiency.

- Apply nutrients 'little and often' to where the feeder roots are.
- Nutrition is complex – study it and get good advice.
- Pay particular attention to the management of nitrogen, boron, calcium & zinc in avocados.
- The balance between nutrients is important.
- Aim for 'effective nutrition', this is achieved when each part of the tree gets the nutrients it needs in sufficient quantity when needed.

Next Meetings

Workshops are now complete for Central Queensland, the Sunshine Coast, West Moreton, Northern NSW, the Mid-North Coast NSW, the Central Coast, NSW and Tristate. Another two meetings will be held before the project finishes at the end of May, 2010. These meetings are detailed below.

Study group	When	Topic to be addressed
North Qld - 6 th meeting	First week in May	Canopy management Guest speaker – John Leonardi
West Australia - 6 th meeting	Last week in May	Phytophthora and post harvest diseases. Guest speakers – Ken Pegg and Liz Dann

Now that the workshops are almost complete be on the look out for surveys which we will be sending out to evaluate the project. Your participation will be greatly appreciated.

Acknowledgements

These workshops are a team effort between our hosts, guest speakers, group co-ordinators, board members, Avocados Australia Ltd and growers. Thanks to everyone for making them successful and to the funding bodies for providing the means - Department of Employment, Economic Development and Innovation, Queensland (formerly DPI&F); Avocados Australia; and Horticulture Australia Ltd. In addition, thank you to the Department of Agriculture & Food WA, NSW Department of Industry and Investment, and EE Muir & Sons, for all their support.

Maturity and Dry Matter Testing

Brisbane consumers have recently been involved in avocado tastings, and then surveyed in order to tell the Australian avocado industry what they expect from Shepard avocados. This is a follow on from work that was conducted in 2007 on Hass.

In 2007, HortResearch (now Plant and Food Research) was commissioned by Avocados Australia to undertake consumer sensory testing. Amongst a number of other objectives, they sought to determine the minimum maturity as measured by percentage dry matter (DM) that provides the Hass avocado with an acceptable eating quality for Australian consumers. As expected, Australian consumers showed a progressive increase in liking and intent to buy avocados as the DM content increased.

Consumer acceptance of quality of avocados was relatively high at about 90–95%, but declined significantly to 70% if the DM was lower than 22%. In essence, the gap between 22% DM and 28% DM represented an opportunity where competitive advantage could be gained by providing consumers with higher rather than lower DM avocados. Furthermore, information on relationships between liking scores and choices of avocados predicted that about 70% of consumers would choose 26% DM avocados over 22%

DM avocados.

Based on these results the avocado industry implemented a new maturity standard for Hass of 23% DM at time of harvest.

Subsequently, Plant and Food Research in partnership with AgriScience Queensland were commissioned to conduct a



Figure 1: A member of the 2010 consumer panel tasting and grading very low, low, medium, and high maturity fruit

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Maturity and Dry Matter Testing - continued

Shepard study to determine the minimum DM, required to provide acceptable eating quality to Australian consumers.

This work was conducted in Brisbane over three days in March, 2010. The results will potentially be used to recommend a new industry standard for Shepard avocado maturity, based on DM, to ensure that they are picked at a maturity that ensures a good eating experience for consumers.

The results of this work will be published in the Winter edition of *Talking Avocados*.

Deciding When to Harvest for Optimum Quality

The following article is based on the following reports/articles:

- The Avocado Agrilink Manual
- Hofman PJ, O'Farrell PJ (2004) The importance of correctly sampling avocado fruit for maturity testing. *Talking Avocados* **15**, 24-24.
- Woolf A, Clark C, Terander E, Phetsomphou V, Hofshi R, Arpaia ML, Boreham D, Wong M, White A (2003) Measuring avocado maturity; ongoing developments. *Orchardist* **76**, 40-45

The date when minimum harvest maturity is reached will vary from year to year and according to the location on your property, for each variety. For example, large fruit on the northern and eastern side of the tree, and fruit at the top and outside of the canopy usually mature first. Rootstocks may also have an influence.

Avocado fruit have a number of characteristics which help indicate when the fruit may be getting close to minimum maturity. Judging maturity on these characteristics is not reliable, but with the experience of comparing them with DM testing results, they can help indicate when to start testing. These characteristics include:

- More mature fruit can be larger, but this is not very reliable.
- Skin is dull and lustreless, with a powdery appearance, rather than shiny. The usefulness of this characteristic is variety dependent.
- Fruit stalk is yellow rather than green, and the lenticels may become brown and prominent.
- The seed coat is dark, dry and somewhat shrivelled, rather than pale whitish in colour.

The dates when the fruit have reached minimum maturity in previous seasons is also a useful indicator of when to start maturity testing. Once you think that your fruit may be approaching acceptable maturity, it is important to

check by doing a ripening test and a dry matter test before picking:

Ripening Test

For a ripening test, select at least 10 avocados from trees scattered throughout the block that are representative of the fruit that may be ready for harvest. Sample fruit will show no sign of broken skin, insect stings or disease. Allow the fruit to ripen at room temperature, and examine and taste the fruit when ready to eat. Mature fruit usually ripen within 10 to 15 days without shrivelling, and will have good flavour.

Dry Matter Test

Percent DM is the easiest and relatively accurate maturity test for avocados. The % DM at which you harvest will depend on variety and the intended market. The Australian domestic market standard for Hass is now set at a minimum of 23%DM. This is based on an average DM over a sample of at least 10 fruit.

The DM test involves weighing a sample of flesh before and after drying. The test can be done at home using a household conventional oven, domestic food dehydrator or a microwave (although this can be less reliable because of the risk of burning the samples). Alternatively, some marketing cooperatives and packhouses offer this service for a fee. Here are the details of the various tests based on methods used by Agri-Science Queensland (formerly Queensland Department of Primary Industries). The three components are sampling the fruit, holding the fruit before DM testing, and weighing and drying the sample. Poor practices in any of these components will result in inaccurate results.

I. Sample preparation

a. Using the grated flesh method

- Harvest at least 10 avocados, making sure that they represent the fruit (size, position on the tree, block etc.) that you intend to harvest.
- Place the fruit in a plastic bag and keep cool. Start the DM test within a few hours of harvest.
- Cut each fruit lengthwise into quarters (stem end to base). Remove the seed as well as any adhering seed coat.
- Select two diagonally opposite quarters from each fruit to provide a total sample of 20 quarters. Peel the 20 quarters.
- Shred the flesh of all 20 quarters using a kitchen grater. Ideally the shreds should be less than 1mm

thick. This can be achieved using graters with five cutters per square centimetre.

- Thoroughly mix all of the shredded flesh together.

Or

b. Using the Hofshi Coring Machine (or a similar implement – for small quantities of fruit a hand held cork borer is adequate)

- Bore a 'plug' or core of flesh from the equator of the fruit (Figure 2a). The Hofshi machine pushes a sharpened 15.9 mm metal tube completely through the equator of the fruit (Figure 2b), yielding a core of tissue (Figure 2c). The two plugs of flesh generally weigh about 5g (depending on the fruit size).
- Remove the skin and seed coat from the flesh plugs.
- Cut each plug in half so that there are four pieces of flesh from each piece of fruit.



Figure 2a: The Hofshi Corer.

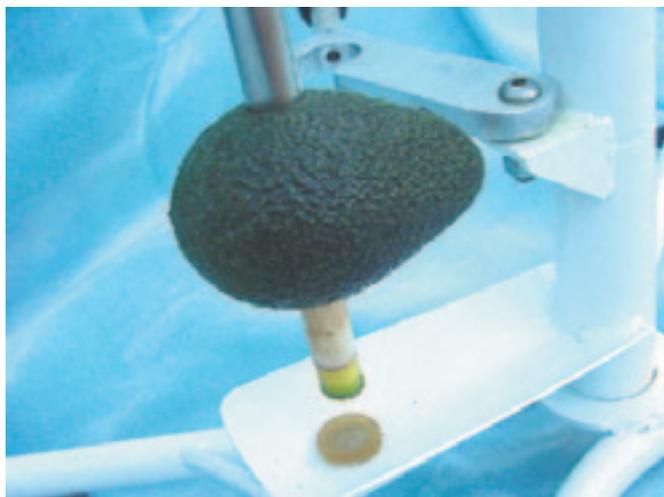


Figure 2b: Using the Hofshi machine to take an avocado core sample.



Figure 2c: A core sample of fruit taken by the Hofshi machine.

The photos in figures 2a to 2c were taken from Woolf A, Clark C, Terander E, Phetsomphou V, Hofshi R, Arpaia ML, Boreham D, Wong M, White A (2003) Measuring avocado maturity; ongoing developments. *Orchardist* **76**, 40-45.

It should take approximately 10 minutes to process (not dry) 10 individual fruit using the Hofshi corer.

NB: An adaptation of the Hofshi corer is available from a New Zealand company. For more information please contact the Avocados Australia office. Alternatively, hand-held 'cork borers' can be purchased from some hardware stores (see figure 3 for an example). Make sure the diameter is at least 15.9mm.



Figure 3: Hand held 'cork borer' available from some hardware stores (photo provided by Matt Weinert, DEEDI, Mareeba)

WARNING

After the flesh is cut/mixed, move IMMEDIATELY to the weighing step below. Any delay will result in moisture loss before weighing, causing inaccurate results.

Maturity and Dry Matter Testing - continued

2. Drying procedure

a Conventional Oven

- Preheat oven to 100 to 110°C.
- Use a shallow, ovenproof container. Weigh the dry/empty container and record this weight.
- Spread at least 100g of the shredded avocado (if using the grated sample method) or all the pieces from the core samples (if using the corer sampling method), evenly onto the container and weigh. Record this weight. Use a balance with two decimal places if the wet flesh weight is less than 20gm, as may be the case if measuring individual fruit DM with the corer.
- Place the container in the centre of the oven and leave undisturbed for five hours. During drying, be careful to avoid burning the avocado flesh.
- Avoid, or at least minimise opening the oven door during this period. An easily read oven thermometer is useful to monitor the actual oven temperature.
- After five hours, allow to cool in a dry environment for no more than five minutes, and re-weigh to determine dried avocado weight.
- With initial tests, redry the sample for a further 30 minutes and then re-weigh to ensure that the sample is fully dried.

b Domestic Food Dehydrator (models that go to 60-65°C)

- Use approximately four shallow, heatproof containers (exact number will depend on the size of the fruit).
- Weigh the dry/empty containers and record these weights.
- Spread at least 100g of the shredded avocado (if using the grated sample method) or all the pieces from the core samples (if using the corer sampling method) evenly amongst the containers.
- Weigh the fruit in the containers. Record the weight of each of the containers.
- Place the containers in the dehydrator and leave undisturbed for one day, weigh, then dry for another day and re-weigh to make sure it is dry.

c Microwave Oven

- Use a shallow, microwave-proof container. Weigh the dry/empty container and record this weight.
- Spread at least 100g of shredded avocado (if using the grated sample method) or all the pieces from the core

samples (if using the corer sampling method) evenly onto the container and weigh. Record this weight.

- Set microwave at medium-low for 15 to 20 minutes. **Note: You may need to adjust power setting and time depending on the microwave model.** Avoid burning the flesh.
- Dry to a constant weight by reheating and re-weighing. You can also use the ‘snap’ test (see below), to determine if the sample is fully dry. Note the time taken for future reference (if you use a different amount of flesh, the setting may need to be changed).
- When first trying the microwave method, keep a constant watch on the sample until you are confident of your settings. To avoid possible damage to your microwave, always place a container of water on the turntable.

HINT

A simple way to determine if the sample is fully dried is to take a shred of the dried flesh about 5cm long, place it lengthwise between the thumb and forefinger, and try to bend it. If it is brittle and snaps cleanly, it is fully dried. If it bends without snapping, more drying time is required.

3. Calculate Percentage of Dry Matter

Use the following calculation:

$$\frac{\text{Weight of dried avocado sample} \text{ (minus weight of container)} \times 100}{\text{Weight of fresh avocado sample} \text{ (minus weight of container)}}$$

NB: If you have dried the samples using a domestic food dehydrator with multiple containers you will need to take an average of the DM percentages you calculated for each container.

