



The Australian Newswire

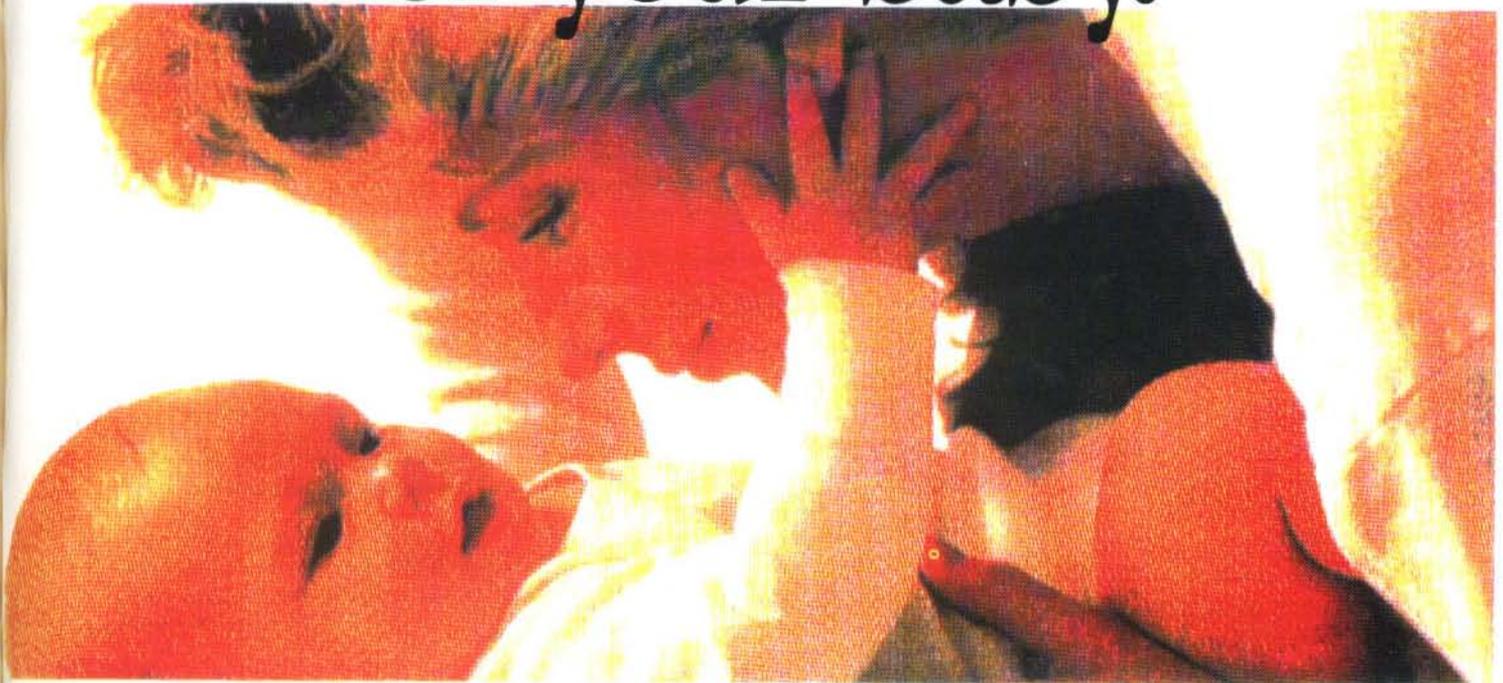
# Talking Avocados



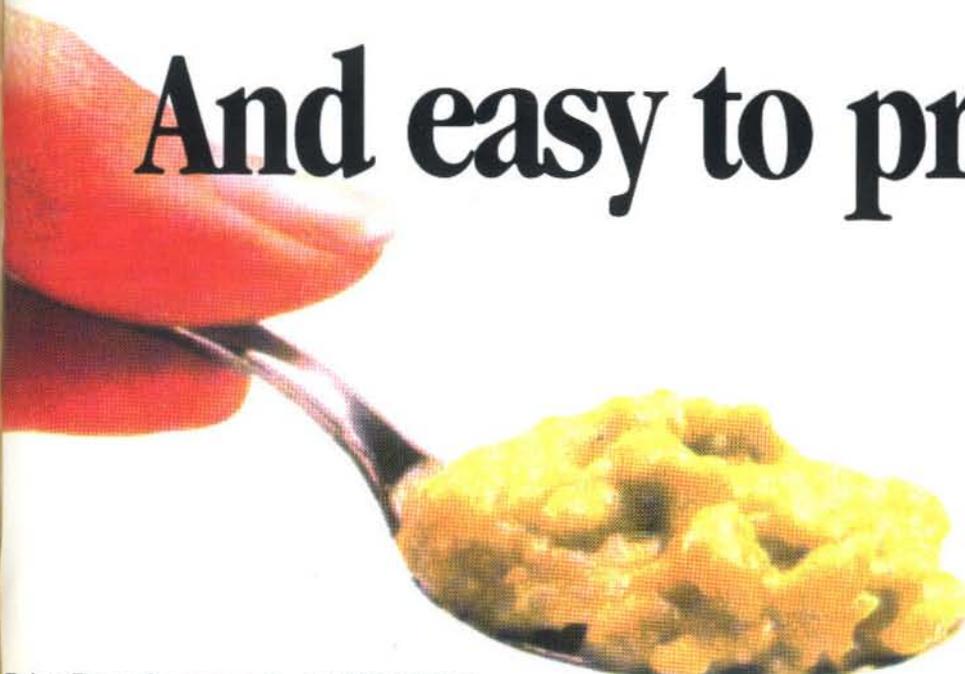
Vol 5 Number 3

August 1994

## Avocados are nutritious for your baby.



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## Table of Contents

World Avocado Congress III.....	3
Conference '95.....	3
Growers Fined For Short-Weighted Cartons .....	3
From Your Federation .....	4
Have Your Say .....	5
President's Address To Industry Leaders.....	6
Do You Qualify For A Telecom Discount? .....	7
Australian Round-up.....	8-9
World News .....	10
Export Benefits Hass Growers! .....	12-13
Access To Overseas Markets .....	13
Asian Language Seasonality Charts .....	13
Exports .....	13
Office Management - Computer Hardware .....	14-16
The Fax Machine - A Wealth of Knowledge.....	17
Market Reports By Phone Or Fax.....	17
Avoman Computer Options And Requirements.....	18-19
Horticultural R&D Spending To Increase .....	19
Overseas Trade Shows .....	20
Avocado Project Approved.....	20
International Experience Joins AHC .....	21
Horticulture Funding Package Announced In Budget.....	21
AHC Board Selection.....	21
AHC Undertakes Internal Quality Program .....	21
International Conference On Clean Food .....	22
Industry Visit .....	22
Leadership Skills Sponsorship .....	22
Fresh Ideas.....	22
Marketing Edge Conference .....	23
China Workshop Evaluation.....	23
AHC Quality Initiatives .....	23
How To Reduce Costs And Increase Your Return .....	24-25
Effects Of Mulching .....	25
Anthracoze - Field Control Is Essential.....	26-27
US To Replace Food Safety Standards .....	27

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This publication is distributed upon the understanding that the publisher is not engaged in legal, cultural or other professional advice. The Editor, Directors and Executive Officers of the Australian Avocado Growers' Federation Inc (ACN Number IA 5122) do not accept any liability for and/or necessary enclose and/or concern and/or support any of the claims and/or statements made and/or views and/or opinions expressed anywhere in any edition of "Talking Avocados".

## Calendar of Events

### August

- 10 **Richmond Branch of the NSW Avocado Association** - meeting Alstonville Tropical Research Station commencing 4.30 p.m.
- 15 **Brunswick Branch of the NSW Avocado Association** - meeting Mullumbimby Ex Servicemen's Club commencing 4.00 p.m.
- 18 **Coffs Harbour Branch of the NSW Avocado Association** - meeting Coffs Harbour Catholic Club commencing 7.30 p.m.
- 25 **Tweed Branch of the NSW Avocado Association** - Meeting Murwillumbar Services Memorial Club commencing 6.00 p.m.
- 29-31 September.  
**1994 Australian Fresh Fruit & Vegetable Industries Conference** - Country Club Casino, Launceston, Tasmania. Contact: 008 030 566

### September

- 1 **Biological Control For Avocado Diseases Seminar** - Maroochy Horticultural Research Station Conference Room commencing 2.00 p.m.
- 12-14 **Australian Avocado Growers' Federation** - Directors meeting, Queensland Fruit & Vegetable Growers Brisbane.
- 13 **Fruit Spotting Bug Workshop** - Conference Room, Queensland Fruit & Vegetable Growers, Brisbane Markets, Sherwood Road, Rocklea commencing 9.00 a.m. **Statutory Report to Industry** - By the AHC and HRDC, commencing 1.30 p.m.
- 19 **NSW Avocado Association** - Special General Meeting, Tropical Fruit Research Station, Alstonville commencing 10.00 a.m.

### October

- 4 **Avocado Growers Association of WA** - meeting Conference Room, Market City commencing 5.30 p.m.
- 28-30 **Agview: The Fantastic Family Farm Show** - Elizabeth Macarthur Agricultural Institute, Camden Park, Camden NSW. Industry and education exhibits complimented by rural entertainment. Estimated attendance for 1994 - 50,000 people from the Sydney area.

### November

- 1 **Avocado Growers Association of WA** - meeting Conference Room, Market City commencing 5.30 p.m.

*Front Cover and Back Cover - Two of the posters being used for the 1994/95 Australian avocado promotion campaign.*

## Conference '95

Do you wish to attend Conference '95 in April/May of next year? Although it is early days yet, the organisers need to have some idea if sufficient growers are interested in journeying to the West. An early response to the flyer sent to you in July would be appreciated.

So far the response has been less than encouraging and the organisers have indicated that if they do not receive more support within

the next month or two, they will be reviewing plans and cancellation is a distinct possibility.

So if you want to ensure the success of the Conference, do not let it languish due to apathy. Return your Registration Of Interest form as soon as possible to Dave Duncan, AAGF Conference Convenor, P.O. Box 105, WANNEROO, WA 6065. The form can be found in the previously distributed flyer.

## World Avocado Congress III

The third World Avocado Congress will take place in Tel Aviv, Israel on 22-27 October 1995.

The Congress will cover all aspects of the avocado industry, including: cultivation, extension, research and development, post-harvest handling and shipping, marketing, consumer trends, and any other issue related to avocado production.

Participants will have an opportunity to view the Israeli avocado industry as an integral part of the Congress program. Current situation and prospects for the future of the world avocado industry will be presented.

Pre- and Post-Congress tours will be offered to participants which will include highlight tourist sites in the ancient Holy Land, combined with a close view at the new technologies in agriculture and New World crop—the avocado.

**Preliminary Acknowledgement:** Those interested in attending the Congress or presenting a paper should send their mailing address to the Congress Secretariat, Dan Knassim Ltd. P.O. Box 57005, Tel Aviv, 61570 Israel. Tel: 0011 972 3 5626 470 or Fax 0011 972 3 5612 303.

**Venue:** Dan-Panorama Hotel, Tel Aviv.

**Climate:** The temperature in Tel Aviv during October can reach up to a maximum of 27°C and a minimum of 18°C. The sky is usually partly cloudy and there is a slight chance of rain.

**Language:** The official language of the Congress will be English.

**Accommodation:** Hotel accommodation at special Congress rates has been reserved at the Dan Panorama Hotel as well as other various class hotels.

## Growers Fined For Short-Weighted Cartons

Two vegetable growers have been fined \$1200 in the Queensland Holland Park Magistrates Court for sending cartons to market that were not up to the stated weight.

Random inspections carried out by the Trade Measurement Branch of the Office of Consumer Affairs in the Brisbane Markets revealed that of 864 inspections, 625

breaches were detected.

Growers are warned that where their packages state a certain weight that those packages meet that weight when they reach the retail level. Approved scales which are regularly checked for accuracy should be used and an allowance made for shrinkage during the transit time from farm gate to the retailer.

# From Your Federation

Since my last report, your Federation Executive has met once to discuss plans for the project "Improving the Management of Avocado Quality During Marketing". Funding for the project has been approved by the DPIE Agribusiness program and the initial survey of wholesalers and retailers has commenced. A project management committee has been formed which will meet regularly to oversee the project. The committee will also consult with key wholesalers and retailers for their input.

The last edition of Talking Avocados featured a new initiative of the Federation; 'pick the tick' labels for avocado fruit. I recently spotted the stickers on fruit at my local Woolworth's store and was very impressed with the overall result. The eye-catching logo should prove most effective in diminishing the avocado cholesterol myth.

The latest in promotions for the industry is a series of one-minute videos on selection, handling, nutritional information and great recipe ideas for avocados. The videos

will be placed in the produce section of 120 avocado outlets Australia-wide along with point of sale promotional materials. The instore videos are a new concept in marketing which have proved very successful in other countries. Consumers will be able to watch how a dish is prepared then pick up a pamphlet with the recipe on it to take home.

Research projects to be funded by HRDC and AAGF this year are:

- Biological control of anthracnose.
- Improved management of avocado productivity and quality.
- Disinfestation of avocados against Mediterranean fruit fly.

The total levy program allocation towards these projects is \$116,898.

The first flyers for Avocado Conference '95 to be held in WA have been distributed. All members of industry are encouraged to attend this event; it will be a great opportunity to see the ways of the west and rub shoulders with key industry people. Further

information is available from Dave Duncan phone (09) 407 5383.

The annual Industry

Leaders meeting with AHC was held in Sydney on 27 June. A copy of the avocado industry address by John Bolton is featured on page 6 of this issue.

The Federation will be holding a teleconference on Tuesday 26 July to discuss current issues.

Finally, I would like to welcome new Federation representatives Phil Franzone (WA), Phil Connor and Allan Campbell (NSW). Their contact details are listed inside the front cover. Please contact your local representative or myself for more Federation news.

See you next edition!



## Fruit Spotting Bug Workshop And Statutory Reports To Industry By The AHC And HRDC

Avocado growers are encouraged to attend this combined event.

<b>Date</b>	<b>Tuesday 13 September 1994</b>
<b>Time</b>	<b>9.00 a.m. - 4.00 p.m.</b>
<b>Location</b>	<b>Conference Room Qld Fruit &amp; Vegetable Growers Brisbane Markets Sherwood Road, Rocklea.</b>

The Fruit Spotting Bug (FSB) Workshop to start at 9.00 a.m. is to be conducted under the auspices of the Co-operative Research Centre for Tropical Pest Management utilising the services of researchers from the Queensland Department of Primary Industries and New South Wales Department of Agriculture.

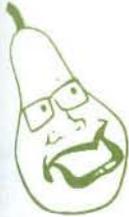
The workshop will cover research outcomes to the present, encourage grower participation in determining potential avenues of applied research and seek guidance in setting directions and priorities for future research.

The ultimate goal is to develop a major research project for consideration by the AAGF and HRDC to be undertaken in the financial year 1995/96.

This is a golden opportunity for growers to directly influence the direction FSB research is to take in the immediate future.

