



CITrep

Newsletter of the Murray Valley Citrus Board

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inside this issue:

- P1 • Chairman's Report
- P2 • Chief Executive Report
• Notes From Neil Eagle
- P3 • New Australian Citrus Varieties – Goals and Product Specifications
- P4 • Australian Citrus Growers 56th Annual Conference
- P5 • Comments on the ACG Conference
- P6 • The Chislett Family
- P8 • Key Points for Winter Irrigation
• CITTgroup Activities
• Sweet & Sour
- P9 • ISC Congress Summary and Study Tour to Italy and Morocco
- P12 • Images from the Australian Citrus Growers 56th Annual Conference



Robert Mansell, Chairman MCVB

Chairman's Report

The recently released Navel crop forecast indicates a lower than average crop, but higher than last year. This season's fruit looks very clean, with a minimum amount of rind rub and scurfing. The latest fruit measurements show that the fruit size of most Navel varieties is larger on average by one to one and a half counts.

The Australian Citrus Growers Annual Conference, organised by Sunraysia Citrus Growers, was held in Mildura last month. It was a very successful event and I would like to congratulate SCG on their organisation, together with all sponsors, as it wouldn't have happened without their support. However, I was disappointed with the number of local growers and industry people who did not attend. Regardless, industry leaders will continue to provide such opportunities in the best interests of the industry.

The MCVB has had a busy last couple of months with much work being done trying to prevent an outbreak of Fruit Fly, following a number of Fruit Flies found in Deniliquin. This outbreak threatens the whole of the Murray Valley and the MCVB offered assistance to clean up the outbreak. Our worst fears were realised when an outbreak was announced in Barham in March. The Easter school holidays were of real concern, with large numbers of holidaymakers travelling into our area. A concerted effort was made, through relevant media outlets, to see that this potential and serious threat was well publicised to prevent any further spread of the pests.

The current status of Qfly suppression programs in southern NSW is:

Tocumwal: A cover and bait spray program is still being conducted in the urban areas and small numbers of flies (about 1-2 per week) continue to be trapped in monitoring traps.

Barham: The program in Barham was completed prior to Easter and no further flies have been trapped there since that time.

Deniliquin: An intensive program of bait, cover spray and fruit stripping is underway in Deniliquin, in an attempt to reduce the adult population that is taken into winter. Community support for the program has been positive.

The MCVB is greatly concerned about keeping the Fruit Fly Exclusion Zone (FFEZ) intact. We have met with the NSW Minister for Agriculture, to stress the importance of agreeing to a Tri State Fruit Fly Memorandum of Understanding between States.

In this context, we believe there is a need to put permanent roadblocks in place along the eastern edge of the FFEZ. The only way the MCVB area will be able to get market access on Area Freedom will be if roadblocks are in place. This is a huge challenge for us, and Government is saying that the industry has to pay its way. The citrus industry is already paying its way, but we are being let down by all of the other horticultural industries in this regard. (Eg. Stonefruit, Pomefruit, Tablegrape, Olive and Vegetable industries.) It will be a big challenge to get their support on this very important issue.

Murray Valley CITTgroups have continued with their meetings, keeping growers up-to-speed with the latest technology needed to grow the right quality fruit for export markets.

The MCVB has recently had to go to a Poll to get the agreement of growers to allow the Board to operate under new legislation. This Poll was forced on the Board by the Governments of NSW and Victoria because of the outcome of the National Competition Policy review.

Our new Chief Executive, John Tesoriero has come to grips with how our industry works and he will be out meeting growers, packers and processors over the next few months. I urge industry people who haven't yet met John, to take the opportunity to do so.

Robert Mansell Chairman MCVB



Chief Executive's Report

John Tesoriero, Chief Executive MVCB

The upcoming Poll to reconstitute the Murray Valley Citrus Board under Victorian legislation is very important to the future of our citrus industry. To create greater grower awareness, meetings were held at Ellerslie, Dareton, Gol Gol, Mildura, Nangiloc and Barham from the 3rd to 6th May 2004. Hopefully the outcomes will be positive thus enabling the industry to move forward with security.