There are **no dry matter standards** for over-maturity, but this fruit should not be marketed. Do not leave fruit on trees beyond the normal picking period. Picking over-mature fruit results in poor flavour and increased fruit diseases and flesh disorders, as well as reducing the yield of the next crop.

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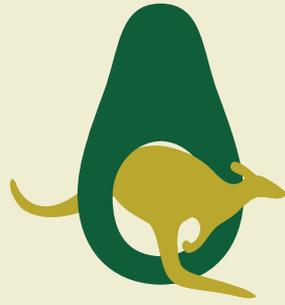


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VII WORLD AVOCADO CONGRESS 2011
VII CONGRESO MUNDIAL DEL AGUACATE 2011

CAIRNS - AUSTRALIA



The VII World Avocado Congress will give you the opportunity to catch up with old friends and meet new people in the industry, while learning the latest techniques for growing, finding out all about avocado marketing and how the economy and climate change are going to impact the industry.

We sincerely hope you will enjoy the VII World Avocado Congress in 2011 in Cairns, Queensland, Australia!

VII World Avocado Congress 2011

Sunday 4 – Friday 9 September 2011

Cairns – Australia

Register your interest at www.worldavocadocongress2011.com



Australia invites you to Cairns
to enjoy the
VII World Avocado Congress 2011



News from Around the World

US: Local Growers Optimistic of New Avocado Crop

Avocados are the top food crop produced in San Diego County, and it is a \$140 million-a-year business. However, 2009 was one of the worst years for the local avocado industry in recent memory.

For avocado farmers like Noel Stehly, the last few years have been a challenge. “It’s been pretty rough,” said Stehly. Water cutbacks and water price increases have played a role in the tough times. 10News visited Stehly’s Valley Center farm two years ago when he had to stump 30% of his trees to save water. His crop was down 35 to 40% last year. It was too hot at times and too cloudy at others. However, Stehly said, “This crop is great. The crop we’re harvesting right now is not a record crop, but we’re definitely in better shape.” Stehly added the weather has cooperated, and said, “We’ve had great rain. The trees are happy.”

Growers are also happy because more rain means less watering and less salt in the soil. Growers are seeing plenty of bloom on the trees now. “We like to see a good, heavy bloom. It’s nice. It’s encouraging,” said Stehly. Bees have also helped, as they are pollinating trees this spring. Last year, there were too many cloudy days. In sunny and warm weather, bees love to work, and Stehly said he has more than 1,000 hives full of bees to pollinate his avocado trees. His trees have plenty of avocados now, with the promise of more to come.

“The consumers will see a little bit of a price decrease at the store level. In turn, they’ll hopefully buy more because we have more to sell,” said Stehly. After years of nothing but bad news, local growers said they are finally getting a break. “You got the birds chirping. You got the bees humming. It can’t get any better right now,” said Stehly. Stehly has about 200 acres of avocados that are grown organically. His family has been growing avocados and other fruits and vegetables in the county since 1962. Source: 10news.com

Attempt at EU-Wide ‘Wonky Fruit and Veg’ Ban Fails

An attempt to reinstate a European Union-wide ban on wonky and discoloured fruit and vegetables has failed.

A group of Euro-MPs tried to bring back ‘uniform standardisation parameters’, forbidding the sale of straight bananas and curly cucumbers among other items. But the proposal was defeated in the European Parliament, amid arguments that it would increase food wastage.

Liberal Democrat Euro-MP George Lyon said: “The shape

of a fruit is irrelevant to its taste and nutrition.” Marketing standards for 26 types of produce were scrapped by MEP’s in November, 2008 in a drive to cut EU bureaucracy, with misshapen fruit and vegetables coming back on sale in the UK last summer.

‘Eccentric Laws’

This happened after it was revealed a fifth of produce had been rejected by shops across the EU because it failed to meet the requirements. Some Spanish Euro-MPs tried to bring the ban back by tabling a motion to that effect this week, but it was defeated on Thursday. Opponents argued the move would be pointless and wasteful, with Conservative Richard Ashworth calling it “morally unjustifiable”. After the vote, Mr Lyon said: “Eccentric laws about bendy bananas and curvy cucumbers lead to food wastage and exasperation with the EU.” He added: “We cannot have these laws return through the backdoor, and Parliament was right to strike this down.”

Scottish National Party Euro-MP Alyn Smith said: “Finally we can put the nonsensical wonky fruit ban to bed. This issue should never have come back to life after the [European] Commission removed the restrictions last year and I sincerely hope we won’t see another resurrection any time soon.”

The 26 types of produce which had the ban removed in 2008 were: apricots, artichokes, asparagus, aubergines, avocados, beans, brussels sprouts, carrots, cauliflowers, cherries, courgettes, cucumbers, cultivated mushrooms, garlic, hazelnuts in shell, headed cabbage, leeks, melons, onions, peas, plums, ribbed celery, spinach, walnuts in shell, water melons and witloof/chicory.

But the rules remain unchanged for 10 types of produce, accounting for three-quarters of EU fruit and vegetable trade. They were: apples, citrus fruit, kiwi fruit, lettuces, peaches and nectarines, pears, strawberries, sweet peppers, table grapes and tomatoes. Source: bbc.co.uk

Peru: Avocado Exports to Grow 19% this Year

Peruvian avocado exports will grow by 19% compared to last year, with a total of 57,500 tonnes, the Central Reserve Bank of Peru (BCR) reported Monday.

From this total, nearly 48,000 tones would belong to Hass avocado and 9,500 tonnes to the Fuerte kind, which means a 20% growth in both cases. This number was estimated on a report by iQonfruit, a world report system of dry fruits of the Chilean consultant iQonsulting, made on February of this year.

“The avocado is another product that sparks a lot of interest due to the growth perspective of the demand of

the foreign market and the regional dynamic that radiate the Andean valleys,” said the report. The main producer areas are in the departments of Lima, La Libertad, Junín, Arequipa, Ayacucho and Ica, as detailed in the report ‘Economy Activity: January 2010’. Source: andina.com.pe

California Avocado Commission Hires Research Program Director

Dr. Jonathan Dixon, a former research scientist at the New Zealand Avocado Growers’ Association and Industry Council Ltd has joined the California Avocado Commission (CAC) as Research Program Director.

“Dr. Dixon is an avocado expert who has made landmark scientific contributions to – and largely influenced – the global avocado industry,” said Tom Bellamore, President of CAC. “We are excited about having him apply his knowledge for the benefit of the California avocado industry.”

Dixon brings to CAC 30 years in the avocado, horticulture, plant science, plant health and molecular bioscience realms. Dixon’s vast avocado knowledge includes expertise in commercializing new avocado cultivars, extensive avocado research – particularly in productivity, post-harvest and sustainability – and information transfer and technology systems. He has strong research and industry networks in California, South Africa, Spain, Australia and Israel, and is an experienced speaker, known for his novel ways of explaining complex ideas.

As CAC’s Research Program Director, Dr. Dixon’s responsibilities will include research project management, outreach and communications, and development of research strategy, including identification of industry research priorities aimed at strengthening industry competitiveness, sustainability and profitability.

While at the New Zealand Avocado Growers’ Association, Dixon’s achievements included developing and implementing a plan to commercialize 11 new avocado cultivars, the design and implementation of research aimed at improving productivity, and the introduction of a trace-back system for royalty collection.

Dr. Dixon has a Ph.D. in Plant Physiology, Master of Horticultural Science in Postharvest Physiology and Bachelor of Horticultural Science from Massey University in New Zealand. Source: CAC

Chilean Hass Avocado Committee Diversifies for Europe, Latin America

Adolfo Ochagavia, President of the Chilean Hass Avocado Association, comments on his industry.

Grower Member Application Form

Avocados Australia Limited

ACN 105 853 807

For Associate and Affiliate membership application forms please go to www.avocado.org.au or call 07 3846 6566

Member Details

Business name and/or trading name:

ABN:

Key contacts:

Preferred address (postal):

Address of property (if different):

Contact Details

Business phone:

Home phone:

Fax:

Mobile:

Email:

Corporate Structure

How would you describe the nature of your operations (please circle)?

- Individual
 Partnership
 Company
 Trust
 Lessee
 Cooperative
 Other (please specify) _____

Please indicate the area of property that you crop for avocados (please circle)

- 0.5 - 5 ha
 6-19 ha
 20-49 ha
 50-99 ha
 100-149 ha
 150-199 ha
 200-499 ha
 500 ha+

Special Interests

Please tick your main areas of interest from any of the following:

- Consumer information
 Production management
 Environmental management/ sustainability
 Quality Assurance
 Organic farming systems
 Technology/innovations
 Water management
 Marketing
 Field days
 Supply chain management
 Pest management
 Key political issues
 Food safety
 Other (please specify) _____

Grower Member Application Form continued

Payment Options

Grower Membership of Avocados Australia is \$143 pa (including GST). You can pay your membership by cheque or credit card. To pay your membership fee, please choose one of the following options:

Cheque

Please find enclosed a cheque for \$143.00 made payable to Avocados Australia Ltd.

Please charge \$143.00 to my credit card. Details are listed below.

Credit card (please circle):

MasterCard Visa

Credit card number: _____

Name on credit card: _____

Expiry date: _____

Signature: _____

Privacy Options

Avocados Australia Ltd adheres to privacy rules with respect to the way we collect, use, secure and disclose personal information. Please indicate below (tick) if you do not wish to receive additional information.

I do **not** give Avocados Australia Ltd permission to allow my postal contact details to be accessed by other organisations other than Avocados Australia Ltd which offer beneficial products and services.

- NB - No personal details other than name and postal address will be given out under any circumstances.

Once you have completed this form please place it in an envelope addressed to:

Avocados Australia
Reply Paid 8005
Woolloongabba Qld 4102

(no stamp required within Australia):

For more information or assistance please go to

www.avocado.org.au or call on **07 3846 6566**



News from Around the World continued

The Committee brings together 80% of the Chilean industry. Good prospects for the Committee have been the opening of markets like Colombia. "This is an opportunity to continue sending quality fruit, not only to Colombia but to other Latin American countries", declared Mr. Ochagavia.

It is possible, if conditions permit, to start a trial promotion this year, and by increasing it in the future gain more experience and power to promote the consumption of Hass avocados in the country.

Per capita consumption of avocados in Colombia is approximately four kilos, particularly of the Antillean varieties, but there is lot of confidence that the Hass avocado will come to replace these varieties. "It is a market to be developed and is expected to begin this year," said Mr Ochagavia.

On the world market exports to Europe have been growing systematically. The dominance of the U.S. market has decreased over time, and this was particularly due to the diversification strategy that has been implemented by the committee and its industry. Source: Comité de Palta Hass de Chile

NatureSeal has Fresh-cut Covered From the First Step to the Last

NatureSeal, Inc. has added a new line to its successful product range designed for maintaining the quality and extending the shelf life in fresh-cut and minimally processed fruit and vegetables. NatureSeal FS is the 'First Step' in processing your fresh produce. Based on a combination of fruit acids, NatureSeal FS is a viable alternative to chlorine based washes without the concerns common with the storing and use of hazardous halogenated chemicals.

NatureSeal FS was originally developed in conjunction with Environmentally Safe Solutions Limited (ESSL Ltd), to supersede their range of produce washes used as processing aids for the washing and decontamination of fresh produce. A formulated liquid concentrate is currently offered in the UK and Europe and is designed to be used in wash tanks providing vigorous agitation. NatureSeal FS liquid has been validated in the laboratory and through extensive commercial usage. The concentrated liquid as well as reformulated dry products will soon be offered in the U.S.

NatureSeal FS products are offered in both conventional and organic processing. Some formulations of the product have received approval from the UK Soil Association and most recently ECOCERT certification in France. U.S. OMRI certification is anticipated.