The afternoon session to commence at 1.30 p.m. will include presentations from both the AHC and HRDC on their respective activities for the avocado industry.

Both presentations will be followed by a question and answer period.



## TALKING AVOCADOS - HAVE YOUR SAY

Dear Sir,

Your Sunshine Coast correspondent (Australian Roundup May 1994) may have missed

his/her true calling by growing avocados. Emotive journalism with a touch of the mystery writer, coupled with the satisfaction of taking cheap shots at the Queensland Department of Primary Industries (DPI), may provide some relief from worrying about the weather or the market.

But I am somewhat deflated at having to pass through the pages of 'Talking Avocados' as that anonymous but 'well-known' Ministerial letter drafter. So I confess! I have signed my name to this letter.

The Sunshine Coast Avocado Growers Association wrote to the Queensland Minister for Primary Industries late last year protesting at the transfer of an extension officer from Maroochy Research Station. The protest was understandable given that the extension officer was heavily involved in the AVOMAN project. The only comment I wish to make is that one of my responsibilities is to ensure that all industries have reasonably equitable access to DPI extension services, and sometimes transfer decisions have to be made.

I admit I did take the opportunity to remind your writer that the avocado industry has been well served by DPI. Where would many of your growers be now but for the work of Ken Pegg, Tony Whitley, Marie Piccone, Alex Banks, Shane Mulo, Terry Campbell, Scott Ledger, Peter Hofman, Geoff Waite, Lindy Coates, Greg Johnson, and now Simon Newitt amongst others, over the last decade. And who paid their salaries while they were helping avocado growers stabilise their livelihood against the ravages of Phytophthora and other problems that made life difficult? We greatly appreciate the financial and moral support your industry has provided to the above research and extension officers, but the easiest way to lose government support is to pretend you aren't getting any.

I cannot do better than refer you to a letter to the editor in the same May issue from a New Zealand grower who states "I find it incredible that your industry only has a levy of 3 cents per tray [for research]. Australia is obviously lucky to have QDPI and other States funding research to the present levels". Even a humble Ministerial letter drafter couldn't have put it more bluntly.

The other issue on which the writer castigates me concerns fruit spotting bug. What is "QDPI seems to have its claws into this one as well and our well-known

Ministerial letter drafter does not appear to relish the offer of regional funds" supposed to mean?

Fruit spotting bug is certainly a difficult and complex pest problem affecting avocados and a range of tropical fruits throughout Queensland. All I think I have been guilty of pointing out is that \$5,000, while a generous offer from one group of growers, is unlikely to solve the problem. Your current national levy does not raise enough money to contribute to this project and getting different commodity groups to jointly contribute to resolving a common problem is almost unheard of.

Is \$5,000 a sufficient investment in an attempt to rid your industry of a problem claimed to be causing up to \$2m in lost production each year plus the cost of existing chemical sprays? Again, your New Zealand correspondent puts it into perspective when he equates research funding to other investments you make in your farm—in the long term it is as essential as a new tractor.

The message your industry is getting on the need to increase the level of industry funding of research is going to all industries. If the avocado industry increased its contribution to research and development to 0.5% of its GVP, you would have (after a matching grant from the Horticultural Research and Development Corporation) an amount of approximately \$300,000. With that you would capture an equal amount of funding from research agencies and suddenly you have a solid investment in your future prosperity.

Finally, let me compliment you on your publication. It is a good example of industry communication and one which could be emulated by other commodity groups.

*Dr G.M. Behncken*  
General Manager  
(Horticulture Industry Services)  
QDPI

*Despite the reservation of Dr Behncken, plans are proceeding with the organisation of a Spotting Bug research program. The avocado industry hopes to interest the macadamia, paw paw, custard apple, lychee and research communities in contributing towards a joint venture.*

*If they are successful, current planning has research starting in the 1995/96 financial year with a sum of \$45,000+ being raised annually from participating industries for the duration of the project.*

*The Fruit Spotting Bug Workshop being held on Tuesday 13 September will enable avocado growers to have an input into the project. Ed.*

## ANVAS Accreditation Applications Due

Applications for ANVAS accreditation for 1995 are now being called.

If you wish to become an ANVAS nursery for 1995, please supply the Registrar, Roslyn Stark, ANVAS, c/- QFVG, G.P.O. Box 19, Brisbane Markets, Qld 4106 (Telephone 07 213 2482, Fax 07 213 2438), with the following information:

Name of nursery . . . . .

Postal address . . . . .

Location of nursery if not above . . . . .

Estimated nursery production of avocado trees for the calendar year 1995 . . . . .

(This estimate is confidential and is for administrative purposes only)

You should also sign and date the statement - **I hereby apply for accreditation in the Avocado Nursery Voluntary Accreditation Scheme and agree to abide by its guidelines.**

An inspection will be arranged by a Departmental Officer.

Fees remain the same as they were for 1994, that is a levy of 10¢ for every avocado tree in the nursery at the time of inspection.

Applications must be received by 14 October 1994.

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# President's Address To Industry Leaders

The AHC convened an Industry Leaders' Meeting in Sydney on 27 June 1994. The meeting was attended by the Presidents and Executive Officers of member commodity industries, the AHC Board and principal AHC staff. Mr John Bolton and Ms Sandy Teagle represented the Australian avocado industry at that meeting.

As President of the AAGF, Mr Bolton gave the following address to the meeting:

In considering this presentation I determined it would be of value to revisit my predecessor's delivery at last year's conference.

The AHC will recall that the 1993 avocado rendition was to the point, some would say incisively painful. Then again Mr Malcolm Irving had referred to the old Chinese saying that change represents danger and opportunity to which Mr Robert Mosse had added "and an element of pain".

Well, the pain continued and the partnership nearly severed as a result of the AHC statutory presentation to industry which left growers who attended with the feeling that they were mere servants providing funding to employ yet another isolated horticultural bureaucracy operating out of some high-rise air-conditioned environment.

It was the best thing that could have happened to the relationship. No matter how grim the situation, there is always some way to turn adversity to gain. And the avocado industry did just that. I believe that we now have a better co-operative partnership between the AAGF representing the many disparate avocado production areas across Australia and the Australian Horticultural Corporation.

I have been asked to address what the avocado industry wants to achieve. Put simply, the industry wants to create and maintain a continuous demand for Australian avocados.

We see this being obtained by:

**Firstly** - encouraging a market driven outlook with emphasis on long lines of product showing consistency and quality to meet consumer needs.

**Secondly** - enhancing the viability of growers and other professional sectors of the industry.

**Thirdly** - developing power and financial strength to enable the industry to:

- fund essential marketing and R&D programs,
- improve information transfer and communications, and
- lobby government and other agencies in the achievement of long and short term goals.

*Now where do we see the AHC fitting into the scheme of things?*

Before I address that issue, let me first look at some of the positives and negatives of the Corporation from the avocado industry's perspective.

**Quality** - We at the AAGF like the direction the Corporation has adopted with respect to the avocado industry. This is a positive strength and links with two other positives: Product Management Communications and Product Promotion.

**Product Management Communications** has improved dramatically. A function of eyeball contact, AHC participation in AAGF Board deliberations and out of session telecommunication briefings.

**Product Promotion** - The AAGF appreciates that the AHC would have wished to have engaged some other agency as principal promotions contractor, but deferred to the avocado industry argument. The industry is impressed with the 1994/95 promotions product about to be released and due credit to the AHC. We believe that there will be three winners:

- the customer
- the avocado industry
- the Australian Horticultural Corporation.

On the negative side we perceive that the arena of administration management and associated communications needs attention. There appears to be a reluctance to be open and frank, need I say to be blunt and honest, in financial and procedural matters affecting the avocado industry. Indeed, I myself wonder whether the left hand knows what the right is doing at the headquarters of the AHC and I am concerned that the gains achieved on the product management side may be dissipated due to tensions imposed from within and without.

*Where does the AHC figure in the avocado industry scheme of things now?*

It is an old military adage that you reinforce success. I believe the same applies to business.

In furtherance of our mission of creating and maintaining a continuous demand for Australian avocados, the industry has embraced total quality management. We actually started the process back in 1987 with the introduction of the Avocado Nursery Voluntary Accreditation Scheme designed to provide pathogen free true-to-type nursery stock to industry. The scheme has since been expanded to encompass other quality attributes.

More recently, in co-operation with the HRDC and in partnership with the WA Department of Agriculture, the NSW Department of Agriculture, Queensland Department of Primary Industries and selected consultants, the industry is developing the ambitious AVOMAN project.

As at June 1994, the industry is putting in place a quality trifecta. In partnership with the AHC, utilising funding assistance from the Agribusiness Program, consultants have been engaged to design and implement over a three year period a national training scheme to improve

the quality of Australian avocados during marketing. At the end of the three year period the program is to be ongoing and self-funding.

The next step is the customer. Here we have myths to dispel and information to impart. For the most part the issue is outside the ambit of direct consumer promotion.

The AHC has a proven quality management understanding and access to the necessary communication skills. We want to capture those attributes.

We see total quality management as profit producing for all involved along the production chain from the nursery to the household plate. However, there needs to be understanding and co-operation between all participants in the production chain. Not in one direction, but up and down the line. Currently that does not occur. In partnership with the AHC the avocado industry must redress this situation.

*The raison d'être of the AHC - Export.*

We at the AAGF see many post-overseas trip reports concerning the consideration and potential regarding other products. We are yet to see anything specifically targeting avocados. This should not be taken as a criticism. At this point in time the problems are here in Australia and reality dictates that in partnership we must solve those issues.

To date the AAGF, in concert with the HRDC and the R & D community, has been working towards solving specific potential importing countries' quarantine concerns. In isolation, is this a wise course of action? I know of no single export agent who understands the implications regarding the export of avocados, the sourcing of the fruit or the quality requirements.

Some would have us believe that avocados and Asia are incompatible, notwithstanding that Indonesia is one of the world's largest producers of the fruit and on any one night in South East Asia, the number of tourists is equivalent to the population of Australia.

There is a need to address the export issue and it is not inconceivable that adjustments may have to be made within the AVOMAN Project to accommodate specific demands of the importing countries. It is far better to commence our studies earlier rather than after disasters have occurred.

I have deliberately restricted myself to a few issues. The major concern of industry is to produce a quality fruit and deliver that quality product to an ever increasing number of consumers. To achieve those goals all participants in the production, marketing and consumer chain need to be educated, trained, practised and imbued with a sense of purpose and responsibility. We can only achieve that by entertaining a mutual co-operative and equal partnership.

# Do You Qualify For A Telecom Discount?

Many growers do not belong to a farmer's organisation, not even an avocado organisation. And why not, you may ask. Comments like: "What's in it for me" or "Will it put money into my pocket" are common. Fortunately, many growers are only too willing to join with the idea of contributing to horticulture and in particular, the avocado industry.

Well, now there might be something in it for you! The National Farmers' Federation (NFF) has negotiated a deal with Telecom to give its members a discount on their telephone calls.

Members of NFF affiliated organisations also have access to this discount Plan, some have already applied and others will probably be making application in the near future.

If you are a member of any of the organisations listed you should make inquiries as to the availability of this telephone discount.

To receive a discount, you have to be an eligible voter of one of the listed organisations. But what does this discount Plan offer?

The Plan will provide for a minimum of 6% discount on all Telecom phone calls (except for 0051/0052/0055 calls, 'One 3' calls and Faxstream calls). For those eligible voting members who receive itemised accounts, a maximum of 15% discount

may be applicable to STD and IDD calls. The Plan does not apply to mobile phone accounts or phone rental.

An itemised account provides for a detailed listing of STD and IDD calls in terms of number, destination and cost. You will have to contact your local Telecom office regarding the possibility of receiving an itemised account if you do not already receive one.

The discount will apply to two lines per financial member (which may include a fax line). Members who have more than two numbers will need to have an additional member status to nominate up to a further two numbers.

The Plan will automatically override any existing Telecom discount plans that members may have. It should ensure that members of the Association are achieving the highest level of discount available under these Telecom plans.

## Terms & Conditions

Members who elect to take up this offer will be billed by Telecom monthly for their Telecom usage.

Discounts will apply from the next full billing cycle after the commencement date (i.e. the date the application form is processed by Telecom).

The member may, from time to time by written notice, alter any of the information provided.

Either party may, by notice to the other, terminate the Agreement from the end of the day on which the notice is received.

If you are interested in this Telecom discount, you should contact your

organisation if it is listed below to determine availability, eligibility, any costs involved and to request an application form.

## Eligible Organisations

Agricultural Technologists of Australia  
Australian Alpaca Association  
Australian Cane Growers' Council  
Australian Cotton Foundation  
Australian Dairy Farmers' Federation  
Australian Dried Fruits Association  
Australian Horticultural Growers' Council  
Australian Macadamia Society Ltd  
Cattle Council of Australia  
Deer Farmers' Federation of Australia  
Goat Industry Council of Australia  
Grains Council of Australia  
National Farmers' Federation  
NSW Farmers' Association  
Northern Territory Cattlemen's Association  
Pastoralists' and Graziers Association  
Pork Council of Australia  
Queensland Farmers' Federation  
Ricegrowers' Association of Australia  
Sheepmeat Council of Australia  
South Australian Farmers' Federation  
Tasmanian Farmers' and Graziers Association  
The Australian Veterinary Association Ltd  
The Cattlemen's Union of Australia Inc  
United Graziers' Association of Queensland Union of Employers  
Victorian Farmers' Federation (Inc)  
Western Australian Farmers' Federation (Inc)  
Wool Council of Australia

## SEMINAR NOTICE

**Date:** Thursday, 1st September 1994.

**Time:** 2.00 p.m.

**Venue:** Maroochy Horticultural Research Station, Conference Room.

**Chairman:** Rob Allen, QDPI Plant Protection Unit, Indooroopilly.

**Speaker:** Lisé Korsten, University of Pretoria, South Africa;

**Topic -** "The Development of Biological Control for Avocado Diseases in South Africa."

**Speaker:** Lindy Coates, QDPI Plant Protection Unit and Marcelle Stirling, University of Queensland Microbiology Department;

**Topic -** "Progress Towards Developing Biological Control for Avocado Anthracnose in Australia."

**Enquiries:** Lindy Coates Phone: (07) 877 9468 Fax: (07) 371 0866.

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# Australian Round-up



## Production

Production, especially from the coastal plain near Perth, was severely affected by a storm in late May which gave 15 hours of gale force winds.

Crop losses of over 50% were reported by a number of growers. Fruit quality of fruit left on the trees is of course, adversely affected. Some hundreds of trees were uprooted at affected properties.

## Promotion

A \$20,000 program of store promotions and media contacts is under way, half in June/July, the other half will be staged in September/October. Funding is partly from the AHC and partly from State levies.

## Research

A number of potted nursery trees have been supplied to the University of WA (UWA) for salinity trials.

In a parallel development, our Association is looking to purchase an Enviroscan soil moisture sensing system. It will be used for a 3 year study on tree moisture requirements under the different soil/climate conditions in WA. We are contemplating linking this work with UWA studies on photosynthesis but there are a few problems, funding being one of them.