These meetings provided me with an opportunity to meet growers and to flesh out some of the current key issues. It is my intention to continue talking more fully with growers and key stakeholders on their turf, as this contact is very useful in familiarising myself with the many issues that confront the citrus industry.

Having recently come from a non-industry background there has been a lot to learn and as you can imagine I have been on a fairly steep learning curve. However my transition into the citrus industry has been made easier by the support and enthusiasm of a focused and professional Board and a dedicated and helpful staff who have gone out of their way to assist me coming to grips with the industry.

In addition to carrying out our normal core business activities, we have been very busy since Christmas responding to the Victorian Government's Green Paper on Delivering our Water Future, dealing

with the Fruit Fly menace in the lead up to Easter following serious outbreaks in the Southern Riverina, preparing for the Poll to re-constitute our Board under Victorian legislation, as mentioned above, and assisting with the recent ACG Conference held in Mildura.

There are many challenges facing our industry as we move forward, such as gaining export market access for our products, promoting the health benefits of citrus on the domestic market in an attempt to grow that market, maintaining the integrity of the Fruit Fly Exclusion Zone to protect our area freedom status, contributing to the important water debate to ensure the citrus industry is consulted and plays a part in the decision making process, and liaising and providing advice to government on issues relevant to the citrus industry.

These are important issues and I look forward to working with the Board and our key stakeholders to ensure we have outcomes that are of benefit to our industry.

John Tesoriero Chief Executive

Notes

from Neil Eagle

Congratulations to the Sunraysia Citrus Growers for the planning and the effort of so many people in hosting the recent ACG Conference.

I believe that the 'Export Marketing Forum' held on the Wednesday afternoon, was a particularly good initiative. This open forum allowed debate on the needs of the industry - on those aspects impacting adversely on achieving maximum sales and returns in our export markets.

The meeting identified and agreed with the need for marketing plans to be developed for our Asian markets, where we continue to have Australian exporters competing with each other for market share. The need to develop an agreed code of practice, as to quality and maturity standards into the Asian markets, was also seen as a priority.

It is heartening to hear that the most recent fruit size measurements of the coming crop has revealed an above average fruit size increase. Even so, I would hope growers will give consideration to select picking for size in the early harvest period, to minimise unwanted small counts in both the domestic and export markets.

Finally, with regard to the approaching vote for the reconstitution of the MVCB under Victorian Government legislation. It is imperative that we get a YES vote on this issue, as this will ensure the most cost-effective way of operating the Board.

It needs to be clearly understood that to achieve this goal ALL NSW growers need to vote, as the majority of those NSW growers entitled to vote must agree, for the Poll to be carried.

Neil Eagle Chairman, Mid-Murray Citrus Growers Inc.

New Australian Citrus Varieties – Goals and Product Specifications

In Summary:

- Top priority is for easy-peel varieties yielding seedless, juicy and sweet fruits
- Dual purpose sweet oranges are a major goal
- Export opportunities for very early and late varieties are a driver
- Nomination of first new varieties for release is planned for late 2005



Seedless, sweet and very early maturing (late March in Mildura) fruits are being bred as part of the National Citrus Scion Breeding Program.

At a New Varieties Day held 19 June, 2003 at Renmark, and also during a series of grower briefings held in the Central Burnett, MIA, Sunraysia and the Riverland during August–October last year, information was presented on the National Citrus Scion Breeding program. (www.austcitrus.org.au/internal_report.php?page_id=166) During these presentations, parts of the Formal Breeding Plan, developed and documented by the program's reference committee, were described and feedback sought from growers. The plan addresses goals, methods to achieve them, and a commercialisation strategy for new Australian citrus varieties. As it was impossible to reach all citrus growers at these meetings, a summary of the goals and products targeted by breeding are presented here hoping that further feedback from industry may be forthcoming.

Overall the research, funded by the Australian Citrus Industry (through HAL), CSIRO and QDPI, aims to develop new and improved varieties to meet actual and perceived market and industry requirements. Targets for the breeding program have been developed based on consumer requirements, trends for specific markets, and fruit availability in key markets.