NatureSeal FS provides many benefits to both conventional and organic processors alike. Unlike chlorine-based treatments, which can leave an undesirable odor or even taint, these products are odorless and tasteless, leaving the end produce with a more wholesome appeal. Furthermore, NatureSeal FS is considered to be safer for workers and kinder to the environment.

NatureSeal FS is a natural extension of the NatureSeal line of products designed to inhibit the browning of fresh-cut produce while maintaining its natural taste and texture. This product line has grown to over fifteen formulations which provide benefits to over thirty fresh produce items after processing. For products such as apples, pears, potatoes and avocados NatureSeal inhibits enzymatic browning and maintains the texture, while avoiding any off taste or odor. In the case of cut or baby carrots the blushing or whitening is inhibited by minimizing dehydration, therefore providing a brightly colored, more appealing product. As for cut melons and pineapples NatureSeal inhibits the liquid purge, keeping the moisture in the fruit instead of the bottom of the package. These formulations are comprised of vitamin/mineral blends which are sulfite-free.

The original NatureSeal product line was developed and patented with the USDA, and is marketed world-wide with over 300 processors supplying the retail and food service industries. Source: NatureSeal

No More Cold Treatment for Peru Hass Avocado Exports

Peru's National Service of Agrarian Health (Senasa) estimated that from April this year Peruvian Hass avocado exports will not undergo cold treatment, a requirement to achieve quarantine security against fruit flies for entry into the US Animal and Plant Health Inspection Service (APHIS) certifies that the product is not infested by the pest.

On 28, December last year, nine years after Peru's request, the United States Department of Agriculture (USDA) formally authorized admitting Hass avocados from Peru.

The standards established by the USDA include compilation of detailed technical requirements, of which Peru has to meet as part of approved health protocol involving the implementation of APHIS Risk Analysis System and Cold Treatment.

"We will complete the tests needed to optimize - in coordination with APHIS - the cold treatment by the end of February", Senasa's head Oscar Dominguez said. "Now we just have to wait for the results", he added. Source: andina.com.pe

Oxnard Avocado Producer to Open Ripening Center in Canada

Avocados have long been a mainstay of California cuisine, crowning sushi rolls, slathered between deli sandwiches or crushed with cilantro and chopped onion for chunky guacamole.

But the United States' northern neighbors have developed an appetite for the creamy-textured fruit, prompting Mission Produce of Oxnard to open its first international ripening plant in Toronto, Canada.

Ripe avocados can sell four times faster than unripe avocados because of shelf appeal, said Ross Wileman, Vice President of Sales and Marketing for Mission Produce.

"We saw the success of regional ripe centers in the U.S. and made a conscientious effort to get the message out to Canadian customers that they were losing sales because the fruit wasn't in the right condition for the customer," Wileman said.

Several Canadian grocery retailers expressed interest in partnering with a Toronto-based ripening center, Wileman said, including Loblaws Supermarkets Unlimited in Ontario, Metro Inc. in Quebec, and Sobeys Inc. in Nova Scotia. Source: Ventura County Star

US: Hass Avocado Board Offers Hass Avocado Meal Ideas

Celebrate National Nutrition Month all through March with a menu that everyone can enjoy. National Nutrition Month is the perfect time to introduce exciting, tasty new menu items that put the "good" back in goodness. We suggest starting with Fresh Hass Avocados.

Fresh Hass Avocados have a subtle, nutty flavor that compliments most dishes, it is available year-round, and versatility is just one of its many hidden assets. In fact, the avocado is virtually the only fruit that has monounsaturated fats. According to the American Heart Association, monounsaturated fats can help reduce bad cholesterol levels in the blood and lower the risk of heart disease and stroke. Source: perishablenews.com





AUSTRALIAN
AVOCADO
GROWERS'
FEDERATION

Talking Avocados

—The Australian Industry
Newline,
First Edition,
March, 1990.

AVOCADO NEWS TO PRESS

For some eight years we have discussed the problem of lack of communication throughout the industry. A national news sheet, newspaper or journal have all been proposed but never eventuated. Queensland C.O.D. greatly assisted with the issues of Fruit & Vege News being devoted to Avocados. This was commendable, but highlighted even more the need for an industry publication. Well, we have it, and I trust we have your full support to make the venture successful.

'Talking Avocados' can assist everyone in numerous ways. One important aspect is to keep all growers up to date with research and technology; you will be within a short time of any new breakthroughs and this can be vital to orchard management. The practice of injecting trees with phosphorous acid was in common practice in Queensland some eighteen months before it became general knowledge in the other states.

Another aspect of 'Talking Avocados' is to provide a forum for you, the grower, to air your views and to let us know your problems—write to the editor. Additionally, we shall publish excerpts of major interest from avocado journals & newsletters from other countries — Israel, South Africa, U.S.A. and New Zealand.

I also wish to briefly mention the Biennial Federal Conference and in particular the Research aspect. Up till now our research projects have been limited to the obvious major problems. Phytophthora etc. and have been tackled with great success. Now I feel that many of the minor problems particularly those confronting the smaller growers, need to be addressed. At the federal conference we shall be compiling a list of those problems and allocating priorities for the distribution of research funds. There are further details on the conference in this issue. It will be important to you and all growers. Some of the major items of interest will be the research programme, with updates on current and continuing research and future research priorities; finance, with one of Australia's leading finance advisers; and export achievements and the future. Your attendance and participation could be of immense value to both yourself and your industry.

I look forward to renewing friendships and meeting many of you at the conference in July this year.

David Rankine
President, Australian Avocado Growers' Federation.

MANAGING QUALITY IN AVOCADOS

Terry Rudge and Simon Wathen
Davy Quality Management Services. BRISBANE.

Quality has become something of a buzz word in horticulture, but in spite of preaching of the industry leaders, there has been little guidance as to how quality can be achieved. There is even confusion as to what the word quality really means. It is not a ridiculously high standard that is impossible to achieve, simply means meeting the customer's requirements.

A grower or packer must be certain that fruit will always satisfy his customer. To achieve this, a deliberate strategy is needed. The most important part of this strategy is a series of quality checks at all stages of growing and handling. These checks stop unsatisfactory fruit from incurring unnecessary packing and transport costs and backlash from customer dissatisfaction. Results of quality checks must be recorded to allow problems to be fixed and quality levels improved.

Steps required to truly manage quality are:

1. Set standards. These may be D.P.I.E. (Federal) standards or based on the requirements of a particular market. Standards should be set for the product at all stages of production and handling.

2. Work out what quality aspects have to be controlled, and the stage of the system when they should be checked. (eg. in the field, at the pack house, at the market)

3. Set up a monitoring and recording system, with clearly defined actions when product does not meet standards.

4. Use information from records along with research findings to solve quality problems and improve product quality.
5. Review and fine-tune the system regularly. Audits by both senior management and an independent auditor are needed to ensure that the quality system is working and continues to work.

COMMITMENT

For a quality system to work it must cover all aspects of production from growing through to the consumer. Management and all participants must be committed to having the product meet the customers specifications. A certain amount of formal training is needed, so all staff know the standards and their own roles.

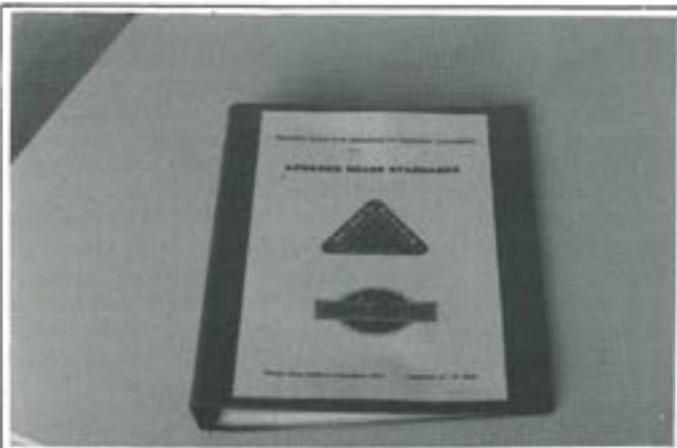
BENEFITS

Quality management does have a cost. A quality controller must be recruited and staff trained. In the short term it is likely that more fruit will be rejected, but in the medium term there will be several benefits.

- *Reduced packing costs.
- *More reliable market outturns
- *Greater buyer confidence.
- *More return orders.
- *The ability to promote an elite brand and receive a market premium.
- *A steadily improved level of quality.
- *A higher percentage of marketable fruit due to awareness of problems and better management.



A quality assurance programme has been implemented at the Sunshine Coast fruit Marketing Co-operative.



THE FIRST STEP

The first quality system for avocados in Australia is still being put into place by the Sunshine Coast Fruit Marketing Co-Operative. This will be necessary if the co-operative is to compete in Europe. The system is also needed to maintain the standard of domestic market fruit.

The QDPI and Davy Quality Management Services produced a quality manual. This covered handling procedures and the quality checks from orchard to market. Staff structure and the roles of all participants were clearly defined. The manual is a reference for those involved in quality.

Grade standards for each of their brands were presented in user-friendly photographic form. These were and are used to train packhouse staff.

The first stage of setting up the system was appointing a quality controller. She has been monitoring the quality of packed fruit, taking records and giving feedback to sorters, and will become the key person as the system develops.

GROWER INVOLVEMENT

In the 1990 season, fruit and handling systems will be monitored in the orchard and prior to sorting. Growers will be informed about market specifications. This may include size, blemish and level of pests.

An improved spray programme is recommended to minimise pest and disease levels. This also avoids the use of chemicals which may be unacceptable to certain markets. Growers will be required to keep a diary of all sprays used. This diary is part of the documentation in the quality system.

Dry matter will be tested to ensure that fruit is not immature, or too mature to withstand a voyage to Europe.

THE MARKET CHAIN

As good fruit often deteriorates during transport and marketing, checks of fruit handling and condition will be carried out in the marketing chain. Fruit temperature will be monitored in the coolstore and through to the market.

FURTHER INFORMATION

Davy Quality Management Services was established to develop and set up systems to meet the specific requirements of horticultural producers and exporters.

The company has a wide range of experience in New Zealand where quality assurance is a cornerstone of export marketing. DQMS has branched into Australia where enquiry and demand for QA systems is alive and growing.

EDITORIAL

Naming this publication has been the most difficult part in getting this first edition together. The title we are using could be permanent or it could be temporary? If you have an inspiration please pass it on to me.

I believe this newsletter is packed with views, news and information that everybody involved in the Avocado Industry would be keen to know. Please keep the contributions flowing and let me know if you have any suggestions or constructive criticism. The Letters to the Editor section is there to invite discussion and sharing of ideas.

Compiling the subscription list has been the sort of job that even the computer balks at!! Please spread the word about this new initiative and send your subscription forms in "Pronto!!" so that the list can be revised to an even more mind-boggling document.

The next edition will include updates on trunk injection, stem end rot and more stories on marketing ventures. As I sit here pen pushing, a few quotes from the desk diary (my inspiration while pen pushing.....) have caught my eye.

Did you know that:

G.C. Lichtenberg said "The most dangerous of all false-hoods is a slightly distorted truth." and Martin Luther said "Peace if possible, but truth at any rate." I think I agree with them.

Marie Piccone
Editor

Enquiries regarding advertising, articles etc. in "Talking Avocados" should be referred to:

The Editor,
"Talking Avocados",
P.O. Box 1393,
TOWNSVILLE. 4810.
PH (077) 71 3388 (W/H)
Fax (077) 21 2481

THE FEDERATION

Delegates who represent the member states on the parent body, the Australian Avocado Growers Federation (AAGF) are as follows:

SECRETARY: Ross Boyle, P.O. Box 19, Brisbane Markets, Q.
Phone (07) 379 0228 / Fax (07) 379 92

PRESIDENT: David Rankine Ph (075) 45 10

VICE PRESIDENT: Ross Richards Ph (085) 85 31

CHAIRMAN, VARIETIES COMMITTEE: Don Lavers Ph (070) 93 32

QUEENSLAND: Dick Armstrong, David Rankine
Don Lavers, Brian Capamagnoli
Charles Dimsdale

NEW SOUTH WALES: Warren Meredith, Ashton Goulding
Peter Molenaar, Graham Anderson

VICTORIA (Sunraysia): Marion Matthews Ph (050) 29 11

SOUTH AUSTRALIA: Ross Richards Ph (085) 85 31

WEST AUSTRALIA: John Galatis Ph (09) 525 22

This is the growers paper and reflects their views and opinions; it does not necessarily represent the policies or views of the President, Committee or members of the AAGF.