## Conference '95

Planning is proceeding and flyers have been sent to potential delegates. Letters to various industries seeking sponsorship have also been sent out. There has been some positive response from both sources but not yet anywhere near enough to make a conference viable.

So if you expect to attend but have not yet responded to the flyer, please do so now. At venues in south east Queensland or northern NSW, organisers could afford to rely on reasonable "drop in" attendance because of the high grower population. Here we do not have that luxury. Nor does the AAGF have the funds to spare on lost venue deposits if numbers do not materialise. So it is best if we have a reasonable indication of support well in advance. Please attend to this now.



## Coffs Harbour Field Day

It looked like a property auction on Bruxner Park Road just north of Coffs

Harbour on Thursday 12 May.

It was a Field Day held at the property of Tom and Steve Millward, hosted by the local office of NSW Agriculture and the Coffs Harbour Branch of the NSW Avocado Association. In all, about forty avocado growers attended from the Coffs Harbour and Nambucca regions.

Subjects covered were: cultivation practices in general, pests, pruning, mulching, irrigation, ground cover, reworking amongst other things.

Steve Millward, Neil Treverrow and Greg Ireland were the speakers and our thanks go to them and their helpers for an excellent and informative day.

This was our last outing with David Stevenson from NSW Agriculture who has now retired. David supported the avocado industry as it took hold and although he was not involved to the same extent in the later years, his support did not diminish. We wish him well in his retirement.

Now the battle has started to get a replacement for David. Unfortunately, NSW Agriculture staff are not automatically replaced when someone departs. However, this matter will be pursued, hopefully to a successful outcome.

## Tweed/ Brunswick Field Day

A field day was held at the property of Graham and Viv Anderson at Duranbah on the 15 June. Some sixty people gathered for an interesting afternoon's discussion and demonstration of the art of pruning avocados trees.

Ian Atkinson, the local NSW Agriculture horticulturist, suggested that pruning was necessary to:

- control the height of the trees which effectively increased the fruit bearing area within trees (up to 4 times the yield);
- ease the burden of fruit picking;
- allow more sunlight into the centre of the trees which helps to increase yield;
- allow the trees to rest;
- deter fruit spotting bug by reducing its ability to hide and breed;
- allow spray applications to better penetrate the trees which increases the yield of 1st grade fruit due to better control

of spotting bug and anthracnose;

- increase air circulation which also increases yield by improving overall fruit quality;
- encourages new growth and increases leaf area which in turn invigorates the trees. This will not control phytophthora but gives a balance between roots and foliage leading to healthier trees.

Graham's philosophy on pruning is to prune each year, in this way tree production is not upset. Cuttings are heaped between the tree rows and mulched mechanically. Large stems are discarded.

Branches are cut back to a junction to limit new shoots. The cut is made at an angle to ensure water run-off. The risk of disease entering trees can be reduced by not cutting the knuckle where limbs join.

Graham stressed that along with pruning, it was extremely important, indeed essential, to ensure a good ground cover of mulch. It prevents weeds, helps to retain soil moisture and improves soil texture.

The proof being in the eating, trees planted by his father some 50 year ago are yielding some 30 trays per tree under Graham's pruning and mulching regime.

Those who attended the day would agree it was well worth the effort. It was a delight to just come along and sample the excellent afternoon refreshments put on by Viv and her worthy helpers.

## A Taste Of The North Coast

On Saturday 16 July, the Wollongbar Agricultural Institute celebrated its centenary by holding "A Taste of the North Coast" day at which local producers could display their produce.

The Association sponsored an avocado stall which became the envy of other participating industries. Avocado dip was the main attraction with 40 litres of guacamole being prepared. This allowed over 6,500 dip samples to be handed out from a selection of Hot Mexican, Spicy Italian or Mellow Mild. The Hot Mexican was most popular with many requests for all three recipes.

Congratulations must go to Allan Campbell for organising the industry's participation and his many helpers, especially those who prepared the dips, for a job well done.

Judging by the lack of knowledge by local people about preparing avocado dips, there is room for a consumer education program wherever tastings are being conducted.



### ATHERTON TABLELANDS

For most growers, another season is behind us and indications are that production was close to that forecast.

The Shepard crop was up on last year and volume approached the 120,000 trays anticipated. A lot of new Shepard trees came into production and both yield and quality of fruit from these young orchards was highly satisfactory.

Hass production was similar to last year and the product was well received. A group of Hass growers inspired by the marketing success of SHEPARD AUSTRALIA, formed a marketing group and designed a quality management program which was in place in time for Hass picking. These growers were particularly pleased with the success of their marketing program and are joining a Shepard group in refining their QA and crop forecasting for next season. They will continue to investigate quality and packaging techniques that will make their product more attractive and marketable.

An end of season meeting of SHEPARD AUSTRALIA was held recently at which the outstanding features of the six week season were reviewed. Treena Welch of Interharvest reported on how the promotion proposals were discussed with each of the target customers well in advance, allowing Interharvest to tailor programs to suit their individual needs.

"This enabled us" she said, "to gain the enthusiasm and commitment we needed at the management level. It also ensured that produce managers remained informed and enthusiastic about the product and the promotion through our constant communication with them in all three States.

"One of the highlights of the promotion was to promote avocados at the 'front line' of the market—new mothers. Mothers were informed that avocados are an ideal introduction for babies to solid foods", Treena said.

"The centre-piece of this promotion was the nutritional information leaflet produced by QFVG for the AAGF and we are grateful to the AAGF for making this excellent leaflet available to us."

The meeting congratulated the Interharvest team—Robert Gray, who coordinated the supply of product, as well as Treena—on a highly professional marketing campaign.

Thanks were also given to Irene Kernot and Terry Campbell of QDPI for the

excellent way they co-operated with Tableland growers. Their contribution within the framework of the AVOMAN project had gone along way in helping to define the needs and achieve the goals that had been set at the beginning of the season.

#### Tableland Field Day

A Field Day to coincide with the Tableland visit of Bart Gannon, Industry Manager of the AHC, was held recently at Stan Land's orchard, "Paddy's Green", near Mareeba. Bart reported on initiatives the AHC had taken in co-operation with the industry, particularly concentrating on the DPIE Agribusiness Programs project "Improving the Management of Avocado Quality during Marketing" aimed at expanding consumer confidence and demand.

Bart described how the project was directed towards developing quality consciousness among wholesalers and retailers and in training them in product handling.

He also spoke about the meeting with the AAGF and other sectors of the industry coming up in September which would endeavour to apply some measurement methods to future strategies in the Avocado Industry Strategic Plan. He described how this meeting will concentrate on domestic marketing, product quality at retail level and communication with the industry through Talking Avocados.

Bart said: "There is a need to put exports high on the priority list and to lift the confidence of key growers and marketing groups to make them more export orientated."

#### AVOMAN

Irene Kernot gathered a lot of information on the Shepard crop cycle and this had been programmed into the AVOMAN. Irene had AVOMAN running on a number of computers at the Field Day and growers were shown how to enter their own orchard details and to use the computer to extract useful information. Irene took growers to a number of marked trees in the orchard and asked them to fill out Growth Cycle Recording Sheets. She emphasised how important it is to the AVOMAN program for a wide selection of growers to fill out these sheets correctly.

"The information gathered" she said, "will be entered in the Avogrow module of the program so we will have accurate data as a basis for management recommendations for the entire Tableland area.

"Tony Whiley will be entering the data into AVOMAN as soon as it is received

and regular updates will be available for growers to look at" she said.

Most of the participants in the exercise quickly learnt how to assess the growth stages of the trees even though discussion on the first tree was fierce with estimates of bud break ranging from 20% to 80%. By the time the group assessed the last tree, the assessments were considerably closer.

#### SUNSHINE COAST

Sunshine Coast Avocado Growers Association (SCAGA) Meetings tend to lead to steady progress rather than exciting developments. The June quarterly meeting proved to be an exception to the rule. The meeting was drawing to a close when a resolution was carried calling for a Special General Meeting to progress the formation of a South East Queensland Marketing Group.

Those present recognised that modern practice demands that larger marketing groups are in the best interests of all growers. Elsewhere in Queensland, larger growers are already joining forces. Pressure is now on smaller growers to conform if they are to enjoy similar benefits in the market place.

The prospective project is still in the kite flying stage. An annual throughput of a million trays has been canvassed. Anything up to half a dozen packhouses might be required to service SE Queensland. One such packhouse already exists in Nambour—Sunshine Coast Fruit Marketing Co-operative. Its existence is seen as entirely compatible with the development of a large marketing group project. Indeed, it might be a model from which the remaining packhouses could be developed.

SCAGA's Rules prevent the Association from playing a direct part in marketing but any proposal which is seen to be in growers' best interests will certainly receive wholehearted support. The Special General Meeting will be held at 7.30 p.m. on Wednesday 7 September 1994 in the Committee Room of Palmwoods Memorial Hall. It will be followed after one hour by the usual quarterly general meeting. The requirement is for growers to express interest and enthusiasm for the proposed project. Ideas are also required to improve on the existing ones.

We look forward to hearing how the instigators of the project propose to involve the remaining growing regions of SE Queensland.

# World News



## Mexico - Avocado Exports

*From Fruit & Legumes Distribution No. 4, September 93*

Mexico has only been exporting avocados for the last eight years. Unable to penetrate the USA, who operate a kind of disguised protectionism for their production in the form of a phytosanitary law against the "fly", has been exporting avocados in refrigerated trucks to Canada. Canada took 2,000 of the 14,550 tonnes exported in 1992/93.

Shipped in refrigerated container ships, Japan (1,000 tonnes) and Europe (11,550) are also customers of Mexico. France is the main customer with 9,450 tonnes, ahead of The Netherlands (1,300) and Great Britain (800). The containers stop first in Houston (Texas) (8 days) where they are approved and sealed and then shipped by sea (15 days) to Rotterdam.

In 92/93, ships arrived at a rate of two turn rounds per week but due to timetable problems, there will only be one turn round a week in 93/94 by Seeland who carries for five companies.

The first load of the season arrived on 12 August 1993.

### A Good Opening

The only variety on the market is the Hass. Although it is produced all year round in a part of the world where the seasons do not change, the Mexican avocado starts its new season at the end of July. It is exportable as long as its oil level is adequate, that is, from July to March. The Mexican avocado is packaged in 4 kg batches, graded 2 by 2, from 12 to 24. Some brands even supply a precooled fruit.

From August to October, the opening is very good, especially in France. It has found a perfect niche between the end of the South African and Californian avocados and before the arrival of Spanish and Israeli ones. Sales easily persist up to December for the Hass, a round, black and granular variety. Hass has its unconditional fans and the Mediterranean countries have to send their green varieties first.

### A Different System

There is a basic difference between other avocado-producing countries and Mexico. The others have, in fact, created the avocado production for industrial and export ends. They have, therefore, integrated the functions and the risks taken in commercialisation are born by the producers. As for Mexican production, it is dissociated from the commercial function. Large trading companies have been set up. They buy the avocados at production and bear the risks inherent in changes in the rate of the dollar, in both purchasing and shipping.

Among these groups federated in an export association (Ascaam), about ten are really representative. Three of them represent 70% of volume exported to Europe in 92/93.

Other groups are also very representative and are likely to rise.

The Mexican avocado, therefore, is becoming well-established, whereas 5 years ago it was relatively little known.

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## Hass Shipper To Boost European Exports

*By Steve Anderson from The Packer, 20 June 94*

Agricom S.A., Chile's largest exporter of Hass avocados, plans to ship 5-8% of its 1994 crop to the European Union, even though the prices may be better in the U.S. market.

This market strategy is taken at the suggestion of Chile's Avocado Committee which is urging all of Chile's avocado exporters and growers to do the same.

Chile's Hass avocado exports begin in August and run through late December.

Agricom and most other Chilean avocado growers and exporters are accepting the committee's advice because of the dramatic increase in production anticipated in the next few years. If new markets are not found and courted, the industry could fall victim to its own success.

Chile has 6,000 ha planted in the Hass variety but only 40% of the trees are fully mature and producing to their maximum.

The balance are to come on line in the next few years.

Fedefruta, Chile's growers' organisation, is predicting an 82% increase in Chilean Hass between 1993/94 and 1997/98, from 28,300 tons to 51,400 tons.

Committee Chairman Juan Ruiz-Tagle said the committee is proposing to growers and exporters that a minimum of 5% of the 1994 crop be sent to Rotterdam, no matter what the price situation is in the U.S. market.

With the 1994 crop calculated at about 1.5 million cases, that means roughly a minimum of 75,000 cases would be destined for Europe.

Chile will export between 1.2 and 1.4 million 11.3 kilo cases of avocados to the United States between August and December of 1994. Production for 1995 is estimated at 2.7 million boxes.

### Blessing In Disguise

The U.S. traditionally has been the principal export market for Chile's Hass avocados, absorbing an average of 1 million boxes each season through the late 80's and early 90's. Chile's only competitors in this market are U.S. producers.

The U.S. market is predicted to be much stronger in 1994 because of reduced avocado production. Mexico's avocado production is excluded for health consideration.

Last year, U.S. prices fell to as little as \$8 per box compared to a normal price of between \$24 and \$30 per box.

As a result, exports to Rotterdam jumped a phenomenal amount between 1992 and 1993, from 2,991 four kilo boxes to 573,754 boxes.

Chile anticipates that ultimately the EU will take about 40-50% of their exports.

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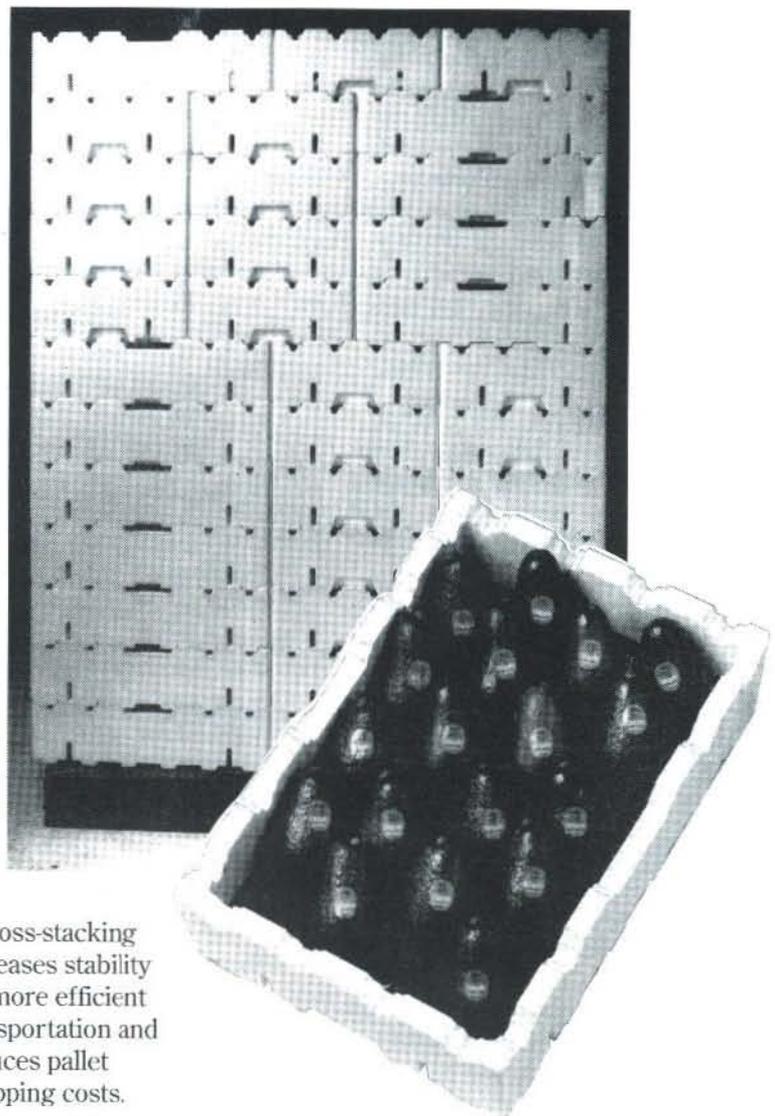
- The clean, white finish of the boxes provides excellent presentation and sales appeal.