In setting goals, it has to be realised breeding is long-term with outcomes anticipated 10–15 years into the future. Within this timeframe, consumer preferences are likely to continue changing due to many factors including income growth, increased awareness of healthy eating, and the desire for innovative products. Even so, worldwide understanding is that fruits which are seedless, easy-to-peel and easy to prepare for eating are and will be wanted by time-conscious consumers. Convenience will be a continual consideration.

From this, top priority for the program is for mandarin types yielding seedless, easy-peel, juicy and sweet fruits. Within this grouping, specific product types targeted are:

- Very early (March/April) and early-maturing (April/May) varieties for export and also for frost prone regions.
- A mid-season replacement for Ellendale in Queensland.
- A general requirement for new, good coloured, sweet, juicy and seedless mandarins for export and domestic sales.
- Late-maturing varieties for export to specific marketing windows in the August-to-October period.

Second in priority is for sweet orange types that yield seedless, easy-to-peel sweet fruits. Specific product types here are:

- Dual purpose varieties (fresh fruit and juice) for late winter/early spring.
- Earlier Valencia types for niche markets, eg Japan.
- Sweet oranges with high Brix (12°+) regardless of Brix:Acid ratio.

Finally, and of lowest priority amongst these aims, is for sweet grapefruit types suitable for juicing. This target comes from discussions with a juice manufacturer and the specific product type is for white-flesh fruits, of a size range suited to plant for juicing oranges, yielding sweet, non-bittering juice.

In addition to specific goals, growers have on many occasions said there is simply a need for varieties better than those currently available. Industry members of the reference committee have endorsed this generalization warning that we should not be too prescriptive in setting goals for the program, although clear targets are necessary to focus our efforts. While it's difficult to predict future consumer preferences, there will always be potential for new market opportunities. Constant awareness is vital to find novel ways to meet consumer demands for differentiated products and so capture and maintain market share. The serendipity factor in breeding new varieties offers potential in this regard and shouldn't be disregarded.

Feedback

The reference committee welcomes any feedback concerning these goals and product specifications. Any comments can be directed either to Steve Sykes at CSIRO or Gerard McEvilly at HAL.

Further information can also be obtained by contacting Steve Sykes.

CSIRO Plant Industry
Private Mail Bag PO Merbein, VIC 3505
Telephone 03 5051 3100 • Email steve.sykes@csiro.au

Australian Citrus Growers'

MILDURA 18-22 APRIL 2004

Some overall impressions (as an outsider to the Conference observing a number of program presentations)

- The last ACG Conference held in Mildura was 18 years ago
- The Mildura Settlers provided an appropriate venue for the Conference with a large number of sponsor and trade exhibitors in attendance.
- There was a very good feel to the Conference throughout. The mood reflected the genuine attempt by the organisers to cater for all industry sectors with an extensive program. As Kevin Cock stated: 'It is being spoken of as the friendly conference.' This statement is a compliment in itself.
- Some 300 people attended.
- Commendation was widely extended to the Organising Committee for a job well done.
- The value of the relevant research demonstrations workshops and field trips was openly acknowledged.

Market Intelligence - China

How to dissect the information so that we can make rational best-bet assessments of the situation in China.

An overview of the situation and how we can take some advantage of that.

What is China's production and how are they producing it?

China is up with the big five citrus producers in the world.

It dominates citrus production in Asia.

Production is focused on domestic fresh with virtually no processing or exports. It provides an opportunity for Australia, but there are challenges.

China has historically grown easy peel types. Currently, there are a lot more new plantings of oranges. Oranges dominate imports because of the Chinese palate. (The Asian population has a decidedly sweeter palate than ours.)

Our most competitive advantage is in fresh produce and Asians put a high priority on colour and consistent quality.

China is one of our most important Asian markets, current and potential. There is a need for strategies to extract that potential.

We need to be in there for the long haul building a brand.

Currently, Australia is at a disadvantage against those citrus producing countries that have access.

Potential for Citrus Juices in the Beverage Industry

Coca-Cola Amatil are looking at opportunities in milk and juice. Innovation drives consumption. Strategies need to be consumer driven. The juice opportunity is in the area of product and package innovation.