LETTERS TO THE EDITOR

"Farmers Case Dismissed!" This was the heading in the Sunshine Coast I saw several days after a case on alleged spray drift (Health Dept. Vs Mosely) was heard in the Nambour Magistrates Court.

After my reminder to the editor, the hearing did get a small headline and a column spread on page 5.

A pertinent comment from the magistrate "Mrs Rushton.... was emotional and at times volatile. I further find she tended to exaggerate" did appear in the press. I conclude the media did not wish to spoil a good story sticking to the facts.

After the initial front page coverage of this case and the subsequent trial in media, it would have been inconsistent to have given a fair coverage of magistrates finding.

THE SPRAY SCENE: Fringe dwellers on the horticultural scene have a dream that sustainable agriculture is possible on "organics" only. We can't dream they do not starve most of our present generation before they wake up!

The proposed Green Paper, which was shelved by the Nationals may soon be reviewed by the new QLD Government members. We must ensure that the properly informed on issues that affect, not only the avocado industry, but primary production. Both state and federal budgets would be much deeper in red without a viable agricultural industry. Neither export or local markets accept inferior produce blemished by diseases and insects.

The community has the right to expect that approved chemicals at the correct concentration will only be applied to the target area. Before we spray we must read the label, to check both the concentration and with-holding period, so both operator and consumer have no cause for concern.

A programme of integrated pest management can be adopted and chemical controls used only when natural or introduced predators let us down.

We need some initiative to better inform the public on the necessary responsible use of agricultural chemicals in the production of quality fresh fruit and vegetables.

Perhaps our industry leaders should look seriously at recruiting a panel of speakers to get the message across to schools, retirement villages, service clubs and garden clubs.

Ted

Montville.

Perhaps the panel of speakers might also target media, politicians etc?

Dear Friends in Australia,

It is our privilege to extend a cordial invitation to you to participate in the Second World Avocado Congress, which will convene in Anaheim, California, USA, April 21-26, 1991. The official headquarters for the Congress is the Doubletree Hotel at the City. The Doubletree Hotel is located near Disneyland, Knott's Berry Farm, and other major attractions.

The Second World Avocado Congress will, for one full week, bring together people, their problems, solutions, technologies, and dreams that comprise the truly global avocado industry. From this will come "The Shape of Things to Come," the theme of a Congress that can give you one step up on concepts, techniques, and technologies that can favourably impact your avocado operation. The Congress will include all aspects of avocado production and marketing, sessions on breeding and genetics, propagation and other nursery practices, and water management, plant nutrition, insect pests, diseases, tree and fruit biology, post harvest handling, marketing, economics, and consumer trends. The Program will include an Opening Session, entitled "Janus Looks at the Avocado Industry," presented by Mr Jack Shepherd, President Emeritus, Avocado Growers of California.

The official language of the Congress will be English; however, simultaneous interpretation in Spanish will be provided during all sessions and workshops.

The Congress is a great opportunity to bring worldwide focus on yet unsolved problems, find out where the latest research is being done, and who's already doing new things. Take the opportunity to join us and participate actively in the program and workshops, enjoy the tours, and the hospitality of Southern California. We look forward to welcoming you in 1991.

Sincerely Yours,
M.L. Arpaia,
W.H. Brokaw,

Co-Chairs Organizing Committee.

TARGET 90

The "Target 90" group which visited Europe last spring, of which I was a member, learned there are a lot of improvements Australia needs to apply to both the export markets and local markets. The export market is extremely competitive. Although there is a window for Australian avocados in Europe, there is also a lot we can do to help our industry in our own market place. It seems logical that the way to do this is to have more marketing power to achieve the returns we desire. To have more power as an industry we need to become more united as an industry, in the marketing of our fruit. To become more united, each avocado growing area needs to seriously consider the impact our industry would have in the market place, if we marketed our produce under a single brand. Single Brand Marketing is one of the aims of the Target 90 program.

Marion Mathews,
President Sunraysia Avocado Growers Association.

Dear Madam,
The Atherton Tableland avocado growers warmly welcome this, our first national avocado newsletter.

The industry in Australia is scattered over a very large area of continent so that people who live on the perimeter often have a feeling of isolation and remoteness. Growers on the Tableland certainly feel this way. We are a long way from our export markets and the cost and effort of getting there to talk to agents and view our fruit is great enough to prevent many from making even an annual visit.

Our West Australian colleagues have to contend with even greater distances. They have further to travel to the east coast markets and it requires a special sort of dedication on their part to regularly attend Federation meetings and conferences.

However geographic location is not the only factor that sets people apart from the main stream of the industry. Many growers who live close to where it is all happening are content to do their own thing with only as much industry contact as will enable them to continue in business from year to year. They do not go to conferences or local association meetings. They exist in self imposed isolation and wonder what proportion of people with avocado trees make up this group. For all those for whom the feeling of unity has been dulled by isolation, whether geographic or self imposed the newsletter is a great step forward. It will keep growers abreast of what technical workers, the market and the industry are doing. It will give growers a voice to tell researchers, extensionists, marketers and industry leaders what they want.

Members of the Atherton Tableland Avocado Growers Association would like to congratulate the various groups and individuals who have made this newsletter possible. The federation who sponsors it, the various grower associations who are providing early financial support, advertisers, contributors of course our talented editor Marie Piccone, whose energy and enthusiasm make those in isolation wonder how we could have survived so many years without it.

Yours faithfully,
Don Lavers,
Chairman ATAGA.

LETTERS IN THE MAIL!!!

Farming is a risky business. Each year we face the possibility of being wiped out by drought, flood, hail, bush fire, pests or disease. Because we have little or no control over these factors, we accept them as part of farming. We soldier on, never optimistic that the good seasons will outweigh the bad. Once the crop is harvested, packaged, and consigned to market, we tend to think our worries are over. We keep our fingers crossed that the agent will return us a good price and find the mailbox in search of the long awaited cheque.

Unfortunately, each year some farmers don't receive their cheque at all. The agent may eventually be paid a portion of what was owed them, after the Receiver has wound up the company that they consigned to.

1989 saw a couple of major avocado handlers go down the tube: Lojon in Sydney, and Proveg in Melbourne. Some minor agents also collapsed during the period.

Market agents have a very high weekly turnover of cash. To entice retailers to deal with them they may offer extended credit. Indeed large retailers may demand extended credit under threat of ceasing to do business with the hapless agent if he doesn't comply. By law the agent is supposed to pay the grower within 14 days of receiving the produce. Often they don't. Now it may be that they are just being greedy and playing the short term money market with YOUR money. But in my experience delaying the payments to growers is one of the first signs that an agent or merchant is in financial difficulties.

The staggering escalation in interest rates over the last few months has put enormous pressure on the business community. Witness the saga of Bond, Anset and Skase! A whole heap of smaller businesses are going under too. You can bet that 1990 will see the demise of more market agents. How can you avoid being caught up in their collapse and perhaps being dragged under yourself?

You can eliminate 95% of the risk by insisting on prompt payment. In Qld, N.S.W. and Victoria there are strict laws governing payment to growers by the market agents and merchants. W.A. and S.A. have none. Policing of this legislation is done by the State Dept of Agriculture Inspectors in the central markets. The legislation varies slightly in each of the 3 states, but as a general rule of thumb, payment must be made within 14 days of the produce being received by the agent. If you have not received your cheque within 17 days (allow 3 days for mailing) phone your agent and tell him it's overdue. Undoubtedly you will be assured 'it's in the mail'. Give him another three days grace and if it still hasn't turned up, phone the market inspectors immediately. Don't waste your breath arguing with your agent. **AND DON'T SEND ANY FURTHER**

CONSIGNMENTS TO HIM EITHER! You will probably hear from your agent fairly quickly. Tell him politely that you are familiar with the law and if he values your business he would pay you on time. If he is apologetic and promises prompt payment in future, you may choose to give him another chance. If he is rude, abusive or threatening, you can be pretty sure his firm is in financial difficulties. Tell him that there are plenty of other agents in the market place and that you prefer to do business with people who have good manners and financial integrity. Then hang up!

I am continually surprised and alarmed at the stories I hear of growers waiting many weeks for their payments. Often they keep on sending to the agent anyway. Don't YOU be one of the suckers who get caught! There are some decent agents out there who are a pleasure to deal with. Search until you find one.

A final word on the subject. We hear a lot about the shonkey agents. Well there are just as many shonkey growers who don't treat their agent fairly. The farmer who whinge the most about crook agents are usually the worst offenders themselves. If you send underweight packs of poorly presented inferior quality produce to an agent, he sure as hell isn't going to put much effort into getting you a good price. If you expect an agent to try hard on your behalf, you have to put your own house in order first. Then having endured all the unavoidable risk associated with farming, eliminate the final one. **INSIST ON PROMPT PAYMENT.**

Brian Capamagian
Mapleton, Qld.

STILL FERTILISING BY THE SEAT OF YOUR PANTS

Marie Piccone
Horticultural Consultant Townsville Qld

Leaf and soil analysis tells you the nutrient levels and needs of the avocado trees in your orchard. Looking at the trees, using your neighbour's programme last year's rates or just guessing, means that you are still fertilising by the seat of your pants - and most probably losing money?!

WHY BOTHER?

Proper use of leaf and soil analysis results will mean:

- *More yield where nutrients were limiting crop potential, eg boron at flowering;
- *better fruit quality and shape as levels are properly adjusted, eg calcium during early fruit development and zinc for fruit shape and sizing;
- *spending money on the required fertilisers at the best rates rather than hoping you're doing the right thing.

By the time you see visible symptoms of nutrient imbalances in the tree, yield and quality are already seriously affected and it will take time to get the nutrient back to optimum levels. Regular leaf and soil analysis helps you to detect the trends and problems early. So this year - be proactive rather than reactive. Take leaf and soil samples for analysis.

THE DETAILS

A specific part of the tree is sampled at a particular time of the year. For avocados, the period from late April to mid-May (as the tree goes into the winter rest phase), is the time to sample leaves and soil.

LEAF SAMPLING 1

- *The leaf sample for analysis should be 30-40 of the youngest mature leaves from the hardened summer flush. The leaves should be healthy and free of pest, disease and physical damage.
- *All leaves in a sample should be taken from terminals not carrying fruit.
- *Any one sample must consist of leaves from one variety only. Take the sample leaves from 15-20 trees.
- *Wash your hands before picking leaves and do not smoke during sampling.
- *Take the leaf sample early in the morning (before 9 am). Samples should be kept cool after they are collected, and despatched to the laboratory as soon as possible.
- *Remember that foliar sprays (eg. fungicides that contain copper, or manganese i.e. mancozeb, or nutrient sprays such as zinc chelates, iron compounds etc), will often give false readings despite thorough washing of leaves in the laboratory before chemical analysis.
- *Leaf analysis should be done annually to review the nutritional programme.

SOIL SAMPLING

- *Samples for soil analysis should be taken at a depth between 0-30cm from twenty sites per hectare or ten sites per block (if the block is smaller than a hectare).
- *Avoid sampling from soil at the dripline. Take the samples from any other area under the tree canopy.
- *Thoroughly mix the total sample and take a sub-sample (500g) for analysis in the laboratory.
- *Where soil nutrient levels are not optimum, sampling should be done annually until the imbalances are corrected. If leaf analysis indicates no problems, soil analysis can be done once every two years.
- *Soil analysis should be done at the same time as leaf analysis. It should not be done where fertilisers have just been applied.

So put a big cross on your calendar and make sure you spend a little money on leaf and soil analysis-it's a wise investment in your future crops.