- The outstanding thermal efficiency of EPS ensures the products retain coolroom freshness and out-turn for optimum prices.

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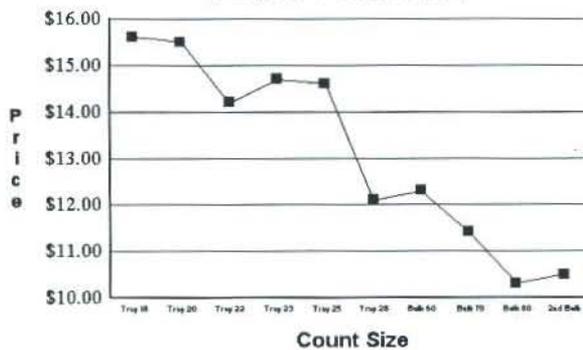
# Export Benefits Hass Growers!

By Alan Glogoski, from the *Fruit Vine Vol. 3 1994*, Sunshine Coast Fruit Marketing Co-Operative

Twelve months ago the Sunshine Coast Fruit Marketing Co-Operative exported its product indirectly through export agents in the wholesale markets. Quantities involved were minimal and these agents were paying us the ruling market price for the product. Consequently, the Co-Op gained no benefit from having its product in overseas markets.

I decided, therefore, that this situation could be, and had to be changed. The "price curve" for Hass at that time looked like this:

PRICE CURVE



Export markets wanted reasonable quantities of 25 and 28 count fruit. This demand satisfied differently by the Co-Op could make a dramatic difference to growers' overall returns.

In July 1993, the Co-Op began exporting independently. By the end of the '93 season some 3,000 trays had been exported mainly to Hong Kong, with a smaller amount to Singapore.

The establishment of export markets is a long and determined process. Trust must be developed. I was fortunate to have come from a background where I had dealt, for many years, with companies which could handle our product, thus the key part of the process was already in place.

The moment the Co-Op began its own export the effect was dramatic. The graph to the right indicates the effect on the Hass pools. The graph shows two pools one week apart. One pool involves export shipments and the other pool involves no shipments. The local market price remained virtually unchanged through the two week period.

This year, as the '94 Hass season approaches, we expect to be able to double our export volume. The benefit of the increased export orders should be seen in

a greater number of pool weeks. Last season we had one buyer in Hong Kong and one in Singapore. This season we will have two buyers in Hong Kong, two in Singapore and one in the Middle East. Other markets are also being pursued.

Export markets should not be looked upon as a panacea for a poor domestic market. It will be a long time before the volume of avocados exported from Australia can have any significant impact on the local market situation. Many quarantine barriers have to be "knocked over" and transport technology has to be put in place before any significant markets will open to us. However, as shown above there is business to be done overseas and we will continue our strong commitment to ensure that this happens and brings maximum benefit to growers.

## Persimmons

This season approximately 40% of our persimmon production went to export. As a result our average "pay out" price for persimmons this year will probably be as much as 6% higher than last year for the better size, good quality fruit.

Persimmons are one crop where the Co-Op would not be embarrassed by a doubling (or more) of volume of product. Our two main markets Hong Kong and Singapore were nowhere near satisfied this season and that is without chasing other, equally as lucrative markets, like Thailand, Malaysia and further away Europe and Canada.

The key is quality. Good size (23 count and larger), clean fruit to be shipped out at about the 75% coloured stage. Give us that

next season and we will be able to improve returns even further. This season was more about proving ourselves to our buyers. Now that we have their confidence even higher prices can be commanded for next season.

## Custard Apples

We are also keen to export as much of our custard apple crop as possible this season and actually have buyers waiting for product from us.

Unfortunately deliveries to date (23 April), have been of a rather disappointing standard and not suitable for export at this stage.

## Mandarins

As the result of my recent market trip to Hong Kong, Singapore and Indonesia, at least 50% of our total mandarin production this season will to export.

A strong demand exists for certain varieties, particularly Nova and Murcott, in those market at very satisfactory prices.

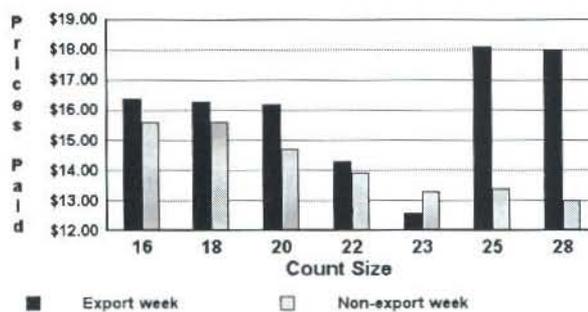
We have buyers for both 1st and 2nd class fruit in all three markets who could take more than double our estimated production for this year and still be looking for more. With the increase in production coming over the next few years, this is most comforting.

We would expect that the Co-Op will pack in the order of 25,000 cartons of Mandarins for export this season.

## Summary

The success experienced in exporting the above products allows the Co-Operative to work its way towards being less dependent on an oversupplied domestic market. Ultimately we must look to being as far as possible, a producer of "value added" fruit. We must utilise technology to produce our product in convenience food style packaging, thus taking ourselves totally away from the vagaries and frustrations of the local "fresh product" market. We must convert our raw product into a processed product that will allow us to be price setters rather than price takers. This, however, will be a slow and expensive

HASS PRICES PER TRAY



## Access To Overseas Markets

BY G. McEvilly, HRDC 15 May 1994

Certain overseas markets require satisfaction that imports from Australia will not pose a risk of importing new pests or diseases. This satisfaction may be provided by demonstrating:

### Asian Language Seasonality Charts

The AHC has produced Seasonality Charts for Australian Fruit and Vegetables in English, Korean, Japanese, Mandarin (Hong Kong/Taiwan) and Indonesian. The top quality charts are double-sided and printed on glossy card in four colours.

The Charts are able to be personalised by Australian exporters and are available from the AHC at a subsidised cost of \$35 for 20 copies.

### Exports

The AHC is currently investigating the opportunities that exist for exporting avocados.

AHC Industry Manager for Avocados, Bart Gannon, has been questioning growers and packers who are presently exporting avocados. He is endeavouring to collect as much information as possible, the pitfalls and potential, the traps and successes.

Bart would like to hear from avocado growers interested in looking at the opportunities for exports with the use of current and new technology. Bart can be contacted at the AHC Ph: 02 357 7000 Fax: 02 356 3661

proposition but we must start now gearing ourselves up for this objective. The first step is to eliminate our debt. The second to build up our capital and finally, pursuing the prospect of a Joint Venture partner who can provide either the capital or the technology which is necessary. The one thing we cannot afford is to be doing the same things we do now in ten years time. If we are, we will be dead in the water, looking at other innovators with envy and wondering why its them and not us.

1. Area freedom status, or
2. Effective disinfestation treatment.

Each individual overseas market has its own particular concerns and requirements.

To date, on avocados, the situation is as follows:

1. Area freedom: the East Coast States have freedom status for Mediterranean fruit fly (Medfly), recognised by NZ and USA but not Japan. Some East Coast areas have area freedom from Qld fruit fly (Qfly).
2. Effective disinfestation treatment: a disinfestation treatment for Qfly on Hass avocados exists, using a protocol established by NSW Agriculture. This may or may not be accepted by Japan without additional work. Some countries may accept the Qfly work as demonstrating efficacy against Medfly. Japan requires a combined submission providing data on both Qfly and Medfly.

Therefore to gain access to the Japanese market, an effective disinfestation treatment for Medfly is required. Additionally, clarification will be required as to whether the Hass work is acceptable for other varieties. Because of Australian internal quarantine requirements, the Medfly work must be carried out in WA. In order to satisfy the Japanese authorities, the treatment protocol for Medfly tests must be identical with Qfly tests.

The Japanese authorities may require further work on stated pests, or on other pests or disease problems that are deemed to be of concern. According to AQIS, it is not possible to gain an indication of any other pests or diseases until after the submission is put forward.

The proposed time frame for the Medfly work is 3 years, after which a combined submission will have to be made. A delay of up to 4 years or more may be expected (on past performance) after submission before a decision is made by Japanese authorities. It is therefore unlikely the Japanese market will be accessible to Australian avocados until 2002 at the very earliest. If exports commence, the industry must fund an inspector from Japan to stay in Australia to oversee every single treatment, as well as funding AQIS charges.

Clearly an integrated approach is required in tackling these overseas markets, involving AHC for market intelligence and planning and AQIS with regard to quarantine questions and representations to quarantine authorities in relevant countries. For further clarification, please contact Chris Hood, Assistant Principal Science Administrator at AQIS. Telephone 06 272 4120, Fax 06 272 3399.

*It seems ironic that Japan imports Mexican avocados and the USA imports Chilean avocados, both from countries with fruit fly, yet neither country will accept Australian avocados Ed.*

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# Office Management - Computer Hardware

By Orf Bartrop

In the last issue of Talking Avocados, the Fax machine was presented as an integral part of good office management. In this issue, computer systems will be discussed with emphasis on the pieces of equipment



that go to make up computer, more commonly known as computer hardware.

Computers are now a common occurrence in many homes where they are used for business, entertainment or a bit of both. Computers can be bought from various outlets—computer specialist shops, super-market chains and mail order—just to name a few. Some computers are cheap and others are expensive and buyers need to know what they are doing to take full advantage of what is on offer.

For those readers who already use a computer as part of their business, these articles will only be of limited value. For those of you who are new to the world of computers, the following article will try to add to

your knowledge and hopefully make buying a computer a little easier.

An analogy between a computer and a tractor will be used to help you to understand the basics of computing, especially when discussing the programs that run on the computer.

In some ways, a computer is much like a tractor. For instance, the same principles apply in buying a computer as buying a tractor—you seek advice from users, shop around and believe half what a salesperson tells you, then decide for yourself what to buy.

These articles will not recommend any particular product or type of system to buy, only give suggestions as to what you should be looking for in a computer system.

## Computer Hardware - What Is It All About?

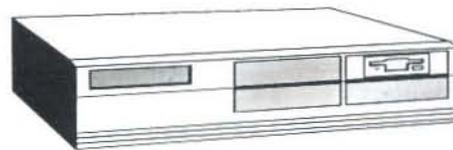
A computer system consists of hardware (the pieces of metal and plastic that can be seen and touched) and software (the instruction set that guides the computer—like the air in the tyre of a tractor, we know it is there but it cannot be seen or touched). The software will be discussed in later articles starting in the next edition of Talking Avocados.

A computer is made of five components, the computer itself (or engine in our tractor) a monitor (the dashboard for viewing the engine output), a keyboard and mouse (the throttle and steering wheel for changing the tractor's progress), and a printer for showing the results of what the computer has done. Each item will be taken individually and explained in sufficient depth to make purchasing a computer more understandable.

Because one of the prime purposes of using a computer to manage your avocado business requires a computer program (or software as it is commonly called) that will only run on an IBM or IBM compatible machine, only this type of computer will be considered. An IBM or IBM compatible computer can be likened to a tractor that runs on diesel fuel, as opposed to an Apple Macintosh computer that runs on petrol. The two are not interchangeable.

Those of you who use an Apple Macintosh computer will be unable to run the AVOMAN software unless you upgrade to

a Macintosh that can emulate an IBM machine—a Quadra or Power PC.



### The Computer

Computer technology progresses at such a speed that by the time you buy a computer and bring it home it is obsolete. What was top of the range just two years ago is now the base line requirement to run some computer programs.

### The CPU

The engine of the computer is the Central Processing Unit (CPU) and this item governs the speed of the machine and how it will operate.

Without going into too much detail, sufficient to say that a computer with an Intel® 486DX33 CPU, or equivalent from another manufacturer other than Intel, is what is suggested. Some may argue that a 486SX33 is just as good, perhaps they are right. However, what about the newer software that makes use of the DX's additional capabilities?

The 33 on the end designates the speed at which the CPU runs, the 33 standing for 33 MHz or 33 million clock cycles per

second. A computer running at this speed will operate sufficiently fast with today's software so that you are not sitting around for long periods waiting for something to happen. Anything slower, be prepared to wait quite awhile.

You may think that at this speed, actions would happen instantaneously and that this article exaggerates the requirement for speed. Be advised, some software processes are so immense that they display an hour glass to show the computer is doing something. Who wants to watch sand passing through an hour glass?

Some salespersons will tell you that a computer is upgradable to a faster CPU. This may be so but be warned, in two or three years time when you decide to upgrade, the components available then may be so advanced that they will not operate in your machine. If you want a faster machine, best to buy it now.

### The Bus

The Bus is the main link between the CPU and other components of the computer, like the electrical wiring of our tractor. However, unlike the tractor's electrical wiring, signals in the computer are sent electronically along parallel paths to be processed by the various components that may run at speeds slower than the CPU. Therefore the speed at which this processing can be done affects the overall speed of

## OFFICE MANAGEMENT

the computer. The number of parallel paths also affects overall performance.

The standard bus system is known as an ISA bus (Industry Standard Architecture). To ensure satisfactory performance, the computer should also have the capability of running a bus called a Vesa local bus, it will pay in the long term in increased computer speed.

### Memory

Memory is probably one of the most important items on your shopping list. Skimping on memory may cause some software programs to run like treacle. Some software that will be suggested requires 4 Mb (4 million bytes) of RAM (Random Access Memory) to run. As this is a minimum requirement, it is better to exceed this figure and go for 8 Mb of RAM. Probably the salesperson will again tell you that memory can be added at a later stage but are compatible chips of the same speed still available? If you can afford it, it is best to buy what you want right from the outset.



### Hard Disk

The hard disk is a device for permanently storing all the software. It is made up of a hard disk drive and an interface card. The standard interface is known as an IDE (integrated drive electronics) and is satisfactory for an office computer. There are others that enable data to be transferred more quickly but they are not really cost effective for our purpose.