'We look for one key thing from all our suppliers - predictability.' Processor and grower issues are unique to juice and need to be addressed if local juice is to reach its potential. There are challenges for growers and processors to meet the growth potential.

Supply Chain Options

What do we need to sell more fruit at a higher level?

- The need to invest a lot more in marketing and promotion
- Target very specific groups with specific messages. (Cannot be all things to all people.)

- Promotional money is fragmented. (State against State.) Have to promote citrus against other foods. Have to differentiate citrus; not enough being done to sell by size or variety and in the more exotic areas. Employ branding as a technique.
- The food service sector needs to be pushed as a priority.
- Need to do more work with Supermarkets. In-store tastings are a powerful tool in season.
- The citrus industry is facing a threat. There are early signs of a downturn, but the problem is fixable. The need to invest behind the industry and do it; to start to act like part of the global fruit industry and to benchmark with others in the industry across the world.
- Captains of industry need to be working together to eliminate waste.

The Next Generation's Vision for the Citrus Industry

Beverley Fisher, Riverview Juices Unlimited, from the Cobram region was passionate about the industry. She argues that we should see ourselves as food growers and sell citrus as a food rather than a piece of fruit. She outlined the importance of such venues as Farmers' Markets to emphasise the need to market our product differently and to highlight that there are markets out there that we can tap.

Citrus Export Marketing Committee - Forum

Some selected impressions for possible consideration:

- The citrus industry is a leader in horticulture. It has issues in the areas of transport, the supply chain, value of the dollar, not getting consistent volumes and trade barriers. The latest is the consolidation of the supermarkets - a trend that will continue.
- As an industry, 'Are we marketing correctly to maximise returns to growers?' We have to look at last year's repack problem across all sectors. We have to be prepared with tonnage knowledge, varieties and size range in future. Our crop forecasting has come a long way and is being refined. It now needs to be put into a marketing plan to enable the whole of industry to prepare for available markets.
- Similarly, growers, packers and exporters need to come together to work as a cohesive industry.
- Need to look at the requirements and expectations of other markets. Need to know what they are doing to maximise returns to the Australian industry.
- Rationalisation is starting in the industry. Basically, we haven't got economies of scale, but we do have trade barriers.
- Markets are limited. What is the future with factors such as border closures?
- On the domestic market, do we give the consumers what they want?
- In terms of competition we have South Africa; now South America.
- The vehicle that has worked well is Riversun.
- In order for all sectors to exist in the industry, more growers have to become involved. They must be up-to-date with citrus varieties and have a good relationship with the packers.
- It is more important to look after your existing customers than to get new ones.
- The on-going issues of containers and carton size have to be addressed.
- There is increased focus within the industry on adding value and decreasing costs.



56th Annual Conference

- The issue of what we want to grow versus what the consumer wants:
 - Improve eating quality
 - Better communication with customers
 - Develop maturity standards
 - Importing at proper times
 - Improving packaging (There will never be a one package system).
 - Responding quickly to customer needs
- The merits of consolidation
- Are we going to be production driven or market driven?
- Realising the strength of being united. Getting a global marketing system together.
- Markets are moving rapidly and we have to manage change and remain relevant
- Australia had to position itself as 'Category King'
- We are not effective in communicating the characteristics and strengths of our product. Premiums will be paid for a product where there is a distinct difference in value in the eyes of the consumer.
- What to look forward to:
 - Formation of alliances and other global partnerships
 - Emphasising that Australia has a definite point of difference. If this is understood by the consumers, they will reward us.
- If the industry is not organised, we will lose market share.
- The need to advise Governments of our high infrastructure costs, and the desirability of some fair trade assistance.
- How much progress has been made in developing a code of practice for the industry?
- The health benefits of citrus are well known. However, the most important thing at the end of the day is taste. Our product has something others cannot deliver – flavour. This factor is not being sold effectively at the moment.
- A number of growers are looking for alternative arrangements for export to the USA to be considered and are seeking a trial. How is this progressing? (Some concern as to whether the USA market was being penetrated as it should.)
- What is the potential in Taiwan and Korea?
- Are we placing too much importance on the USA? Trade barriers are our biggest risk and we have to get access to these other markets on better terms.
- Forums such as this are valuable. There is an opportunity pre-season to have an export panel like this that will allow some serious analysis of the previous season and assist planning for the next year.
- Have to develop an experience that makes the consumer come back again.
- Growers and buyers require more information on markets in general.
- Base our production on the market. This will help control some of the issues. The need to be listening, questioning and making decisions that are in the best interests of the industry.
- America is probably the best-managed market we have. The hope is we learn from our experiences in America and take some of these to other markets.
- The biggest threat to industry progress is not the suppliers, but the supermarket domination.