LEAF AND SOIL SAMPLING

	S	M	T	W	T	F	S		S	M	T	W	T	F	S	
M A R	30	31					1	M A Y						1	2	3
	2	3	4	5	6	7	8		4	5	6	7	8	9	10	
	9	10	11	12	13	14	15		11	12	13	14	15	16	17	
	16	17	18	19	20	21	22		18	19	20	21	22	23	24	
	23	24	25	26	27	28	29		25	26	27	28	29	30	31	
A P R								J U N								
		1	2	3	4	5	6		1	2	3	4	5	6	7	
	6	7	8	9	10	11	12		8	9	10	11	12	13	14	
	13	14	15	16	17	18	19		15	16	17	18	19	20	21	
	20	21	22	23	24	25	26		22	23	24	25	26	27	28	
	27	28	29	30					29	30						

Get the Crop King Compulab Service working for you.



Why test at all?

Soil fertility is any farmer's greatest asset. Making the most of this fertility is the key to successful crop and animal production. The quantities of nutrients available in the soil are the key to your crop's potential. A crop may be limited by the least available nutrient present, even though all other essential nutrients may be present in adequate quantities. Soil testing can be used to provide a more appropriate fertilizer program. Soil testing should be used regularly to monitor soil fertility and check long-term fertilizer programs.

Sampling is simple

Crop King Sampling Kits are available from your local Crop King dealer for sampling soil (or plant tissue). Each kit contains everything needed to take the samples and send them to the Crop King Compulab Service Laboratory. Sample bags and information sheets for individual samples are also available.

Plant tissue

Plant tissue testing is suited to tree and vine crops to monitor nutrient uptake and the effectiveness of your fertilizer program. This enables fertilizer programs to be geared to higher yields of farm produce. Plant tissue testing can also be used for solving problems in broadacre crops. Within 2-3 weeks of mailing your soil of plant samples, you receive a detailed analytical report. This report, together with the field information the farmer supplies, is interpreted by a CFL Sales Agronomist or Crop King dealer.

See your local Crop King dealer or phone (07) 390 9479 for further information.



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RESEARCH

WHO IS DOING WHAT?

Don Lavers,
AAGF Delegate

The following are some of the research projects currently in progress:

- *Phytophthora root rot... Etiology and control, interaction of nutrients a distribution of phosphite in the tree, evaluation of clonal rootstocks — Ken Pegg and Tony Whitley.
- ...Evaluation of tolerant rootstocks — Tim Trenchoulias.
- *Growth Cycle... Growth and flushing patterns of roots, impact of maturity on productivity, use of plant growth regulators — Tony Whitley.
- *Pest control... Biological control integrated with chemicals and pheromones — Geoff Waite.
- ...Integrated pest management in fruit and vegetable crops — John Hogg.
- ...Preparation of a book entitled 'Protect Your Avocados' — Roger Burrell.
- ...Monolepta beetle control — N. Treverow.
- ...Avocado leafroller control — Bruno Pinese.
- ...Pesticide residues after low volume orchard spraying — Alex Banks.
- *Post Harvest... Cold storage disinfestation against Queensland fruit fly — Andrew Jessop.
- ...Preparation of a quality assurance manual — Scott Ledger and Alex Banks.
- ...Early season avocado quality — Scott Ledger and Sheila Spraggon.
- ...Controlled atmosphere storage, performance of waxing under CA storage — Scott Ledger.
- Anthracnose... Infection processes and control — Lindy Rappel.
- ...Control of preharvest diseases, storage and ripening — Ross Fitzell.
- *Irrigation scheduling — Terry Campbell.
- *Marketing... Development of a strategic marketing plan — Kevin Smith and Scott Turner.
- *Cholesterol... Effect of avocados in the diet on blood cholesterol levels — Ian Colquhoun.
- *The following projects are to begin soon:
- *Carbohydrate physiology... Impact of management practices, notably maturity and time of harvest on carbohydrate levels and tree productivity of plant growth regulators on flower initiation — Tony Whitley.
- *Ethylene scrubbing tested under commercial storage — Tony Shorter.

In the next edition, we will endeavour to give readers an opportunity to indicate their views on research priorities. If the list is not complete or you know something that we don't, please let us know!

LOW VOLUME SPRAY RATES — TIME TO TRIAL

Alex Banks
DPI Nambour Qld

Avocado growers have always been faced with the problem of low registered mixing rates for use with low volume equipment such as sprayers. A trial has commenced on the Sunshine Coast to overcome this knowledge and registration.

Low volume (300 l/ha — 160 trees) and a high volume (1500 l/ha trees) sprays of copper hydroxide and endosulfan are being applied to Fuen trees at two weekly intervals. Both treatments apply the same amount of chemical (eg 20g copper hydroxide), but the low volume mixture (eg 10 g/l copper hydroxide) is five times more concentrated than the high volume (eg 2 g/l copper hydroxide). Sprays were commenced in October and will continue until February in April. Residues remaining on fruit from the two treatments will be compared with the hope that those from low volume sprays are no greater than those produced by high volume applications. Control of the pests using the two volumes and rates will also be assessed.

Although only two chemicals are included in the trial it is probable that results, if positive, will be extrapolated to cover other chemicals used in similar ways on avocados. There is a very good chance that these results will be applicable to other tree crops, as well as avocados. However extension and results will depend on the evaluation by the registration authorities. (Federal State Departments of Agriculture).

Funding for this much-needed trial is being provided co-operatively by Hoechst, Shell, Imchem and Incitec.

UPDATE ON CULTAR RESEARCH

Geoff Hillier
ICI Crop Care Brisbane, Queensland.

Two approaches have been adopted with Cultar research in avocado orchard trials. The first is a soil applied treatment based upon tree size. The preferred approach because of its reliability and influence on yield is vegetative growth. Early research showed some difficulty with this technique but that was mainly to do with application timing.

Further work showed that, providing the material was applied before flushing and was kept wet for a few weeks after treatment, there was no problem. If timing was incorrect or soil too dry, the uptake was delayed and expression of the benefits was also delayed.

Cultar was found to show vegetative growth control of both spring and summer flushes from soil application in late winter or early spring and in the following season there was some benefit in setting fruit.

Hass has been the most thoroughly researched variety and is the only variety on the proposed label. Fuerte has also been researched but has not shown the same responses.

The second trial method of application was by foliar spray. This method had a more instantaneous response when applied at flowering in that more fruit set and some growth control of the spring flush resulted.

Unfortunately, vegetative flushing over the summer after treatment in spring is not controlled and that most probably is the reason much of the extra fruit is shed during hot spells over the late summer. The new growth is competing with the fruit growth.

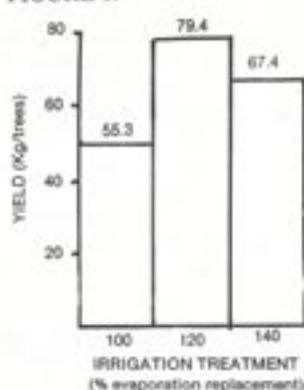
That response is not universal and depends to some degree on the crop loading and severity of hot spells but foliar treatment, in general, provides less benefit than does soil applied treatment.

Progress from here will be into other varieties including those for North Queensland and newer varieties that are replacing Fuerte. Also work is being done to control regrowth after heavy pruning and staghorning.

Registration submission was made in late 1988 but may not be approved until mid 1990 because of delays in the system. Yield improvement and consistent production for an extended period prior to tree thinning or drastic pruning are the key benefits that Cultar will offer avocado growers.

The results of the trial looking at different irrigation rates were: (See figure 1)

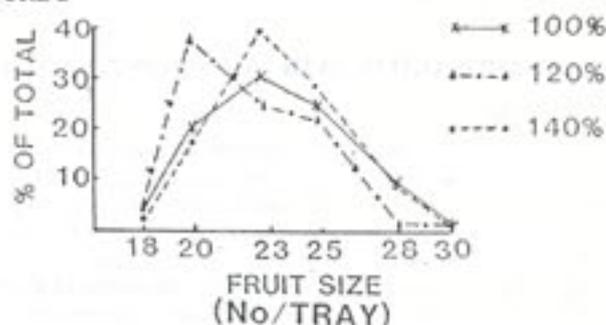
FIGURE 1.



Statistically the yield of the 100% treatment was lower than the other two, although there could be shown to be no difference between 120 and 140%.

The same trends were seen with the fruit size (See figure 2)

FIGURE 2



Clearly there was more large fruit in the 120% treatment than in the other two. The conclusion was that irrigating with 120% of the evaporation rate should be the preferred option.

A follow up harvest in this trial, picked in 1989 and just compiled, confirms that the 120% treatment gives the highest yield as follows: (See figure 3)

Statistically the 120% and 140% treatments were not significantly different, nor were the 100% and 140% treatments significantly different. It is obvious that watering at 120% replacement of the evaporation is better than 100% and there is no value in going any higher as it wastes power and fertilizer (through increased leaching). It was also very interesting to note that watering at only 100% replacement of evaporation produced a much higher percentage of seconds. Seconds fruit was undersized and damaged. (See figure 4)

The follow up 1989 harvest also showed that there was probably not a lot of difference in fruit size between watering rates, although 120% and 140% treatments produced a higher percentage of large fruit.

FIGURE 3.

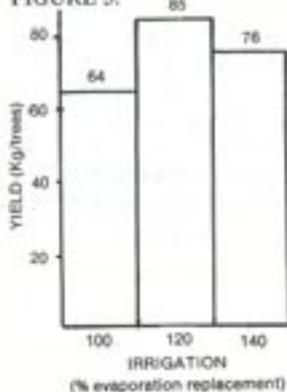
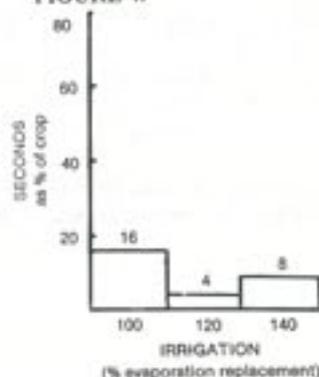


FIGURE 4.



CURING OF 'HASS' FOR COLD DISINFESTATION

Project update: January, 1990.

Andrew Jessup, Research Horticulturist

Since late 1986 significant progress has been made on lengthening the shelf life of 'Hass' avocados while in the same process ensuring complete disinfestation of Queensland fruit fly. This treatment has major implications for the export of avocados by sea freight and in the extension of their period of supply.

It appears, from research conducted at the NSW Agriculture and Fisheries Gosford Postharvest Laboratory, that a pre-storage dip in a warm fungicidal solution will significantly reduce storage rots and chilling injury symptoms when fruit are stored at 1°C for 20 to 25 days. Studies at this laboratory have shown th

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CALCIUM PROLONGS SHELF LIFE.

Dr. Chris Yuen,
Dept of Agriculture, W.A.

Of interest to avocado growers around Australia are the results of trials into prolonging shelf life of avocados by vacuum infiltration of calcium chloride into the fruit. These trials were conducted by Dr Chris Yuen, post harvest research officer with the W.A. Department of Agriculture. Dr Yuen's work was done on Hass and Fuerte varieties. The process, which reduces ethylene production and ripening, delays the ripening of the fruit and has been successful in consistently producing a two (2) week extension of shelf life. He reports very few injury problems and no adverse effects on taste and appearance.

MAKING THE MOST OF WATER ON SANDY SOILS

Greg Luke, Dept. of Agriculture, W.A.

Another W.A. Agriculture Departmental program conducted by Greg Luke (Irrigation Research Officer) involved irrigation trials on avocados growing in the deep sands of our W.A. coast. The results should be of interest to those who grow avocados on sandy soils.

The trials were carried out on 5-6 year old Hass trees about 50km North of Perth, over a period of 3-4 seasons. The first crop was harvested from the trial in 1988.

Water was put on at 100%, 120% and 140% replacement of the evaporation rate with marked differences in fruit yields.

storage for 12 days at 1°C will effectively eradicate from 'Hass' avocados infestations of eggs and larvae of Queensland fruit fly. If fruit fly is present in the fruit at harvest and at packaging export trading to Japan, the USA and New Zealand would be seriously hampered or more likely, not even considered.