The drive itself has to hold all our software programs. There is a law that states: "Data will increase at a rate guaranteed to exceed the space available within three years". From experience, the author has found this to be so. Therefore, a storage capacity of at least 200 Mb should be considered the minimum contemplated.

Some may argue that this is an overkill. Consider that this article is being written on an old word processor that was bought seven years ago and it occupies some 1.8 Mb of disk space. At that time, it was one of the top word processors. Today, some of the top word processors occupy as much as 35 Mb's—a twenty fold growth in seven years. This is a good example of how software increases in size as new facilities are added. Just as an aside, this word processor is alright for articles but not for writing

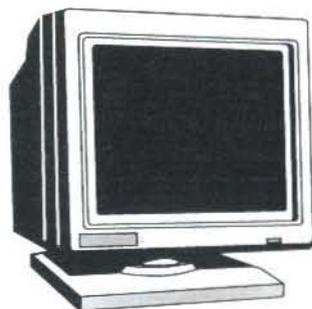
letters in this day and age. Yes, the author has two word processors.



### Floppy Disk Drive

A floppy disk drive is necessary in order to input certain types of data into the computer. There are two types of floppy disks, a 3.5" and a 5.25". Note that the old imperial measurements are still used.

Although smaller in size, the 3.5" is more modern and is capable of holding more data. Only one 3.5" floppy disk drive is necessary and it should be capable of taking a 1.44 Mb floppy disk.



### Monitor

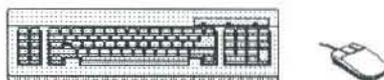
When selecting a monitor, consideration has to be given to the use to which the computer system will be put. In our case we will be running in a graphics environment rather than a text environment. No, you will not be required to draw things, it is just an expression that denotes how data is presented on the screen of the monitor.

This means we will require a monitor that has a basic resolution of 640x480 pixels, commonly known as VGA (Video Graphics Array) resolution.

The monitor should be a 14" colour monitor with a scan rate of 70 Hz. This will give a flicker free presentation.

A graphics card is used to drive the monitor. Select what is known as a "windows accelerator card" with at least half a megabyte of memory.

Remember, these are suggested minimum requirements and one megabyte would be preferable.



### Keyboard and Mouse

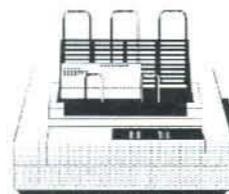
The keyboards used on Australian computers are of standard American design. Try typing on the keyboard and make sure you are comfortable with its feel.

A mouse is a device used for pointing to things on the monitor's screen. It is called a mouse because it has a body vaguely similar to that of a mouse and the cable connecting it to the computer resembles the tail of a mouse. Any standard two button mouse will be satisfactory but again, make sure you are comfortable with its feel. A Microsoft® compatible mouse would be satisfactory.

### Printers

You will need a printer to be able to print out certain information from the computer.

Basically, there are three types of printers, dot matrix, bubble or inkjets and laser printers. How you intend to use the computer will dictate the type of printer you will require. A dot matrix may be suitable for AVOMAN but not for other uses.



### Dot Matrix

Dot matrix printers can be considered high-tech relatives of the typewriter. They

16

## Hardware Requirements

To summarise the article on computer hardware. The suggestion is that those wishing to buy a computer to run the office management software suggested in this series of articles should look for a computer with a minimum of:

- 486DX33 CPU,
- ISA bus with Vesa Local bus system,
- 8 Mb of RAM memory,
- 200 Mb disk drive,
- IDE interface card,
- 3.5" floppy disk drive,
- 14" 70 Hz VGA colour monitor,
- "windows accelerator card" with 512 Kb of memory,
- MS compatible mouse, and
- bubblejet or inkjet printer.

Before you go out and buy a computer, consider what software you will require and buy the lot as a going concern. This means waiting until after the next issue of Talking Avocados, but the wait will be worth it.

15

form an image by hitting the paper through an inked ribbon with an array of pins. Some of these printers have nine pins but a printer with a 24 pin printhead should be considered the minimum for our requirements.

Although dot matrix printers are about the cheapest printer to run, they are only considered to produce Near Letter Quality printing. In other words, the result is not as good as a typewriter.

Dot matrix printers have a tractor feed system and also will print on normal A4 sheets of paper. They are noisy and slow when compared to other types of printers.

A dot matrix printer could be considered adequate for our task if the computer is only going to run the AVOMAN software. If you are considering running the other types of office software that this series of articles will cover, a dot matrix printer is not adequate for the task.

### Bubble or Inkjets

Bubblejet or inkjet printers work almost silently and have a print quality to rival the more expensive laser printers. They produce print by squirting ink onto the paper using an electromechanical pump or a heating element that briefly boils the ink in the nozzle thus driving out ultra fine droplets onto the paper.

Inkjet and bubblejet printers are faster than dot matrix printers and slightly more expensive to run. As to which is better, inkjet or bubblejet, it is six of one or half a dozen of the other. Both are ideally suited to business printing.



### Lasers

Laser printers are at the high end of the market both in quality of print and price. These printers would be a luxury in our case and unless you are considering using your computer for high end graphics such as desktop publishing they should not be considered.

### Buying a Computer

A computer system is made up of hardware and software, the software governing to what use the computer is put.

Until all factors are known, it is impossible to buy a computer system that is adequate for the job but does not cost an arm and a leg. Therefore, before rushing out to buy a computer, consider waiting until the articles on software requirements have been published, they will affect what you buy and how you buy it.

## MultiMedia - Not a Requirement

MultiMedia is a hardware device that enables a computer to read CD-ROM disks. It consists of a CD drive, a sound card and a pair of small speakers. This piece of hardware is not required for our office computer but....

The reason this equipment is mentioned is that it is much cheaper to buy a computer with MultiMedia installed rather than have it installed later. Many computers are now sold with MultiMedia already installed, mainly due to its growing popularity.

MultiMedia opens up a whole new world. Just slip in a CD disk and your computer can show information in the form of text (the written word), graphics (pictures, either stills or motion pictures—yes, just like at the movies) and sound. It will even play an ordinary sound CD.

An example of CD-ROM facility is: Groliers put all 21 volumes of their Encyclopedia on one CD-ROM. It includes thousands of pictures and high quality sounds. This means that when looking up a lion for instance, you not only read about

the animal, it shows a picture and you can hear it roar. The Encyclopedia even shows a film clip of the 1937 Hindenburg catastrophe at Lakehurst, USA—both sound and pictures.

Also available on CD-ROM are educational learning courses, art works, reference material, home doctor, dinosaurs, biblical stories including nine versions of the bible, hobbies, history, languages, even the complete listing of all Australian telephone numbers. There are many more subjects with thousands of titles including games of all sorts. Kodak even will print your photos on a CD so that you can view them on your computer.

However, it would be unwise to let the kids loose on your office computer. They could easily destroy your AVOMAN data.

Things to watch out for when buying a CD-ROM are: make sure the drive is double speed or better with a minimum data transfer rate of 300 Kbyte/sec and that the sound card is 16 bit (16 bits = 2 bytes), if good quality sound is required.

## Modems Another Piece Of Hardware

Part of the requirement of the AVOMAN software will be to communicate information from growers to a central computer and receive data from that computer. Logically, automatic communications via the telephone line would seem to be the way to go but for technical reasons this may not be practical. Regardless, a floppy disk communication system will be available.

The designers of AVOMAN are still wrestling with this problem and it may be some considerable time before a final decision is made. It would be further into the future before such a facility was added to the AVOMAN software.

If such a facility was added, it would require each computer to be equipped with a device called a modem. The modem would then be connected to your telephone line thus enabling your computer to talk to other computers.

Nowadays, most modems also include a fax facility that allows the sending and receiving of fax messages. This fax facility does require the computer to be left running 24 hours a day unless the modem has a memory feature which stores incoming faxes, displaying them when next the computer is turned on.

Like other computer hardware, modems have undergone a tremendous leap in technology in the last few years and this trend is continuing.

However, modems are notorious for their stubbornness to work, mainly due to the electronic differences between the many brands of computers and similar differences between modems. The combinations are enormous.

As it could be extremely difficult for a computer novice to use a modem, the fitting of such a device at this stage is not recommended. Wait until you have used your computer for a year or two and if AVOMAN has been modified to accept data via this method of communication, then have a modem incorporated. A modem is a plug-in device and is easily fitted to a computer. However, insist that the salespeople demonstrate the device working on your computer before you part with your money.

# The Fax Machine - A Wealth of Knowledge

By Orf Bartrop

Last issue, our office management section dealt with facsimile machines and in particular, what to look for when buying a machine.

For those of you who already own or have bought a machine since that article, now is the time to investigate what you can do with it to improve your business productivity.

A fax machine is designed to both transmit and receive documents. What you transmit will depend to some extent on how you market your fruit and how you interact with your market agent or packing company.

What data you can receive is another matter—the world is a big place!

Telecom runs a service called INFOFAX which is an easy to use fax-based information bank that most fax machines can access.

Some of the services provided are:

- Rural advertising of farm machinery, livestock and agricultural commodities.
- The Australian Commodity Advisory Service which deal with travel and financial deals, property, best buys supplier and best buy list.
- The Bureau of Meteorology Information lists fax numbers for the latest satellite picture for the full earth and Australia, weather and forecast charts, regional forecasts, ocean forecasts including swell charts, cyclone warnings and advice, seasonal climate outlook, daily rain bulletin and four day detailed rural forecasts. All told, there are 41 services provided by the Bureau.
- The Retail Banking Market which gives term deposit and mortgage rates.
- The DPI provides 7 services including a DPI menu, drought declared areas and details of a Rainman software package.
- iFax which has 16 services ranging

from Stock Exchange reports to Australian Government Printing information, Barter card, and a listing of fraudulent fax directories.

- The Market infifax service which provides information on wheat and cotton markets, foreign exchange rates and interest rates from around Australia.
- Telecom, which offer a Fax-on-line diagnostic service for correctly adjusting your fax machine.

A complete list of fax numbers for all these services is included in a document which can be obtained free of cost by setting your fax machine in the poll mode and dialling **1800 808 096**. If your machine does not have a poll mode, dial the number and then press your "start/copy" key. The process is automatic from there on in.

You will receive a seven page listing with the fax number to call, the cost per minute and the approximate transmission time for each service.

## Market Reports By Phone Or Fax

The following is a summary of market reports available by phone or fax for the main Australian markets.

There are many services available and their costs vary considerably. For instance, Flemington Market prices are issued at 5.00 a.m., again at 8.00 a.m. as well as at 10.00 a.m. These can be obtained on a daily basis, 1, 2 or 3 days per week or all week.

Subscription rates charged may be quarterly or annually. Also published on Fridays are weekly reports giving the weekly price spread; high, low and average prices; comparative data on average prices and receipts for the last six weeks, and receipts for the current week by State of origin.

Because the spread of services is so complex (yet flexible enough to suit most grower's needs), those interested should telephone or fax the appropriate listed market contact for full details of the service they supply.

Mister Fresh is an independent horticultural consultant that run many services including a market intelligence service for Brisbane and Sydney markets.

### Brisbane Markets

Contact: Trevor Brewer, Market Information Services 07 379 4576  
Fax: 07 379 4103

**Faxed reports:** Available for fruit daily. Also available, a single crop report on a daily or monthly basis.

#### Recorded messages:

Qld Fruit in the Brisbane Market 0055 20401  
Interstate fruit in the Brisbane Market 0055 20432

### Sydney Markets

Contact: Tony Moody, NSW Agriculture 02 764 3516  
Fax: 02 763 1773

#### Faxed report:

Available for fruit - Daily Early Report 0055 25286

#### Recorded messages:

Main Fruit 0055 22759  
Full Fruit A-K 0055 22761  
Full Fruit L-Z 0055 22762

### Melbourne Markets

Contact: John Fanning, Market News Service a.m. 03 687 2510  
p.m. 03 651 7480

**Faxed reports:** Available for fruit on a daily basis.

**Recorded message:** Fruit 0055 31094

### Adelaide Markets

Contact: John Lewis, SA Farmers Federation 08 232 5555  
Fax: 08 232 1311

**Faxed reports:** Available for fruit on Mondays, Wednesdays and Fridays.

**Recorded message:** All produce 0055 31532

### Perth Markets

**Faxed report:** No fax service offered.

**Recorded message:** Fruit report 0055 83298

### Mister Fresh

Contact: Arch Martin for a list of services 07 379 9333

# Avoman Computer Options And Requirements



by Shane Mulo

With many growers having now seen or heard about the AVOMAN software, a common question team members are being asked is, "what sort of computer is required to run it?" Although using AVOMAN on your own computer is probably the best option for most people, there are also a number of other ways you can get access to it.

If you are a member of a regional productivity group (RPG) then you may be able to run AVOMAN on a shared computer within your group. Alternatively you may prefer to have a consultant run your farm records through AVOMAN for you.

If none of these options appeals to you, AVOMAN is still accessible through the project team. Staff at Maroochy Research Station are in the process of establishing a public access computer in the Farmer's Information Centre on which AVOMAN can be run. For those who do not live near the station, records can be mailed in and processed, then information returned for a small handling fee.

If you currently own or are thinking about buying a computer for running AVOMAN, the following guidelines may help. Firstly a word of warning for those who feel queasy at the sight of jargon: it isn't possible to accurately describe a

computer without using a little of the language that the information technology industry thrives on. If you are thinking about buying your first computer and want to learn more about them beforehand, there are many high quality magazines available (e.g. *PC User*) which you may find useful in deciphering computer jargon.

There are currently two major types of computers on the personal computer (PC) market, Apple and IBM (or compatible). Unfortunately these two types of computer are not compatible with each other.

The vast majority of home and small business computers are IBM compatible and it is this type of machine that AVOMAN is designed to run on. We simply don't have the time or resources necessary to create an Apple version of AVOMAN.

The news is not all bad for Apple lovers as some models such as the Quadra and the new POWER PC offer IBM compatibility or emulation. If you are an Apple user who would like to use AVOMAN and are contemplating upgrading your Mac to a POWER PC, talk to your Apple dealer about test running AVOMAN on the new machine before you buy. This applies to any IBM compatible software you may wish use.

As with most other computer programs, there are some computers which will run AVOMAN adequately and there are others on which it will run really well. The speed of the central processing unit (CPU) and the amount of available random access memory (RAM) are the critical factors when running any modern software. Anyone who has tried to run Microsoft® Windows™ on their 80386-SX will agree that although it is technically possible, you need lots of patience to use it regularly on this type of machine.

With this in mind, I have developed two sets of guidelines. The first describes the bare minimum computer on which AVOMAN will run and the second describes an ideal computer for AVOMAN. Please don't skip straight to the second set of guidelines and call your nearest dealer.

The ideal computer on which to run AVOMAN may not necessarily be the best computer for you. Before making any purchase decision, you should consider your other business and private needs. AVOMAN is not and never will be a one-stop-shop for farm management.

Many people these days use word processors, spreadsheets and databases to help them manage their business, so keep these requirements in mind.