Overall the ACG Conference was seen as a wonderful opportunity for so many citrus researchers to present, network and discuss issues with growers from other regions. It provided an insight into current research and enabled growers to compare growing conditions and other industry factors across Australia.

Eddie Warhurst Compiler

Comments on the ACG Conference

A grower attending this year's citrus conference should have gained an insight into the effect of South America on future profits, the future of our domestic market and some unique ways in which some growers have created opportunities. Those of us who are older growers could take some heart at the involvement of some high calibre younger growers and their ideas for the future. Although the conference theme was "\$ize up your Profit\$" many of the morning speakers were challenging growers to "size up their future".

The afternoons were spent in field day mode with growers having many choices of technical presentations across a broad range of topics, mostly aimed at improving citiculture.

The launch of PLA Pest Incursion Management Plan assisted growers to feel secure about how this issue will be managed.

There was time out as well to network, with civic receptions, a conference dinner and a cruise on the Mundoo.

As with all events, the value of the conference is with the participants and early results of the Evaluation Survey are currently being considered by Sunraysia Citrus Growers.

From the responses, 47% of participants listed their main role as producer, 12% as commercial provider, 12% as packer, with the remaining listing government or other.

Day three of the conference was for Australian Citrus Growers with a mixture of housekeeping and reporting by our peak body. The export forum in the afternoon was interesting for those who wished to participate, with a wide range of views on the ever-difficult citrus industry issue of Export Marketing.

The future of the conference is under review by the ACG Board, with Queensland the State in rotation to be the home of whatever format is decided by ACG. Should ACG decide to continue with a full conference format, SCG has undertaken to prepare a conference template to assist conference organising committees to get started and hopefully avoid some of the difficulties that occur.

For SCG, organising the conference has been a challenge, as well as managing the normal industry issues. Growers should take comfort from the depth of skills on the SCG Board and the commitment of Board Directors to undertake the task.

I hope those growers who attended gained value for their time and investment.

Peter Crisp Chair, Sunraysia Citrus Growers Inc.

The Chislett Family

'This was a quiet pocket until everything took off!' This was one of the first comments made by Mr Norm Chislett when I was privileged to meet with the Chislett family at their Kenley property recently.



Their successful business is the result of determined endeavour, humility and pride in their achievements that have proved sustainable over time.

Mr Norm Chislett went to school in Merbein where his father had a 27-acre property on Channel Road. When his parents sold out and retired to Mildura, Norm went to Boundary Bend in 1943 with the idea of planting citrus on some available wheat country.

With his two brothers, George and Gordon, they planted up to 100 acres between them on the basis of a 500 pounds commitment from each brother.

'Mr Bill Sawyer from Coomealla planted Citrus at Boundary Bend and it was through him that my brother George got the initial idea for developing there. We established the property during the War when everything was virtually impossible in terms of reliability. All our citrus trees (some 6000) came from Spurway's Nursery in Sydney and were transported in bundles of 100. In getting all the trees in one lot, our program was fairly ambitious. It took up to three weeks to plant the trees out and we stored the trees in the floodwaters of the Murray, which was in flood at the time,' Mr Chislett said.

Although the area was wheat country (just a bare paddock) in fact it comprised good undulating sandy loam with fair rises and a gully running through it. All holes were dug with a shovel as there were no mechanical devices and watering was into a basin around each tree. There were no plastics and old beer straws were used to protect the trunks from rabbits.