To date successful studies have been conducted on fruit which have been dipped for 3 to 5 minutes in 0.05% benomyl at 50°C then stored at 1°C for 16 to 25 days and then ripened at ambient temperatures. Other fungicides—TBZ, imazil and guazatine—hot water alone, i.e. without fungicides, were not as effective as benomyl in the reduction of chilling injury and storage rot symptoms.

There was no development of vascular browning ("pulp spot"), flesh greying ("mesocarp discoloration") or patchy ripening and there was a reduced incidence of anthracnose following this treatment. Trials were conducted on early-, mid-, and late-season 'Hass' from one area in Northern NSW and on mid-season 'Hass' from the Tambourine and Atherton Tableland areas of Queensland.

Using funds granted to the Gosford Postharvest Laboratory by the Australian Avocado Growers' Federation and the Horticultural Research and Development Corporation studies are underway to test for possible differences in response to the treatment by 'Hass' avocado from various other production areas in NSW and Queensland. Additionally, other experiments will commence to study the rate of heat penetration into and out of avocados during the dip treatment and to test for effects on enzymes, proteins and vitamins. It is anticipated that the results from this research will be completed by June, 1990—so watch for further results.

A BIG STEP FORWARD IN AVOCADO CROP PROTECTION

R.H. Broadley,
D.P.I., Nambour, Qld.

The market place is demanding supplies of unblemished, disease-free fruit. At the same time, there is increasing pressure on many avocado growers to limit the number of chemical sprays used in an orchard. This is particularly important, because of increasing urbanisation of rural areas, bringing domestic residences close to traditional farming operations.

One of the solutions to these problems is to develop integrated crop protection systems. These systems are based on pest scouting, determining whether pests are in sufficient numbers to warrant spraying, and deciding on a control measure which may or may not be a chemical spray. Of course, there are exceptions to the above, and pests such as fruit-spotting bugs and diseases such as anthracnose require regular treatments.

The Queensland Department of Primary Industries is actively researching pest management systems, to allow growers to make better pest control decisions. This information will be made available to growers by next season. Two books will be published. The first is called "Protect Your Avocados" and will deal with day-to-day insect, disease, mite and weed control. It will also deal with pesticide application, and safety when spraying.

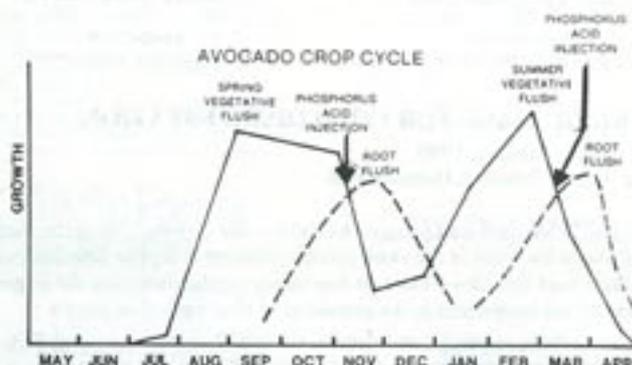
The second book is called "Pests and disorders of avocados", and will have colour photographs (and text) of insects, mites, weeds, fungi, bacteria, viroids and disorders of avocados.

In the meantime, growers may be interested to know that two videos are available for sale from the QDPI Information Centre, Information Branch, GPO Box 46, Brisbane Q. 4001. Cost is \$25.00 each.

The first 25 minute video deals with identification of damage by avocado pests. It is titled "Insect and mite pests of avocados", and is very comprehensive.

A second 25 minute video is called "Management of Phytophthora root rot in avocados". This is a professional production describing most symptoms of root rot, cultural and chemical management of root rot (including tree injection), and rehabilitation of affected trees. There has been a high level of Phytophthora activity in orchards this season, and this video can be of considerable assistance to you.

Note that injections must be timed AFTER the spring flush and AFTER the summer flush has matured for best results.



ENTOMOLOGICAL INVESTIGATIONS IN S.E. QUEENSLAND

Geoff Waite,
DPI, Nambour, Qld

Research into pest control in avocados is presently centred on the testing of pheromones for the trapping of ivy leafroller and orange fruitborer, and consequences of using pyrethroids on avocados.

PHEROMONES

New blends of pheromones for ivy leafroller and orange fruit borer have been tested during the last year. Good catches resulted in the spring with the num caught surpassing previous catches, even during the autumn. The blend is presently being modified by our CSIRO collaborator Dr Chris Whittle—further tests will be carried out during the coming "leafroller season".

PYRETHROID STUDIES

The avocado orchard at M.H.R.S. has been treated on a 2-3 weekly schedule during the spring-summer-autumn period for the past two seasons, firstly with deltamethrin (Decis) and then with fenvalerate (Sumicidin). In both years fruit-spotting bug control has been excellent (better than 99%), but as expected, scale and tea red spider mites have become a problem. Scale populations on twigs and limbs are alarming and it is anticipated fruit will be severely affected by harvest date. Although mite populations have been high on occasions, they have not caused severe bronzing to the trees.

A field trial is being conducted in a commercial orchard to establish maximum residue level (MRL) to enable the possible registration of low volume applications of fenvalerate for avocados.

I have recently put together a submission to the Director of our Division of Plant Industry to invite and support Dr Jeffrey Aldrich of the U.S.D.A. in the Hormone Laboratory, Beltsville, Maryland, U.S.A., for an eight month sabbatical at Maroochy Research Station to assist me with investigations into the use of pheromones of fruit spotting bugs. The proposal has received enthusiastic support and I hope Dr Aldrich will be here sometime in October 1990. These investigations might be regarded as somewhat of a "long-shot" but I believe this pest is of such importance, not only in avocados, but to the whole tropical subtropical tree crop industry of Australia, that we should look at all aspects of possible control, no matter how remote success may seem with our current knowledge.

SUCCESS STRATEGIES FOR NEW "CO-OPERATIVE"

Jim Manwarring,
Department of Agriculture, Haymarket, NSW.

The accompanying table compares some traditional ways of starting and operating co-operatives, with more effective ways that are, in my view, essential to co-operative marketing success in the 1990's.

THE ISSUES	THE TRADITIONAL WAY	"ESSENTIALS" FOR THE 1990's
1. Research	Little research done before the co-operative is formed.	A thorough feasibility study into 11 aspects of forming a co-operative.
2. Capital Investment	Low capital investment.	High equity investment by members achieved, in part, by clever funding mechanisms.
3. Commitment	Vague and loose ties between the co-operative and its members.	Strong producer commitment to finance and deliver 100% production to the co-operative.
4. Producer Discipline	Very little.	Strict disciplines imposed through a contract: to invest money; deliver all of production to co-operative; and to adhere to quality assurance scheme.
5. Board of Directors	Weak on business management skills.	Very strong on business management skills. Two non-producer directors with special know-how.
6. General Manager	Lacking in skills and personal confidence.	Highly skilled, self-confident, market-oriented.
7. Marketing	Guiding philosophy: disposal of a raw material.	Selection of defined customer needs and achievement of competitive advantage.
8. Communication	The key-stone place of communication in a co-operative NOT understood.	Good communications, producer involvement and education seen as the mortar which holds the co-operative together.
9. Strategic Planning	Crop by crop mentality, total concentration on current operations.	Monitor major issues 3, 5, 7 years into future. Examine co-operative's strengths, weaknesses, opportunities, threats.

AVOCADO EXPORT MARKETING

Murray Stewart
Director of Consulting Services
Hall Brown & Stephens, Brisbane, Qld.
BACKGROUND

Under a Federal Government program to develop the export marketing of horticulturists in Australia, a group of Avocado growers, packers and cooperative members from throughout the major growing regions were selected to participate in a program to develop opportunities for their product in export markets.

The group got together at the initiative of Mr Stewart Penny, the chairman of the Sunshine Coast Fruit Marketing Co-operative and formed a steering committee comprised of voluntary representatives from throughout Australia. The group called themselves "Target 90"—a name selected to mirror the government's goal to have in place a committed group of growers and others by the start of 1990.

Throughout the course of 1989, a number of activities were designed and conducted to expose members of the group to facets of marketing such as insurance, retail buyers and their policies, agents and wholesalers (in both domestic Australian market and selected overseas markets). 45

THE PROGRESS MADE

The steering committee and a significant proportion of the Australian avocado industry have been exposed to the information gained from the various export domestic marketing skill development activities conducted under the program. Thus a basic level of awareness appears to have been created amongst a number of growers about aspects of marketing in domestic and export markets ie, they need to consider by way of product quality and marketing options etc. Export opportunities have been identified and analysed in terms of what it will take to enter various markets and the financial returns involved. The different options available to enter export markets were considered and extensive assessment of the New Zealand Apple and Pear Board, with a view to working with them in Europe, was concluded.

The essence the steering committee came to the conclusion that the essence the steering committee came to the conclusion that Australia can compete in European markets on quality, packaging and delivery.

Prices and returns from these markets were quite acceptable providing strict attention was paid to freight, packaging and marketing costs etc.

The lessons learned from analysing fruit marketing in Europe could probably be applied into the local domestic market, with the objective of increasing the potential dollars returned to growers.

However, whilst these issues may seem quite positive, translating them into reality is an entirely different matter.

THE PROBLEMS

Whilst there has been a significant increase in knowledge about many facets of marketing of Australian avocados in export markets (and flow over into the domestic scene), there has also been a gradual problem develop over the course of the project.

The problem is outwardly one of the almost total lack of real commitment and loyalty amongst avocado growers to work toward developing and implementing a marketing system that will provide them with a very significant increase in dollar returns for their efforts and investments.

The most logical and powerful option for growers is to form themselves into a marketing organisation (called in the case of Target 90, a single desk marketing organisation) which will translate the inherent marketing muscle that comes from being able to control the supply of fruit, into a means of improving the total lot for growers.

This lack of REAL commitment appears to be related to the following issues: Can the concept of the growers controlling their destiny actually work?

Can growers make the move from being highly fragmented, individualistic operators of fruit into a central, powerful marketing operation?

The rugged individual and suspicious nature of Australians appears to be a major inhibitor to achieving unity and strength.

Perhaps the unknown and uncharted waters frighten people and works against taking advantage of the real power that growers have at their disposal.

Personality Conflicts Cloud the Real Issues

With such a wide range of people, with various backgrounds and personalities involved in the avocado industry, it was inevitable that personality conflicts would arise as the threat of change becomes more obvious.

Suspicion of the motives of individuals, conflicts of personal styles are just some of the problems that have emerged over the course of 1989.

Interestingly most of the parties in the industry contend that they are working toward a similar end (increasing the lot of growers); there simply is a difference in way in which they see the end being achieved.

The outcome of these problems has been to severely restrict growers from being able to realise the true financial potential of the avocado product.

THE CHALLENGE AHEAD

Avocado growers need to appreciate that there are very significant changes taking place in consumer buying habits, retailing, competition from other fruits in export markets. These changes are already impacting upon the grower and as they do something very positive about the way in which avocados are marketed in Australia and take advantage of export opportunities then their social viability is very much under threat.

There is nothing so constant as change, thus growers need to come to grips with how these changes will affect them in the future. Unless they do so (and very quickly) then the chances are that a number of growers will leave the industry not necessarily by choice.

There is a very real opportunity for avocado growers to significantly increase their returns and all that, that also means for them as individuals. To do so requires unified and committed growers who work together, despite differences in personalities and style, to exercise the marketing clout that they have at their fingertips. To do so must come from the growers — no-one else (Governments will hold their hands and nor should they be expected to do so.

LOOKS LIKE ITS UP TO THE GROWERS!

MARKET FEEDBACK

Charles Cutler, a wholesaler who has specialised in handling and marketing avocados spoke to Don Lavers on the Atherton Tablelands in January. Charles answered some very interesting questions and made comments of interest to the avocado industry.

What are the things that make fruit poor quality?

Poor quality fruit has excessive blemish and breaks down.

What are the trends in price?