Those of you who are familiar with computers will note that the ideal AVOMAN computer is not the latest or greatest available. While the very latest computers will run AVOMAN very well, the cutting edge of technology is expensive and unnecessary for this application. In making the ideal recommendation, I have tried to balance performance and value for money.

As you can see from the Table, AVOMAN requires a certain standard of CPU in order to run effectively. Most IBM compatible computers sold these days will be suitable. AVOMAN also relies heavily on colour to convey information so a colour monitor is highly recommended. To use AVOMAN you must also have a mouse. If you currently have a computer which doesn't have a mouse, you can buy one for as little as \$25.00.

If you don't want to bother with any of these details when buying a computer, a good rule of thumb is to buy one which will

**AVOMAN COMPUTER REQUIREMENTS**

Feature/Component	Bare Minimum	Ideal Computer
Central Processing Unit (CPU)	80286 <sup>(1)</sup>	80486 <sup>(2)</sup>
Random Access Memory (RAM)	2 megabytes	4 megabytes <sup>(3)</sup>
Hard disk	20 megabytes	200 megabytes
Floppy Disk	3.5" or 5.25"	3.5" (1.44 megabytes)
Graphics card	EGA	VGA (or SVGA)
Monitor	Colour <sup>(4)</sup>	Colour
Mouse	Microsoft or Logitech compatible	Microsoft or Logitech compatible

- (1) Avoman can be used on most 80286 computers, however, owners of some older 80286 computers may require assistance to configure AVOMAN.
- (2) There are many models based on the 80486 chip, any of which is suitable for running AVOMAN. The choice of which one to buy depends on your budget.
- (3) Although 4 megabytes of RAM is adequate for running AVOMAN, many new computer programs (particularly Windows) run much better with 8 megabytes of RAM.
- (4) Notebook computers with VGA liquid crystal displays are also suitable though not as easy to use as colour. In this case, an external colour monitor is recommended.



## Horticultural R&D Spending To Increase

Spending on horticultural research and development will increase by over \$5 million this year to almost \$21.5 million, Horticultural Research and Development Corporation Chairman, David Minnis said today.

Mr Minnis welcomed the increase and said it reflected the increasing commitment in the horticultural industries to research and development.

Mr Minnis said the HRDC Annual Program outlining corporation priorities and spending had now been approved by the Minister for Primary Industries and Energy, Bob Collins.

Under the approved program the Corporation will initially provide support for 397 projects worth almost \$16 million, with further funding being allocated to support additional important projects throughout the year. This strong growth in expenditure is underpinned by an expected growth in levy receipts to an estimated total of \$3.135 million (up 22%) and a 13% growth in voluntary contributions to an anticipated \$7.7 million (up 13%).

Mr Minnis said the Corporation had continued to encourage and assist industries to

participate in the R&D activities of the HRDC on a long term basis.

He said the development of the HRDC Annual Program reflected an ongoing commitment by the Corporation to foster efficient, competitive and adaptable horticultural industries.

"The HRDC program will help ensure the Australian horticultural industry is able to function at its full potential, putting money back in the pockets of growers and assisting overall economic growth.

Mr Minnis said significant progress had been made within the program to co-ordinate and rationalise the number of research areas.

"As well as establishing collaborative breeding programs in a number of industries such as potatoes, and apples and pears, there is now even greater encouragement of inter agency co-ordination and co-operation throughout the research program.

"In this area, the Corporation will also continue to support research co-ordination meetings and reviews in order to avoid duplication and ensure the program is continually operating at peak efficiency.

Mr Minnis said the Corporation would continue to evaluate the benefit and effectiveness of its R&D activities, with a planned review program for selected projects and strategic reviews and workshops in key areas to assess program development.

A breakdown of the proposed program by product group is as follows:

Apples and pears	\$1,165,000
Citrus	\$2,031,000
<b>Avocados</b>	<b>\$135,000</b>
Nashi	\$20,000
Cherries	\$28,000
Other Fruits	\$3,027,000
Macadamias	\$291,000
Chestnuts	\$67,000
Other Nuts	\$399,000
Mushrooms	\$362,000
Processing Tomatoes	\$419,000
Potatoes	\$2,953,000
Other Vegetables	\$1,659,000
Nursery	\$578,000
Cut Flowers	\$263,000
Turf	\$361,000
General Horticulture	\$1,671,000
Other products	\$500,000

easily run Microsoft® Windows™ as it is the most popular operating environment for personal computers at the moment. If a computer can easily run Windows™ it will also be capable of running AVOMAN.

These days, strong competition exists in the computer industry, so before you buy anything get lots of advice and quotes and "try before you buy". Very few people would buy a car without taking it for a test drive or looking under the bonnet.

Computers may all look similar on the outside, but inside they can vary dramatically. You really need to give careful consideration to the little details as these often make the most difference.

The best favour you can do yourself is ask lots of questions. This will not only

help you understand what all of the jargon means, but it will also tell you how much the suppliers really know about what they sell (*those who really know what they are talking about should be willing and able to translate the jargon into plain English—these people are generally the ones worth dealing with!*).

Finally, if you own a computer that is less than 4 years old it may be worth upgrading rather than replacing. The choice to upgrade however depends on many factors and must be considered very carefully, so get plenty of advice before you go ahead.

If you would like further help or advice about AVOMAN computer requirements, contact me at Maroochy Research Station on (074) 412 211.

**AVOMAN is an initiative of the Queensland Department of Primary Industries and is funded and supported by the following organisations:**

- Queensland Department of Primary Industries
- New South Wales Department of Agriculture
- Western Australian Department of Agriculture
- Piccone Horticultural Consultancy Pty Ltd
- Australian Avocado Growers' Federation
- Horticultural Research and Development Corporation

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## Overseas Trade Shows

This year the AHC has represented Australian horticulture at three overseas trade shows providing key links into new markets for the long term benefit of Australian growers.

### Taipei Food Show - Taiwan

The AHC participated in the Taipei International Food Industry Exhibition held in Taipei from 22 to 26 June. The AHC's exhibit focused on reinforcing the Clean Food Promotions being undertaken in Taiwan during 1994.

### SeoulFood '94

SeoulFood, a major food show organised by the Korean Government attracted forty five Australian exhibitors this year including the AHC and five companies with vegetables, macadamias and honey products. The exhibition provides an opportunity to network with the trade, including importers, trading houses and the retailers. A series of Government and industry meetings were also held to coincide with SeoulFood with Korean representatives invited by the AHC to attend the Australian exhibit and meet Australian representatives.

As a result, it is now likely that the first bilateral visit between the Australian Industry and the National Agricultural Co-operative Federation will occur this spring.

### Indonesia - Australia Today '94

Indonesia with a population of 190 million was Australia's fifth largest market for fresh fruit and vegetables in 1992/93. The

AHC is investigating the Indonesian market for further export activity and as a result co-sponsored a visit of buyers and importers from Indonesia's major supermarket chain "Hero" during April. During a visit to AHC headquarters the group sampled a range of fresh horticultural products including avocados, which drew favourable comment on internal quality and shape.

As well, a major trade and cultural promotion of Australia was undertaken in Indonesia from 14 June to 2 July 1994. The

event included a series of major exhibitions and conferences.

The AHC exhibited at "Australia Today" (29 June - 2 July) with support from the Agsell division of NSW Agriculture, Queensland Horticultural Exporters' Council and the Melbourne Market Authority.

The AHC took the opportunity to raise Australian Horticulture's profile as well as look at other promotional and market opportunities.



AHC's Export Development Manager, Neil Offner with the Promotions Manager from Melbourne's Market Authority, Maria Kucherhan at the Australia Today exhibition.

## Avocado Project Approved

Funding for the avocado industry's "Improving the Management of Avocado Quality During Marketing" project has been approved by the Agribusiness Programs section of the DPIE.

The project with a total cost of \$171,583 aims to achieve the following objectives:

1. To expand consumer confidence and demand for Australian avocados by increasing the availability of sound fruit with acceptable shelf life and eating quality.
2. To develop a quality consciousness towards avocados by wholesalers and retailers.
3. To develop a series of recommended procedures for the correct handling of

avocados during marketing (wholesaling, distribution and retailing).

4. To develop and implement a National Training Program for wholesalers and retailers to improve the management of avocado quality.
5. To establish a system for recognition of achievement in avocado quality management.

The project will target practices at wholesale level in major markets and other distribution centres focusing on ripening, handling and storage. At retail level, the project will target transportation, storage, handling and merchandising.

The intended benefits of the national project will be:

- a. increased awareness of the need to correctly handle avocados during marketing;
- b. increased profitability for all sectors (grower, wholesale and retail) due to increased sales, higher prices and increased consumer demand;
- c. increased professionalism of the wholesalers and retailers;
- d. a solid foundation on which to build exports of Australian avocados; and
- e. the opportunity for the training of handlers of Australian avocados in international markets.

Professional consultants Anne Storey and Terry Rudge appointed to undertake the project have already commenced work.



## International Experience Joins AHC

The AHC has appointed three new staff to fill existing positions within the Marketing, Quality Management and Information Analysis sections. Two of the new personnel were previously employed in horticultural organisations based in Europe and the United Kingdom.

### Brian Hall

Brian Hall has been appointed the AHC's new Marketing Manager responsible for developing and implementing marketing programs based on industry priorities and consultation with industry.

He was previously the Marketing Manager for New Zealand Apple & Pear Marketing Board (UK) Limited based in London with prior involvement in the New Zealand Fishing Industry Board.

### Graeme Munro

Graeme Munro has joined the AHC as Quality Manager primarily responsible for managing the implementation of the AHC's Australian Horticulture Quality Certification Scheme (AHQCS)—a national scheme certifying businesses to the international standard ISO 9002.

Graeme was previously Quality Manager for the New Zealand Kiwifruit Marketing Board in Antwerp, Belgium.

### Mary Chan

The AHC's new Marketing Analyst is Mary Chan responsible for managing market information and intelligence. She was previously marketing analyst with the renowned international research and global marketing consultancy, BIS-Shrapnel.

## AHC Undertakes Internal Quality Program

The AHC has been developing an internal quality program to assist in its operations and service to customers.

AHC Managing Director, John Baker said significant benefits had already been achieved with an improved focus on core customers, core services and performance measures.

The AHC has set a goal of achieving ISO 9002 certification in 1995.



From left to right: Graeme Munro, AHC's new Quality Manager with Damien Hendrick, Wholesaler from Flemington Markets, and Brian Hall AHC's recently appointed Marketing Manager.

## Horticulture Funding Package Announced In Budget

Continued funding of \$4.5 million over four years (i.e. to July 1998) for the AHC was announced in the recent Federal Budget. The government has agreed to extend financial contribution to the AHC as it recognises that many horticultural industries are still adjusting to increased competition on the domestic market and still developing export markets.

The additional funding will assist the AHC to work as a "change agent" with industry to promote co-operation and improve marketing. It also will enable national programs such as quality management, market access, product identification and adoption of other measures to improve competitiveness to continue.

However the new programs that were recommended in the Task Force Report for the AHC to address will require additional funding if they are to be implemented. Other announcements in the budget were:

- Continued funding of \$500,000 over two years for the HPC.
- New funding of \$595,000 over four years for the citrus industry to assist with the establishment of a Tri-State Fruit Fly Strategy.

## AHC Board Selection

The term for AHC Board Members concluded on 31 July and as a result from advertisements seeking nominations for members, 195 applicants of a very high calibre have applied for positions on the AHC Board.

A selection committee reviewed the nominations before making recommendation to the Minister for Primary Industries & Energy.

Applicants were asked to have a broad spectrum of capabilities covering one or more of the following areas:

- growing or harvesting of horticultural products
- the exporting of horticultural products
- the handling, storing, transporting, processing or marketing of horticultural products
- business management
- finance
- marketing
- product promotion

Unless otherwise indicated, all articles in the AHC section were prepared by Suzanne Conley, Australian Horticultural Corporation, Level 14, 100 Williams Street, Sydney 2001. Telephone (02) 357 7000, Fax (02) 356 3661.



## International Conference On Clean Food

The image of Australian horticulture as clean and wholesome, took a leap forward in May as many delegates from around the world attended the "Clean Food: The Competitive Edge International Conference" and Trade Exhibition on the Gold Coast.

The AHC provided two opportunities for the Australian horticultural industry to capitalise on this event.

1. Home Grown Fruits (UK) Managing Director, Malcolm Schofield was sponsored by the AHC as a guest speaker at the Conference.

The subject of his presentation at the conference was "Long Term Planning in

the International Market" and focused on five key areas:

- Market
- Marketing
- Product and Production
- Environmental
- New Product Development

Mr Schofield's visit also included a presentation on Quality at the Citrus Industry's Annual Conference in Perth, and discussions with industry representatives and business in WA, SA and QLD.

2. The AHC organised a delegation of wholesalers, retailers and importers from Taiwan to visit Australia and attend the Clean Food Conference. Sponsored by the AHC and EVA Air, the visit was organised to assist in the bilateral discussions with Taiwan for more market access for horticultural products.

The group travelled around Southern Queensland and Northern New South Wales with the purpose of seeing the diversity of product and the professionalism of export oriented operations.

### Leadership Skills Sponsorship

The AHC is to sponsor two scholarships in the Australia Rural Leadership Program to boost leadership skills in Australian Horticulture.

The need for greater leadership in Horticulture was one of six major issues identified in the recent Horticultural Task Force Report as an impediment to the development of competitive horticultural industries.

The first scholarship is for the next course—a two-year, part-time program which commences in April 1995. The course includes an overseas tour focusing on business in Asia.

The AHC will also be sponsoring a scholarship in the following course starting in April 1996.

Further details and an application form are available from The Australian Rural Leadership Foundation - tel: (06) 281 0680 Fax (06) 285 3969.

### Fresh Ideas

"Fresh Ideas" is the new ABC's five minute prime-time program on Saturday evenings. The AHC has been working with television celebrity Peter Russell-Clarke in developing segment ideas for the show. In the opening program on 2 July, Peter Russell-Clarke spoke highly of the virtues of avocados. Coming up on Fresh Ideas will be at least one program solely devoted to avocados.



From left to right: Donald Lee (Importer), Ellen Howe (Retail buyer), Vivien Wen (Importer), Nancy Chen (Interpreter, ACIO, Taipei) speaking with Brian Gillespie (Avocado grower).

### Industry Visit

The AHC recently sponsored a visit to Australia by Tom Karst, Markets Editor, for "The Packer", a leading American newspaper for the produce industry.

The intensive visit by Tom Karst involved tours around Australia's growing regions, including:

- South Australia's Riverland to meet with growers, exporters and processors.
- Northern Tasmania - vegetable industry.
- Southern Victoria - pears, apples, nashi and stonefruit.
- Bundaberg - tomatoes, zucchini, bell peppers, avocados, mangoes, citrus

and macadamias.

Tom Karst also attended the AHC's Marketing Edge Conference in Sydney.

The media showed a great deal of interest in Tom with radio and print interviews in every state he visited.

As well as visiting the growers, Tom Karst also meet with key people from the main supermarket chains and leading independent retailers to discuss merchandising and retailing in Australia.