The three of us lived in a 40x20 shed with 'a bit of a lean to' on the side. Drought conditions and sandstorms were common occurrences, but there were no grizzles because it was the best that was,' Norm Chislett said.

'We grew vegetables just for the Melbourne Market for a year or two, but there were considerable difficulties to overcome. Transport to Melbourne was by ex-army trucks and it became clear vegetables were not going to do any good. We acquired a steam engine from Paringa, SA around this time. The Collins Brothers brought it up river by punt to Anderson's Sawmill in Mildura. From there, it was loaded onto trucks and transported to Boundary Bend, providing a story in itself. In the early days, we were considered, by Sunraysia and the Riverland, to be too small and too far away to be considered part of the region,' Norm added.

At the same time the Chislett Brothers were growing citrus they started to run a sawmill. Gaining a sawmillers licence in 1947, they cut red gum through to 1958. 'We learnt the hard way, but we were full of determination. We knew we could succeed and when a problem came up we were prepared to diversify to remain viable. Initially the red gums were felled by cross cut saw and, with an operator on each end, some took a day to fell.

'It was through our sawmilling that I identified our current holding in the area known as Kenley. We were cutting in this bend, and although it was another 40 acre wheat paddock at the time, it was right on the river and provided another opportunity for expansion.'

Planting started here in 1960 and in those days, if you put in 500 trees, it was a fair effort. We also grew peas, watermelons and cantaloupes between the trees for the Melbourne Market. From around 1963 I rode a motorbike from Boundary Bend to the Kenley property. We then lived in a caravan for five years until we moved into the house in 1970'

'At Boundary Bend portable spray lines were used and there was little time to do anything else but shift them as they had to be carted from one side of the property to the other and then back to the start again. Over time we moved to overhead, then under-tree and now drip irrigation,' Norm Chislett explained.

Looking back Norm Chislett has no regrets. 'You had to get on with it. Materials were unattainable really – I got two new tyres for my 1926 Buick car and thought I was made. Vehicles ran on kerosene; the private motorist got four gallons of petrol per month, primary producers received twelve. Land was 10 pounds per acre and a water licence was 10 pounds per year in Boundary Bend.'

I would have liked greater education opportunities, but was conditioned to manual labour. There are more options now and it is good to keep up, but I get a lot of satisfaction and pride in having started something from scratch, building it up and seeing the continuity of my family being tangibly involved today. If it takes effort, you appreciate it more.'

Compared to when we first came down here you couldn't imagine the development that has taken place today. One of the big developments was the buy-up of 22,000 acres by Mr Peter Menagazzo who put water right out in the Mallee to grow potatoes. The current expansion of olive growing in the area is impressive.'

Citrus Growers at Kenley (via Piangil)



Left to Right 1 Family photo (L-R): Susan, Brenton, Meagan, Greg and Mr and Mrs Norm Chislett Snr. 2 Punt with timber for milling crossing from NSW. 3 Homemade spray equipment for Red Scale. (500 gallon bowser tank, 2 operators with 40ft hoses and 2 operators trailing with hand wands.) 4 Timber cutting by hand.

Citrus was an attraction in those days. We still used horses and vines were a tedious industry. There were a lot of earthen ditches, invariably full of paspalum. Nobody pruned citrus then, but we did attempt to control scale. Red Scale was the curse of the industry at that time. We were wet all day spraying with Malathion and four operators were required to do the job. We stopped spraying as soon as the aphytis wasp was introduced. There were no weedicides, however it was a simpler approach to life. I was glad to get out of dried fruit and oranges appealed, as the citrus boys weren't doing too bad. Until we lost the juice market, an orange was worth something,' Norm commented.

Referring to more recent times, Norm Chislett was positive about the citrus industry. 'Citrus has now become more of a science. Certainly, there have been ups and downs, but between frosts and scale we survived. If growers stay up in the forefront of the industry, if they are aware of the varieties and where the markets are, there is good reason for optimism. I ask Greg now. We have always discussed things without a cross word being exchanged, and many of his ideas are better than mine,' Mr Chislett concluded.