During the season, as soon as everybody is in "full stream" and there is overlap of supply between growing areas, the market gets "oversupplied".

Would you agree that often the volume is high in June, for example, and the price is rock bottom whereas, the volume can be high in September, but the price is also relatively high?

Yes, the reason is that during the winter, sales of avocados are slow. In September as the weather warms, sales increase. This is not only prevalent for avocados but for other commodities as well.

Is maturity a big problem?

It is a big problem at the beginning of the season and perhaps at the end of the season, particularly where fruit is hung late. Quality suffers and the product is not in peak condition for consumption.

Immature fruit on markets in February and March is a major problem and should be addressed urgently this season because the large volumes of immature fruit expected mean that repeat sales to consumers are definitely slower.

Can you think of anything industry, groups or individuals can do to promote sales?

Give the customers clean fruit that is mature, without blemish, and the right colour. Let them be able to buy fruit that is exactly as they expect it to be.

Melbourne has always liked green fruit. Is it a preference on the part of wholesalers, retailers or consumers?

It is a preference on the part of retailers. The retailers say that green fruit sells best and when it is displayed beside Hass (even where Hass is cheaper) it still sells first. The public in Melbourne has been educated over many years to prefer green fruit. The green fruit looks more attractive to the Melbourne market.

Are retailers doing a good job in presenting and selling avocados?

The retail trade is doing a better job every year. Competition is very fierce and especially in Melbourne standards are high and increasing. Retailers are more business-like than ever before. There is still room for improvement, though.

What type of retailers are doing the best job?

Some of the new larger entrepreneurial retailers plus the small specialists as well as the retail markets (eg Victoria Markets) are professional. For these markets, the fruit supplied has to be ripened, generally large and of good quality. These markets actually sell very large quantities of avocados and I believe are the best promoters of avocados to the public — better than the supermarkets.

Some retailers say they don't like handling ripe fruit. What do retailers say to you? *Good retailers buy 'green' fruit at the market and request the fruit to be ripened on their behalf. They then tell us when they'll pick them up. Retailers that have little interest end up with wastage due to ripened fruit spoiling. Good retailers place the right quantity of ripe fruit on the shelves to meet the demand. They take some of the beginning of the week and larger loads at the end of the week when demand and throughput are high.*

When did you become aware of the improved sales for ripened fruit?

It all came about when we were trying to improve sales of avocados during winter. It is hard to remember the year, but it was about ten years ago when we started to get fairly large volumes of fruit (especially from the Atherton Tablelands) during the colder months. In the very cold weather, retailers had them for two to three weeks before they even sold them! We needed to develop a system - we started on a small basis. It has meant the success of my business as far as selling avocados.

QUOTES FROM CHARLES CUTLER

"The majority of specialist avocado wholesalers no longer want to handle poor quality fruit. Growers of poor quality fruit actually cost the wholesaler money."

"It is very nice for me to handle twenty pallets at a time from one outlet knowing that quality and presentation is the same at the bottom and the top of each pallet."

"In Melbourne, Fuerte is still the most acceptable variety. Whether that is good or bad is debatable. Order of preference is Fuerte, Sharwil and then Wurtz. Unfortunately, Hass is hard to sell when "green skins" are available. Get rid of varieties like Zutano, Bacon etc."

"Before a grower even plants a tree, he should research thoroughly his chances of marketing that variety and/or product."

KEEPING IN TOUCH

SHORT AND SWEET FROM W.A.

Growers in W.A. have finished what turned out to be a good season price-wise, but this was offset by generally lower volumes of fruit picked. It seems you cannot have your cake and eat it too.

PROPERTY PROFILE FROM W.A.

One of Western Australia's larger growers is Baldivis Estate situated 60 kilometers south of Perth.

The Estate covers 440 acres of which 300 acres is developed.

It was established by Peter Kailis in 1982 and is now approaching full production.

The major crop is Avocados, with 10,000 trees planted, and the Estate also has a 20 acre Wine Vineyard, Limes, Mangoes, Table Grapes, Kiwifruit and Custard Apples. A modern Winery is also part of the Estate.

The soil is Tuart Sands which can only be considered as marginal for Avocado growing. However with the use of fertigation and mulch the trees are growing well and cropping consistently.

Good quality surface water is available and with computerised controllers the whole property can be set up for fertilising in 1-2 hours. In one working day all trees and vines on the estate can be fertigated.

Mulch is mainly wheat straw and chicken manure, and sewage and brewery sludge are being evaluated.

Phytophthora is controlled by injection and orchard hygiene.

Anthraxnose can be a problem in wet years and is contained by a regular orchard spraying program and post harvest treatment.

No insect pest of any consequence needs control on the estate, indeed in most of the Western Australia growing areas insect pests are not a problem.

Force draught coolrooms and electronic weight grading are used to ensure consistent quality and presentation. Ripening facilities are also operated.

N.S.W. — ONE INDUSTRY — ONE REPRESENTATIVE

Orf Bartrop,

Secretary, N.S.W. Avocado Association Inc.

For several years, the New South Wales avocado industry has been represented by two bodies, the Avocado Growers' Association of N.S.W. Incorporated (AGA) and the Richmond Avocado Producers Ltd. (RAP).

The need for a single representative body in N.S.W. had been realized for some time. Both organisations have been co-operating on various projects for some years but it was not until this co-operation culminated into a season-long joint marketing project (designed to increase consumer demand for avocados in the Hunter Valley/Central Coast area of N.S.W.) that the full benefits of a single operation were fully appreciated. It was this marketing initiative that finally convinced members of both organisations to take the process one step further and seek amalgamation into a single representative body.

At a historic meeting on 6 December 1989, the AGA changed its Constitution and effectively formed a new body known as the N.S.W. Avocado Association Inc. This organisation became effective as of 1st January 1990.

The constitutional changes made were designed to take the best attributes of the AGA and Rap and incorporate them into the new Association. What resulted was a recipe for a much more effective and representative organisation that has the capability to surpass the efforts of either of the previous two groups working alone. Members of the RAP have yet to join the new Association but they will be holding a meeting on 31st January at which resolutions will be put to wind up the RAP and transfer all members to the new Association.

1989 — A YEAR OF ACTIVITY FOR THE SUNSHINE COAST AVOCADO GROWERS (SCAGA)

The most notable events for the year just ended were:

The spray controversy on the Blackall Range located in the Sunshine Coast Hinterland was attributed in part to ill-conceived town planning approvals by the Maroochy Shire. This poor planning allowed close rural residential development into a long established prime horticultural area. This spray controversy gave rise to the Shire's intention to introduce a By-law to control the Misuse of Agricultural Chemicals.

Heavy late autumn and winter rains resulted in tree and/or fruit loss.

SCAGA marshalled grower comment and submitted detailed constructive criticism and objections to the Green Paper on Improving Safeguards in the Use of Agricultural Chemicals in Queensland.

1990 CROP PROSPECTS FOR THE SUNSHINE COAST AREA.

Alex Banks, DPI and

John Bolton Secretary SCAGA

The 1990 crop doesn't look like starting the new decade off with a bumper harvest. Prior to Christmas, yield appeared to be down on last years below average crop. However as fruit started to fill they became easier to see and the crop looks like being similar to last year's.

Fuerte has set a low to moderate crop consistently across trees. Sharwil, as is custom, is variable with some good fruit set on trees both on the range and on the coast. Hass is the big worry. It is estimated that 60% of trees are carrying low crop loads, 20% have moderate loads but are in good health. The remainder have flowered heavily, dropped foliage and have set heavy crops without leaf protection. Fruit set between trees on the same property is tremendously variable. This variation extends to different parts of the one tree. Some branches have

clusters of fruit with very little foliage cover. Sunburn is already evident. V has also performed poorly on most orchards around the coast. Fruit set appears to be excellent following a heavy flowering, but most of this develops into cocktails and fell off during October and November. This would indicate a temperature effect on pollination. It is interesting to note that on some Hass are large numbers of cocktails as well. Cold conditions seem to be the reason for the resultant low crop load. Fruit set definitely improves as you travel north to the Kandanga-Gympie area. There are some very good, consistent crops in some varieties.

These observations on crop levels will mean that growers will need to be careful about fertilizing amounts. Applications should be tailored to suit the tree's status with regard to crop load, vegetative vigour, health and with an eye to last year's leaf and soil analysis. Appropriate reductions in fertilizer amount will reduce costs of production in a year when returns from trees may be low due to a low crop set.

NEWS FROM SUNRAYSA

Marion Mathews, SAGA.

In 1989, the avocado crop was variable throughout the Sunraysia area. Growers experienced heavier crops while a few experienced light crops.

The crop was generally mature earlier by about one month which would appear to be the influence of our very mild winter weather, with very few frosts.

The warm humid wet weather experienced earlier in the year resulted in a flare-up of Anthracnose in avocado orchards which, until now has been a concern in Sunraysia. In December and in January, namely the one month when growers with ineffective windbreaks suffered a substantial drop of mature fruit by strong winds. On January the 3rd the temperature reached 47°C, which equalled the last hottest day in January 1939. Despite the harsh weather, January the fruit set for 1990 looks very good at this stage with an 'encouraging' heavy set in most areas. At this stage fruit size is around 7-10 cm long so could still drop if very hot weather occurs. However, this can be alleviated by the use of overhead irrigation to cool trees.

PACKING SHEDS

During 1989 two major packing sheds in Sunraysia went into receivership leaving only one remaining avocado packer towards the end of the season. This was of concern to many growers, as Sunraysia covers a very wide area, including part of N.S.W., and distance for carting fruit to the remaining packer involves a journey of 2 hours or more for some growers. This year there are other packers seriously looking at packing avocados in a more central location, which will alleviate this problem.

AVOCADOS IN THE BUNDABERG DISTRICT

Gary Fullelove and Jerry Lovatt,
DPI, Bundaberg, Qld.

The Bundaberg district is now a major supplier of fruit and vegetables to the eastern states of Australia though it is now supplying markets throughout Australia and overseas.

Climatic information for the city is shown in Table 1

Table 1. Climatic data for Bundaberg

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Mean Maximum (°C)	28.9	30.7	30.0	27.5	24.8	22.4	21.7	23.1	25.0	26.9	28.5	28.5
Mean Minimum (°C)	21.6	21.5	20.3	17.9	14.5	11.9	10.3	11.4	14.0	17.0	19.6	20.9
Humidity (RH%)	67	71	72	71	70	70	67	64	60	59	62	65
Humidity (RH%)	69	69	69	67	66	62	49	46	48	53	57	61
Rainfall (mm)	276	182	139	81	66	67	63	32	37	60	64	131
Wet Days	12	12	2	8	7	6	5	4	5	7	8	9
Evaporation (mm)	270	180	160	126	126	95	106	30	45	100	205	271

Avocados are the major tree crop in the district with about 49000 trees grown on approximately 350 hectares. Of these trees 66% are less than 5 years old and 87% are less than 8 years old. In 1988 117,650 trays were marketed from the area with a crop worth and estimated gross value of \$1.3M.

The four major cultivars are Hass (16892 trees), Fuerte (13131 trees), V (12991) and Sharwil (4319 trees). Harvesting begins in March and is virtually completed by the end of October.

Table 2 shows the annual production distribution from the Bundaberg District.

Pest and disease problems are nothing out of the ordinary from production centres. Anthracnose, Monolepta, and Fruit Fly are the most common considerations.