He will be preparing a report of his impressions of Australian horticulture, merchandising and retailing which we will seek permission to publish in the next issue.



## Marketing Edge Conference

This year the AHC was flooded with last minute registrations to the Marketing Edge Conference which was held in Sydney from 27-29 June. The final number of attendees was over 170.

The AHC would like to extend a thank you to sponsors NIES (National Industry Extension Service) and Woolworths, enabling a line-up of top international and Australian speakers.

In launching the AHC's Marketing Edge Conference, Senator Bob Collins, Minister for Primary Industries & Energy outlined the challenges for the Agrifood Industry currently Australia's largest industry. He said the industry has a gross product of \$48 billion dollars and employment exceeding half a million jobs.

"Agrifood exports from Australia currently total \$12 billion, and 20% of our manufacturing activity relates to downstream processing of agricultural produce. The industry therefore provides a significant contribution to Australia's prosperity,

and provides a major base for further development" Senator Collins said.

Senator Collins said our participation in Asian markets will be most successful if exporters seek to integrate their activities with those markets establishing or creating alliances with distribution networks.

"This integration could involve Australian investment in Asian enterprises demonstrating greater commitment to those markets with the return of greater access," he said.

Regarding the Horticultural Task Force, Senator Collins said the decision had been made to establish a group to oversee the implementation of the reports recommendations with Senator Sherry as its chairman.

### Sponsorships

Five young leaders were awarded sponsorships by the AHC to attend the Marketing Edge Conference. Recipients were:

**Peter Davidson** Leeton NSW - Citrus grower and packer.

**Bruce Maley** Perth WA - Involved in domestic and export marketing with HJ & F Simper Pty Ltd.

**Peter Reibel** Bowen Qld - Vegetable grower, packer and marketer.

**Fiona Solly** Camarvon WA - Co-ordinator of the Camarvon Horticultural Development Council.

**Anne Story** Toowoomba Qld - Story Horticultural Services Pty Ltd.

### Evaluation of the Marketing Edge Conference

From evaluation forms received to date the Marketing Edge Conference has been a tremendous success with 70% of attendees rating the conference as "excellent" and 25% rating it as "good".

Delegates said what they liked best about the program was the range of excellent speakers and topics, the international flavour of the content with lots of ideas for further development, and the time available for informal networking.

## China Workshop Evaluation

Evaluation forms received from the Workshop on China Markets held on 30 June, indicated that 85% of attendees rated the standard of the workshop program as at least "good" or "excellent".

Overall attendees said the best features of the program were: the excellent speakers, material on trends and potential providing a clear picture of the current position in China, the program's broad commercial application, and the significance of John Piper's presentation on the need for trade and retail alliances.

However delegates mentioned there was not enough information provided on quarantine status and access for particular products. The AHC is expecting to address these issues with further research and a second China market study by the University of Western Sydney.

The AHC is sponsoring a group of five post-graduate students (including student translator) to further explore the China market and the Australian industry's capacity to service it. Included will be consumer surveys carried out in retail outlets in China, meetings with wholesalers, importers, government and quasi-government

personnel. Austrade are assisting with arrangements. The group left for China on

2 July for 15 days and will visit Hong Kong, Guanzhou, Shanghai and Beijing.

## AHC Quality Initiatives

The AHC has completed planning for new initiatives in quality including development of a comprehensive training package and a getting started program "Q-Start".

The AHC's training package is being developed as a series of modules of which Q-Start is the first. The package is being designed to meet the needs of the horticultural industry with most modules for use on-the-job through self directed exercises.

By removing much of the quality jargon and using plain English, the training modules will provide clear illustration, through horticultural examples, of how a company can develop a tailor-made quality management system.

Work has already commenced on Q-Start which focuses on giving organisations the skills to take the "first steps" in developing a system to meet their specific needs.

Q-Start is specifically targeted toward growers and packers, and will provide guidelines to assist companies develop a quality management system.

The training package is a key part of AHC's overall quality activities. Current activities include development of a product description language that will provide the framework for the development of purchase specifications, wholesaler and retailer training—both domestically and internationally—and a review of AHQCS.

AHQCS is being reviewed to ensure it more adequately reflects market requirements. More flexibility is to be built into the scheme providing recognition of other quality schemes, incentives and rewards, and a platform for Australian Product Identification initiatives.

As a result of industry response, the development of the quality package is being fast tracked for launch in March 1995.

# How To Reduce Costs And Increase Your Return

By Tonia Smith, Piccone Horticultural Consultancy, from *Successful Horticulture* June 1994

Why is it so important to apply not only the correct chemical to your crop, but also the right amount of chemical in the most efficient way possible?

The answer: To reduce time and money you spend on crop protection and to ensure optimum marketable yields.

As a field consultant, time and again I see poor pest control and wastage of both chemicals and labour resulting from inefficient or poor spray application.

While spray application efficiency is well covered and by no means a new topic, I still regularly see much opportunity for improvement.

Why is efficient chemical application so important?

## Chemical Costs

By over applying chemicals or applying unnecessary high volume sprays, you are wasting valuable product. Wastage of up to 50% of chemical through runoff onto the ground can occur with such an application.

When applying a miticide at a cost of about \$35/ha<sup>(1)</sup> over a 50 ha orchard, for example, chemical loss through wastage adds up and can cost you a lot of money.

## Labour

Even the best crop protection chemicals will not work if they do not contact the pest or disease targeted. If the chemical does not reach your target, you are wasting valuable time and money as:

- Pest and disease control will be poor.
- Sprays will often have to be repeated at shorter intervals to keep the pest under control.
- With more frequent spray applications needed, labour costs associated with mixing and spraying chemicals will be increased.

## Reduction in Yield and Quality

Poor pest-disease control generally results in greater levels of damage to your crop, resulting in lower yields, reduced quality and, of course, lower returns.

## Case Study

A case study was carried out (see Table), the circumstances being:

- A 50 ha deciduous fruit orchard.
- Crop protection costs: (1992).
- Infrequently calibrated equipment, never tested for coverage. (1993)
- Equipment recently calibrated and tested for coverage.

removed to show the under lying blue base when placed in contact with water. The blue stain resulting from the water contact shows where the spray applied has contacted the card. Apply only water when testing spray coverage for your own protection.

	Chemicals			Total	Labour (mixing & spraying)
	Fungicide	Insecticide	Miticide		
1992	\$13,600	\$7,100	\$3,500	\$24,200	8,500
1993	\$12,000	\$5,500	\$3,000	\$20,500	7,500

The orchard in the Table reduced chemical and labour costs over a 12 month period by \$3700. More importantly, pest and particularly disease control in this case were considerably improved by the more efficient application of chemicals, resulting in a 10% increase in marketable yield at a \$20,000 increase in return, even though the price received for fruit was actually a little down on the previous year (1992).

Of course, seasonal variation between yield and fruit quality could have contributed in part. However, this grower achieved the best disease and pest control he believed he had ever achieved, particularly on pests which required good spray coverage.

Furthermore, he had significantly less pest damage—markings and blemishes—on fruit in comparison to neighbouring orchards.

This was achieved by improved spray coverage and refining the quantity of chemical applied by re-calibrating and modifying his sprayer accordingly.

## Testing Your Sprayer

Various techniques can be used to assess the performance of a spray operation. Water sensitive cards are recommended because they are simple to use in the field, are easily obtained and provide reliable and accurate information.

The results of such a test show whether or not your sprayer is providing the right coverage for the pest/disease that is being sprayed.

Water sensitive cards are artificial sampling surfaces that consist of paper coated with a dark blue base and an overlying lacquer surface.

The lacquer is soluble in water and is

## Test Procedure

- Handle cards carefully as they will absorb moisture from your fingers. The resultant smudge will mask test results.
- Staple cards to leaves and stems with lacquered surface facing outwards.

Try to select some difficult to reach sites. Cards should be placed in the bottom, middle and top of the canopy.

In tree crops, we generally recommend three cards in the lower canopy, four in the middle and three in the upper canopy on inside and outside leaves or stems. Fewer cards are needed if testing coverage in a vegetable crop or vine crop.

- Apply a spray of water with your calibrated machine.
- Cards dry quickly and can be retrieved within 15 minutes.
- Arrange cards according to where they were placed in the canopy (lower inside canopy, lower outside canopy, middle inside canopy, middle outer canopy, etc.).

## Interpreting Card Results

The patterns on cards will provide a good indication of where and how well the spray is penetrating.

If the card is completely blue, it has obviously been saturated and this area of the tree sprayed to runoff. Conversely, if there are few spots on the leaves, coverage is poor.

You must also look at the size of droplets and the range in droplet size, which affects the coverage of the pest/disease you are targeting. If your target is well defined, a narrow droplet size range is appropriate.

The patterns on cards will show you where improvements can be made to spray coverage and penetration. For example, if

(1) Average cost of four commonly used orchard miticide treatments.

# Effects Of Mulching

By D. Stevenson, District Horticulturist Coffs Harbour

It is a well accepted fact that avocados respond to mulching under their canopy. The type of mulch is important as any mulching material that becomes slimy, such as lawn clippings, could encourage the development of Phytophthora Root Rot. By adding coarse fibrous material to a potentially slimy one can help alter the carbon:nitrogen ratio<sup>(1)</sup> to make it a more useful material. Avocados grow better with their surface feeder roots fully functioning, therefore, their continued health is important.

When it is considered that avocados, like many of the tropical rain forest species that are grown commercially, come from an environment where large amounts of leaf litter are present on the soil surface, all we are doing by mulching is doing what nature intended.

Having completed some research work with bananas the following data can be applied to avocados.

Most of our soils in the Coffs Harbour district have a high silt content and if the organic matter content decreases, then surface caking occurs making the environment in that surface soil unsuitable for root development.

In a survey carried out in red earths, red podzolics and yellow podzolics, the following data indicates the importance of organic matter to maintain the health of the surface soil.

the outside coverage is good, while inside penetration and coverage to the top of the tree is poor, a number of modifications are necessary.

Perhaps tractor speed needs to be decreased and/or the flow of nozzles increased (adjusting pressure nozzle size), or perhaps you simply need to change nozzle placement or add more nozzles to improve coverage.

If spray coverage is known to be good from previous tests, the cards can also be used to assess nozzle performance such as the effect of worn nozzles on droplet size and distribution.

Be sure to conduct tests with water sensitive cards in all crop sizes represented on your property.

Next issue I will discuss and outline the procedures involved in the calibration of sprayer equipment.

The organic matter content of each of these plots is:

Sample Number	% Organic Matter
1	7.40
4	5.21
7	4.64
13	4.59
19	8.43

Sample 1	Undisturbed forest (bottom of the slope)	0-2 cm
Sample 4	Undisturbed forest (top of the slope)	0-2 cm
Sample 7	In the banana plantation (caked area)	0-2 cm
Sample 13	In the plantation (interrow) (caked area)	0-2 cm
Sample 19	In the plantation (unaffected interrow)	0-2 cm

The figures above show that when the organic matter level is below 5%, surface caking and structural breakdown can occur. Naturally poorer structured soils such as those based on a high sand content would not be effected to the same extent as those that have a fine particle silt content.

Various mulching materials were applied to a soil and after 2 years pH's were taken at various depths.

## pH Equivalent to Ca Cl<sub>2</sub> Test<sup>(2)</sup>

	0-5 cm	10-12 cm	25 cm	40 cm
Mulch Materials	7.5	5.8	5.1	4.6
Perennial Ryegrass	7.8	5.0	4.8	4.2
Unmulched	7.6	5.5	4.7	4.0

The mulching materials used were: composted sawdust, deep litter poultry manure, wheaten/oaten straw and lucerne hay.

When you look closely at the above figures it is obvious that the liming material has been moved down where mulching material was applied and investigation into whether earth worms were responsible for this movement was instigated.

## Earthworm count per square metre in mulched plots

Composted/Sawdust	90
Poultry manure	72
Straw	66
Humic acid	18
Lucerne hay	120
Ryegrass	45
Unmulched area above sawdust	15
Unmulched area above straw	12
Unmulched area above hay	45
Unmulched area above ryegrass	27
At top of plantation (good area)	79

These worm counts are low compared to under pastures in southern Australia, where up to 800 worms per square metre are often found.

Three species were identified:

1. *Odalasian cyaneum* - usually in cooler, damp areas;
2. *Pontoscolex corenthurus* - a tropical species, very active in sugar cane; and
3. *Megascolecoides* sp. - the dominant species (further identification to be carried out).

The *Megascolecoides* sp. is an Australian native, and its presence is due, no doubt, to the undisturbed nature of banana soils.

More recently, in these plots a small number of *Aporrectodea rosea* were found. A species that occurs from Tasmania to Brisbane.

In discussions with Dr John Buckerfield, CSIRO, Adelaide (Australia's Earthworm expert) he said that we are an interesting area in that we have what appears to be a combination of tropical and temperate earthworm species and this is unusual. Also he said that the species of earthworms are more important rather than the total number of earthworms. So the relatively low number of earthworms we have are not that important.

In conclusion avocados need mulching and the mulch should be a relatively coarse material that will not encourage possible Phytophthora activity under it. It is well recog-

nised that mulching of any crop can be an advantage particularly where degradation of the soil can occur due to the subtropical climate that causes the rapid breakdown of organic matter. With increasing organic matter levels, earthworm activity improves. This is nature's deep plough that encourages nutrients to move to and from different depths, allowing tree roots to utilise a greater volume of soil.

(1) The carbon:nitrogen ratio should be about 25 carbon to 1 nitrogen to prevent sliming occurring to the mulch. Normally grass clippings are 10 carbon to 1 nitrogen whereas sawdust is about 100 carbon to 1 nitrogen. The difficulty with a high carbon content material such as sawdust is that the nitrifying bacteria will consume most of the nitrogen in the soil to break down this type of mulch material. Additional nitrogen can be added to minimise the prementioned problem.

(2) Equivalent to the standard test used by laboratories.

# Anthracnose - Field Control Is Essential

Tony Cooke and Lindy Coates QDPI Plant Protection Unit, Indooroopilly

Anthracnose continues to be the major cause of postharvest breakdown in avocados at all levels of the marketing chain, right down to the consumer. This year demonstrated how unseasonal rain in drier growing regions and showery weather can accelerate the development of anthracnose.

Anthracnose is caused by a fungus which infects fruit in the orchard. Under certain conditions, e.g. when the fruit skin is damaged by insects, infection may lead to the formation of dark lesions on fruit which are hanging on the tree. This type of anthracnose, which is often referred to as "pre-harvest anthracnose", is plain to see.

In most cases, however, the anthracnose fungus enters a dormant phase once the initial stages of infection have occurred. This type of anthracnose, which is often referred to as "postharvest anthracnose", cannot be seen in the orchard. It is not until fruit are harvested and ripened that typical anthracnose symptoms develop.

A basic knowledge of the anthracnose life cycle is very important because it helps us to understand how to best control this disease. Therefore, let's have a look at Figure 1 below to see how the infection process works.