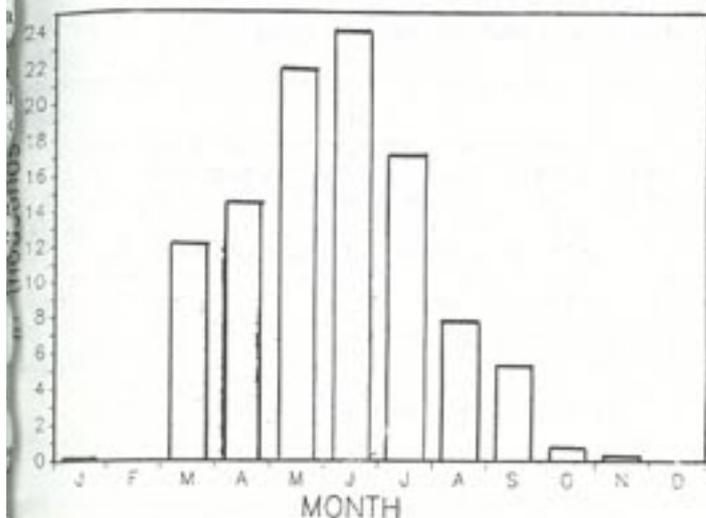
Wind in Bundaberg changes direction and intensity, but is almost always present and this would be considered one of the most important physical factors to control in producing quality avocados. Prevailing winds are from the east to north-east during the warmer months and from the south to south-west during winter. Hot dry north westerly winds are common during October, November and can cause severe stress and fruit drop. Windbreaks and good irrigation systems are therefore essential.

The avocado industry in the Bundaberg district is still young but the expansion seen 5 to 8 years ago is considered over with only small areas of plantings now occurring. However because of the young average tree age, production increases can be expected to continue for several years.

Charles Dimes is the local representative on the Avocado sub-committee of the COD and can be contacted on (071) 56 1207 should growers have any enquiries.

Table 2. Avocado production in the Bundaberg district.

AVOCADOS: 1988



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CONFERENCE '90 — PROFIT THRU QUALITY

11-13 July 1990

Conrad/Jupitons on Queensland's beautiful Gold Coast will be the venue for the most important meeting of avocado growers ever to be convened. The Australian Avocado Growers' Federation believes that the industry is at a critical stage in its development and that any grower who wants to remain viable up-to-date will be attending Conference '90.

Speakers of the calibre of Mark Affleck, Chairman of the Californian Avocado Commission, Richard Davey of Davey Quality Management, John Dermody Executive Director of the Sydney Market Authority, Margaret Thursby of COI Peter Russell Clarke, Professor Ken Tucker of the Australian International Business Centre and Noel Whittaker, well known financial advisor, will address a range of issues influencing the avocado industry, and should stimulate plenty of discussion.

The Organising Committee is endeavouring to have the conference opened by Mr Ed Casey, the new Minister for Primary Industries in Queensland.

High profile QDPI researcher, Tony Whiley, will report on his overseas trip, his observations, and his conclusions on where Australia should be heading.

Sponsors for the conference should contact Ross Boyle directly to ensure maximum exposure at the Conference.

Further details on Conference '90 can be obtained from AAGF Secretary Ross Boyle, on (07) 379 0228.

PROGRAMME

Tuesday, July 10, 1990

5pm - Welcome cocktail party (Conrad Hotel)

Wednesday, July 11, 1990

7.45am Registration

9am Welcome by AAGF president - David Rankine

9.05am Official Opening by the Honorable E. Casey, MLA, Qld Minister for Primary Industries

9.35am Sponsor acknowledgement

9.45am Conference administration

10am MORNING TEA

10.30am Quality in the market place - John Dermody (Syd Market Authority)

11am Quality assurance - Scott Ledger (QDPI), Brian Capamagian and Richard Armstrong (AAGF)

11.30am Implementation of the quality assurance program - Richard Davey (Davey Quality Management Services)

12pm Panel session with morning program speakers

12.30pm LUNCH

2pm Keynote address by Mark Affleck (Californian Avocado Commission)

2.40pm Questions

3pm AFTERNOON TEA

3.30pm Group discussions on day 1

Thursday, July 12, 1990

9am Central discussion on day 1 group discussion

9.30am An introduction to AAGF - AAGF president & Alec Kidd, OAM.

10am State reports

11am Group discussion on morning session

12pm Promotion and the television aspect - Margaret Thursby (COD)

12.30pm LUNCH

2pm Financial Management by Noel Whittaker (Whittaker, Hurst, MacNaught)

3pm Export Opportunities and Strategies - Professor Ken Tucker (Aust International Business Centre)

- 3.30pm **AFTERNOON TEA**
- 4.00pm **Cholesterol Research** - Dr David Colquhoun (Wesley Medical Centre)
- 7.30pm **Conference dinner** with Peter Russell-Clarke (TV Personality)

Friday, July 13, 1990

- 9am **Overseas sabbatical report** by Tony Whaley (QDPI)
- 10am **Central discussion of day 2 group discussion**
- 10.30am **MORNING TEA**
- 11am **Marketing Research** - Scott Turner (QDPI)
- Cold Disinfestation** - Andrew Jessop (CSIRO NSW)
- Crop Protection** - Geoff Waite, Roger Broadley, Alex Banks (QDPI)
- Injection** - Ken Pegg (QDPI)
- 12.30pm **Closing comments**
- 1.30pm **Bus leaves for Avocado Land and Anderson's Nursery** (subject to numbers).
Bus at cost.

Saturday, July 14, 1990

Open farms available for visit on Mt Tamborine. Own transport required. Arrangements at conference.

Registration Fees

Early registrants can take advantage of discounted registration fees as follows:

Registered by March 1, 1990	
\$95 single	\$175 husband and wife or 2 from same company only one handbook supplied.
Registered by May 5, 1990	
\$115 single	" " " " "
Registered after May 15, 1990	
\$140 single	" " " " "

(Does not include lunch or Conference Dinner)

Daily rate

Registered by March 1, 1990 - \$40
Registered by May 15, 1990 - \$45
Registered after May 15, 1990 - \$50.

Accommodation

Fifty rooms have been reserved at Hotel Conrad & Jupiters Casino at the special rate of \$125 for single/double/twin (2 adults & 2 children) occupancy. This rate is available to all delegates pre and post conference

Conrad Facilities

Delegates can enjoy the range of facilities provided by Hotel Conrad which include the following:

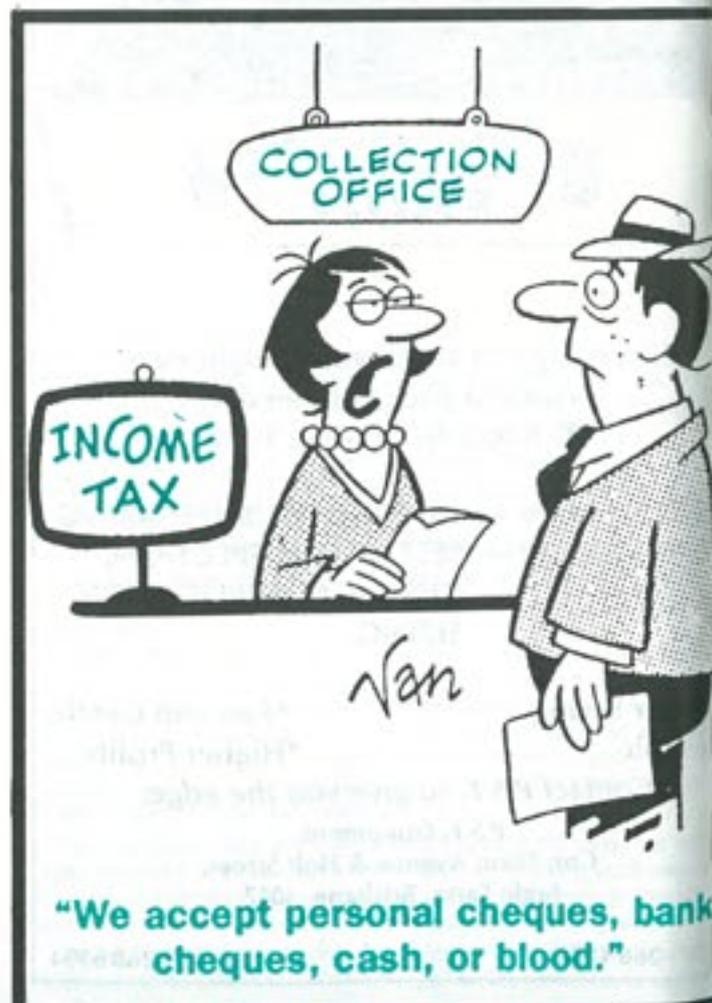
- Conrad's International Showroom features "Hollywood Legends", the multimillion dollar extravaganza with lavish settings, spectacular costumes, dynamic dancing and breathtaking special effects. For group bookings, Conrad has extended to delegates a special group price of \$22. You can receive more information about this on arrival.
- Jupiter's Health Club is located on the Pool Level of the hotel
- Jupiter's Tennis Centre is located adjacent to the Pavilion Convention Centre. The tennis centre features four synthetic grass courts and fully equipped pro shop (including hire of equipment).

Alternate Accommodation

Alternate accommodation can be arranged by delegates, free of charge, through the Gold Coast Reservation Centre on (008) 074 300.

Please return accommodation form with your registration

P.S. Remember, attending conferences is tax deductible.



Registration Form

Fill in, detach and return to:

Secretary, Organising Committee, Australian Avocado Growers' Federation - Conference 90, PO Box 19 Brisbane Market Qld 4109

Delegate's Name.....

Preferred Name.....

Accompanying Person(s).....

Name of delegate's organisation (if applicable)

Address for correspondence

Telephone Number

Intending to attend Avocado Land & Nursery Yes/No

Number.....

Intending to visit farms. Yes/No Number.....

Registration Fee \$.....

Conference Dinner (\$40) \$.....

Total \$.....

(Farm visits are free of charge)

Make all cheques payable to AAGF - Conference 90

A NEW ERA IN COMMUNICATION FOR THE AVOCADO INDUSTRY

The Australian Avocado Growers Federation has launched a new, up-to-date newsletter. The publication is a vital link in the communication process around the industry. Latest technology, progress reports on research, marketing news, points of view, industry news, "reminders" and anything that affects the avocado industry in Australia will be featured.

The first two editions — being printed in March and May — are free but annual subscription will then be \$12 per year for four issues. If you are involved in the avocado industry and you wish to be up-to-date and informed, send in the subscription form NOW so we can put you on the mailing list. Any contributions or advertising enquiries regarding the Newsletter are welcome. Please direct enquiries re: advertising and contributions to

Marie Piccone, Editor, "Talking Avocados"
P.O. Box 1393, Townsville, 4810.
(PH (077) 71 3388, Fax (077) 21 2481).

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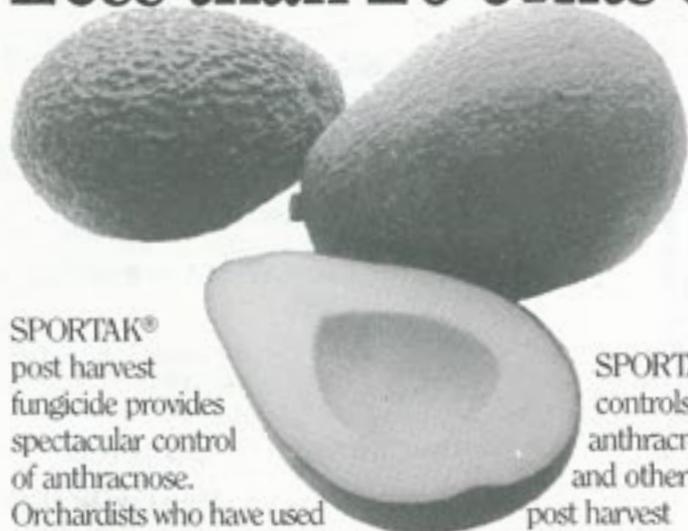
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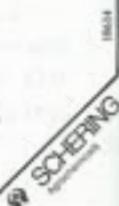
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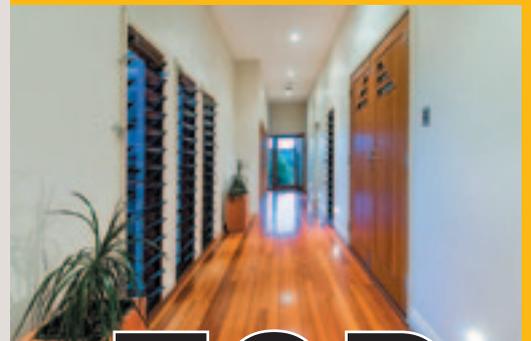
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