**The best way to control this disease is to prevent infection from occurring in the first place.** The germinating spore has to be stopped. So, how does this spore come to find itself on the fruit? Actually we are talking about large numbers of spores—millions and millions of them are produced on diseased fruit, dead twigs and leaves entangled in the tree canopy.

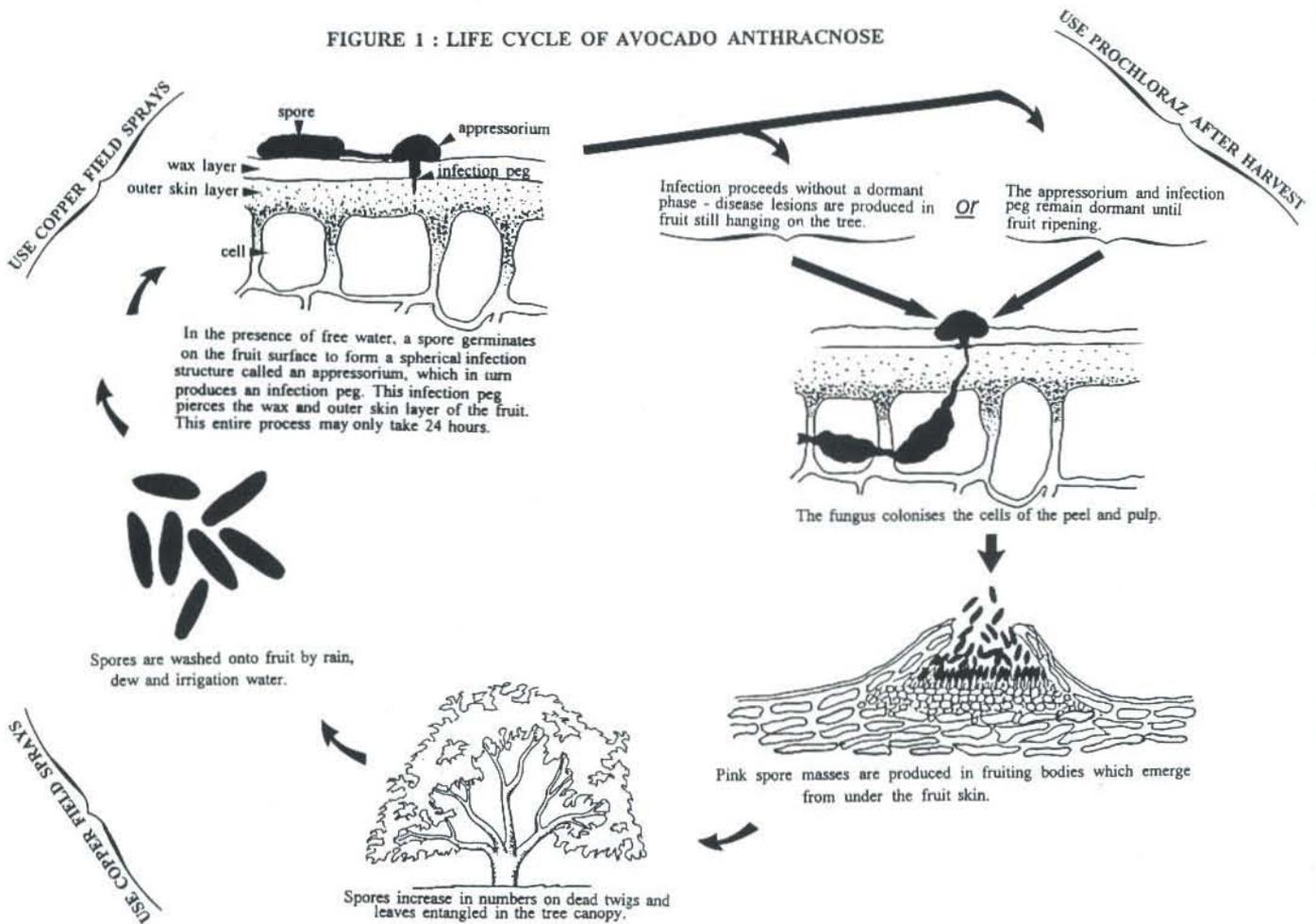
The spores are washed down onto healthy fruit by rain, dew or irrigation water. The more there are, the greater the disease pressure—remember that you can't see any of this happening. You may occasionally see the pink spore masses of anthracnose on leaves and twigs, but generally all of this goes on unnoticed.

At present, the best way to prevent infection is to maintain good orchard hygiene and keep a coating of copper-based fungicide on the fruit and foliage. Copper, being a protective fungicide, works by shielding the fruit against infection and by preventing the build-up of spores in the tree canopy. This is why the use of properly calibrated spray equipment is of such importance.

Complete spray coverage of the fruit and foliage is essential, as is regular application—every 4 weeks in dry weather or every 2 weeks in wet weather. Without this protection, germination of the spore can take place unhindered on the surface of fruit.

Once germinated spores grow to form an appressorium and infection peg, the disease moves into a totally new phase. From being relatively easy to control, the enemy is now dug in and is so much harder to kill. It is extremely important to prevent the fungus from getting to this stage. **Anthracnose is best controlled by preventing the formation of the infection peg.**

FIGURE 1 : LIFE CYCLE OF AVOCADO ANTHRACNOSE



## TECHNICAL REPORTS

There is a misconception among some growers that Hass avocados do not need to be copper-sprayed as often as Fuerte avocados. This is not the case. The recent AVOMAN survey of retail outlets in Sydney showed anthracnose to be a major cause of breakdown in Hass avocados displayed for retail sale.

Once infection takes place, the anthracnose fungus plays a waiting game and lies dormant waiting for the right conditions to rot the fruit. The "right" conditions are triggered by the ripening process, which means that this dormant phase may last up to twelve months because infection can take place anytime from fruit set to harvest. Because copper sprays will not kill the fungus in the dormant stage, another battle line has to be drawn and that is done after harvest with an overhead spray of prochloraz on the packing line (Sportak®, Mirage®). This does not mean that copper field sprays are not needed—**prochloraz alone will not do the whole job.**

It is important to use copper to reduce infection levels in the first place, and then use prochloraz to attack infections which the copper was not able to stop. If copper is not used to reduce infection levels in the first place, prochloraz won't be able to cope with the high disease pressure, resulting in poor control of anthracnose.

## US To Replace Food Safety Standards

*From Successful Horticulture March 1994*

A food safety package put forward by the Clinton administration may see the Delaney Clause with its zero tolerance standard replaced by a standard based on negligible risk.

The Delaney Clause of the US Food, Drug and Cosmetics Act, written in the late 1950's, has long been criticised as simplistic and outdated.

American scientists say it no longer makes sense, given the improved ability to detect chemical residues at one millionth of the level in the fifties. They say the public would be better served with a tolerance system based on minimal risk.

The current adherence to the Delaney Clause is preventing the EPA from registering new chemicals considered safer than those in use.

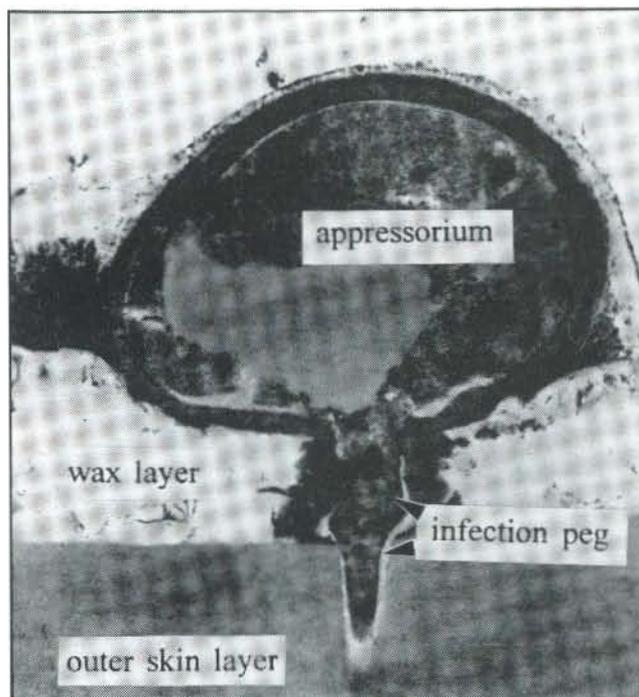
Chemicals alone are not enough. Good orchard hygiene is also essential. It is important to ensure good tree ventilation to allow rapid drying of the foliage after rain. This can be done by pruning lower limbs so that the canopy is at least half a metre above the ground. There appears to be some confusion about this practice, but as a disease control measure it is most beneficial.

It is also important to remove all dead twigs, leaves, branches and diseased fruit from tree canopies, as they encourage the production of spores. Control of fruitspotting bug and fruit fly using recommended practices can also help to reduce pre-harvest anthracnose which develops around insect injuries on the fruit surface.

In the postharvest situation, apart from applying prochloraz as an overhead spray on the packing line, temperature is a key factor in anthracnose development. Fruit ripened at temperatures of 24°C or higher will develop more anthracnose than fruit ripened at temperatures of 17-20°C. Anthracnose will also have less time to develop if fruit are controlled ripened with ethylene after

harvest.

The battle against anthracnose needs to be fought on many fronts by all involved in the production and distribution chain. Because the battle is best fought by preventing infection from occurring in the first place, a major part of the responsibility rests with the avocado farmer. The future of the industry hinges on the production and marketing of high quality fruit, and that means no anthracnose!



**Figure 2 :** The infection structure of the anthracnose fungus—an appressorium and infection peg, magnified 10 000 times using the electron microscope. Note that the infection peg becomes embedded in the very thick wax and the outer skin layer. Once infection proceeds to this stage, control is very difficult.

## A NEW VARIETY FOR AUSTRALIA EXCLUSIVE TO ANFIC MEMBERS

### GWEN

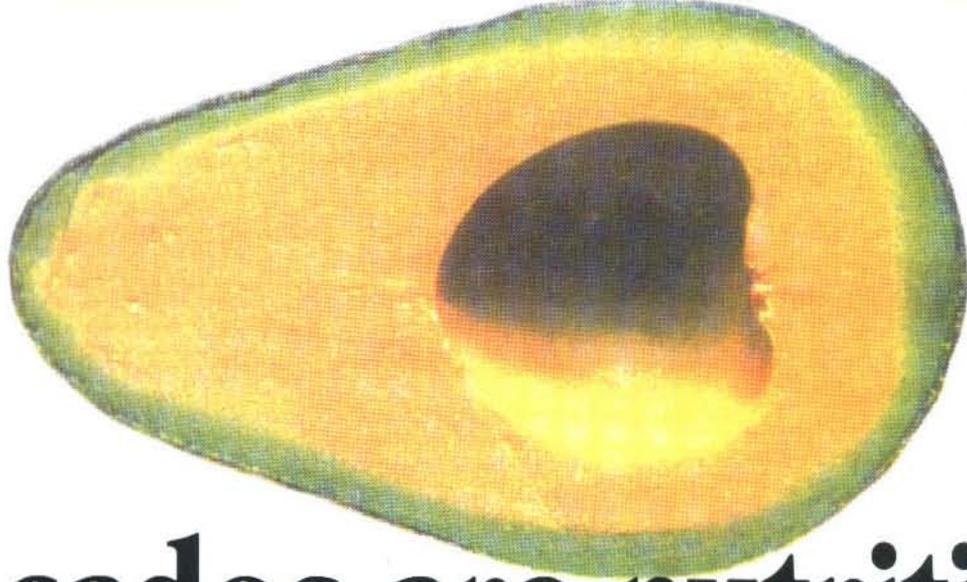
**ANFIC NURSERIES ARE TAKING ORDERS FOR DELIVERY 1994 & 1995**

Gwen is a small growing tree, early bearing and will out-yield Hass in many districts. It matures 4 to 6 weeks later than Hass. It has A type pollination, the fruit has green, thick skin.

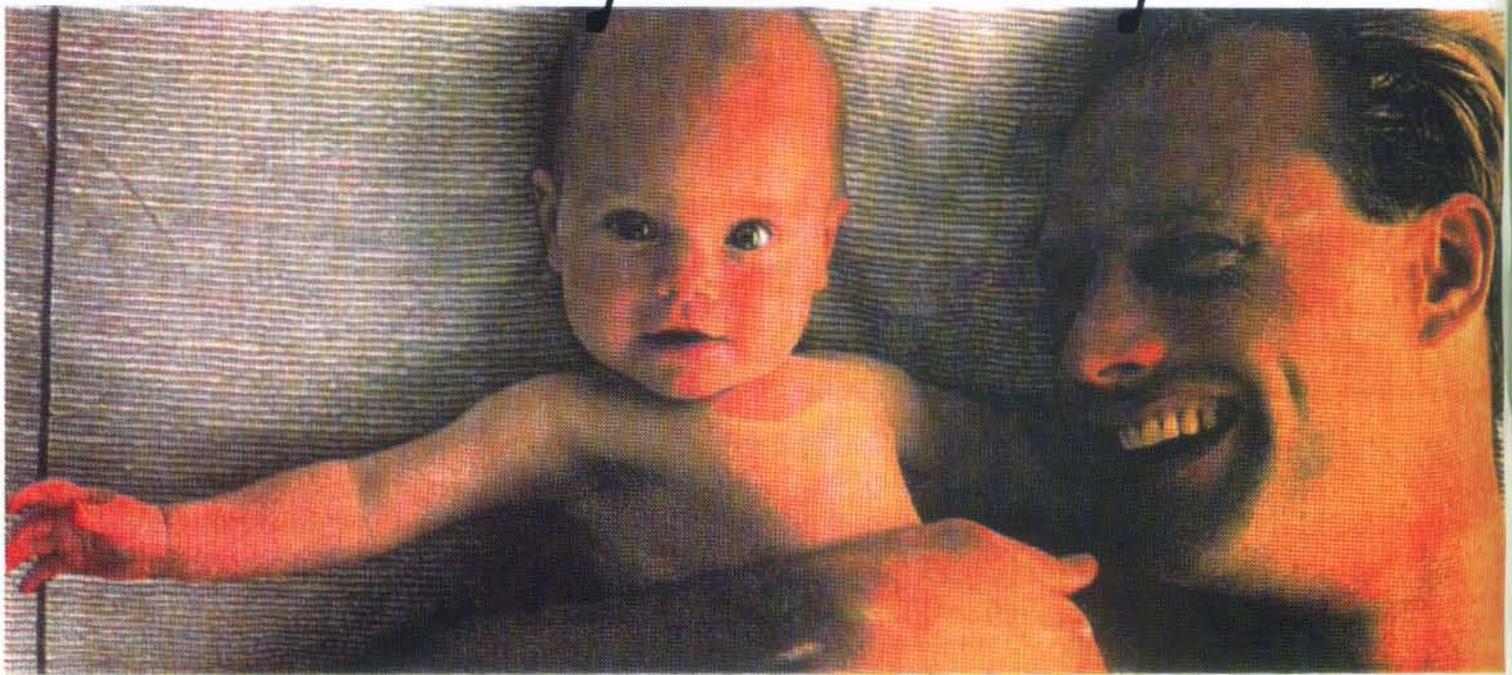
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