Norm's son Greg and his wife Susan have travelled to Spain on several occasions over the last six years on research visits. Greg acknowledges that these trips have had a big impact on their outlook.

'We have seen first hand what can be done with irrigation, fertigation and the development of varieties. We wouldn't have installed our current system if we hadn't seen the positive outcomes in Spain,' Greg stated.

Greg shares his father's optimism in the industry and considers that one of our biggest advantages is being a Southern Hemisphere producer. He believes that the easy peel varieties have a lot of potential and are the way of the future.

'The combination of new varieties, irrigation and fertigation techniques and new cultural practices brings trees into bearing faster with more consistent and higher yields. Even though it is expensive to put in infrastructure and high-density plantings, I think it will all pay off,' Greg said.

'The MVCB are to be commended for their foresight in organising the overseas trips for growers. The outcomes are really starting to pay off with more larger growers becoming interested in the new varieties that could return good profits. In this regard, there is also a spin-off for the packers who will get the larger, higher quality fruit that the consumers want. This makes their job easier and more profitable,' Greg added.

Greg Chislett spent two years in Zambia (1978 to 1980) and compares this time to being in jail for two years, as it was like going back 50 years in terms of industry practices.

Susan Chislett, originally a Tasmanian, supports her husband's belief that, 'you have to get out of where you are,' you have to attend workshops and see first-hand how others operate in an increasingly competitive market.

'Education and information is essential in understanding the industry. It's all about making and adjusting to change,' Susan commented.

Susan is very involved with the family business, being mainly concerned with the administration side. She acknowledges the increasing workload in this area and is very aware of the importance of what she refers to as 'the paper trail'.

Susan is currently completing a Bachelor of Horticultural Management by correspondence. Greg and Susan's son Jonathan is a chemical engineer based in Brisbane, 20-year-old son Brenton works on the property and daughter Meagan is in year 11 at McKillop College in Swan Hill.

Throughout the interview, the close family ties and mutual respect for each other was evident. There was understandable pride in their achievements and recognition of the need to believe in the industry, keep up-to-date and plan for succession.

It was a pleasure to spend time with a family of citrus growers whose success is underpinned by hard work, self-help, professionalism, researched inquiry and a strong family bond. Once again, I felt the industry was in good hands, and for all the right reasons. I thank them for the opportunity.

E. Warhurst Compiler

CITTgroup Activities

CITTgroup (Citrus Information and Technology Transfer Group) meetings are open to all growers. CITTgroup notices are sent out via email and fax with the local media providing valuable support in conveying information to growers.

To add your details to the contact lists, or for further information, please contact Peter Morrish, Murray Valley CITTgroup Co-ordinator at the MVCB on 03 50211890, or on mobile 0407325 934

Sweet & Sour

Neil Eagle staying true to form.

The writer of a snappy little personal pars column in the Koondrook-Barham 'Bridge' newspaper is getting a little worried that Neil has almost outranked her with his weekly contributions.

'He almost needs a column of his own headed *Neil Eagle's Words of the Week*.'

Fearing being overrun she suggests she might need to 'take him out', because she is getting worried about losing all the attention. All in jest obviously as she ends with 'Terrific to see passion in what you believe in'.

Key Points for Winter Irrigation

Irrigation management in winter, as with all times of the year, is important to give growers the best chance of producing healthy trees and good quality fruit. Proper irrigation scheduling in winter is receiving more attention in recent seasons due to the low rainfall measured throughout Sunraysia.

The following points should be considered by citrus irrigators in the June to August period:

- While irrigation requirements are relatively low during this period, do not underestimate water requirements. Temperatures may be cool, but windy days significantly increase citrus water requirements.
- Growers with soil moisture monitoring tools have learnt that in winter and spring the most active part of the rootzone is in the top 30cm. This means that, while at other times during the season the full rootzone depth of 80-100cm may be monitored, winter monitoring should be concentrated on this relatively shallow depth to determine irrigation timing. Low water use occurs at depth, and irrigations should not be pushed too deep at this time of the year. Shallow irrigations are also an advantage if heavy rainfall occurs which can cause possible water logging.
- Citrus growers who have adopted accurate soil moisture monitoring tools have found that in the last few winters (which have been extremely dry) at least one, and possibly up to three full cover sprinkler irrigations per month, have been required throughout the winter period. Mandarin and other easy peel varieties appear to have a greater irrigation requirement throughout winter than navel varieties.
- Irrigators with drip and under tree sprinklers applying water in a strip along the tree line only (dry mid rows) should be careful not to overestimate effective rainfall. If you irrigate under the tree line only, most of the active, healthy roots will be concentrated in this region under the canopy. The canopy on mature trees will therefore shield this active rootzone from most rainfall events. Following rainfall, irrigators often delay reading their soil moisture monitoring equipment, believing that everything has received a good drink. Water stress and salt burn (as the trees take up rainwater from the mid-row where the soil is usually high in salt) often occurs. If you irrigate

along the tree line only, read your monitoring equipment or dig a hole under the canopy shortly after rainfall to gauge how much moisture has become available to the active rootzone. An irrigation may be necessary much sooner following rainfall than initially thought.

Information provided by:

Jeremy Giddings
Irrigation Officer
NSW Agriculture, Dareton

ISC Congress Summary and Study Tour to Italy and Morocco



Left-Right: 1 Peter Morrish inspecting excessive mounding in Moroccan orchard. 2 Young clementine wrapped in straw for frost protection in Morocco. 3 & 4 Wind fan for frost protection. In past used for insect control. Note small round tube with jets behind fan to pump out insecticide.

INTRODUCTION

The ISC Congress is viewed as the peak forum for the presentation of citrus research from around the world. It is conducted every four years to showcase citrus research and development. The 2004 Congress was held in Morocco from February 15 to 20.

I attended the conference, pre-conference tour and the pre-pre-conference tour co-ordinated by Mike Arnold (Auscitrus), to Southern Italy and Sicily to view citrus production. The cost of the study tour was funded by the Murray Valley Citrus Board and Horticulture Australia Ltd.

This report is taken from my records, thoughts of the study tour and the ISC Congress. Information should only be used in conjunction with other expert information and not as the sole basis for decision making. Notes are the presenters' views as recorded at the time, unless indicated.

Maturity timings are based on Moroccan maturity dates unless stated. They will differ from Australian maturity times by approximately six months. This information is to be used as a guide and only in conjunction with other expert advice.

Horticulture Australia assisted a number of attendees to attend the congress, including myself. A more detailed final report will be released by Horticulture Australia Ltd.

PURPOSE OF VISIT

- 1 As a steering committee member of the Blood Orange Growers Group establishment committee, I was to investigate, in conjunction with Auscitrus representatives, different varieties of Blood Oranges to introduce and extend the season for the growing and marketing of Blood Oranges in Australia.
- 2 To observe growing practices and varietal selections in Morocco and Italy to determine best practice management tools to be adopted by the Murray Valley Citrus Industry.
- 3 To investigate opportunities to bring relevant overseas citrus researchers to Australia to present at Citigroup meetings.

EXECUTIVE SUMMARY – CONCLUSIONS/OBSERVATIONS

Italy and Sicily

The Italian citrus industry is facing an uphill battle. It has many small properties with plantings of unwanted varieties for current markets. The majority of production is on Sour Orange rootstock. While susceptible to Tristeza, fortunately it is not yet present in Italy. With the opening up of the European Union, there have been significant subsidies for orchards to convert to organic production and this has been taken up by many growers. If subsidies are reduced, it will be interesting to observe how many remain growing organic citrus.



Blood Orange in Sicily.

Blood orange production will be affected by the Parmalat collapse, as they were the main sellers of Blood Orange juice. There is always going to be a market for the juice, but new products have to be developed to expand its up-take by consumers. Fresh Blood Oranges will need to be marketed to consumers. The newer Tarocco varieties may be difficult to market due to the skin being the same color as other oranges. The red pigmentation is only on the inside.

One Australian Grower on the tour was quoted as saying that the juice from the Tarocco Blood Oranges was 'the best orange juice I have ever tasted'.

ISC Congress Summary and Study Tour to Italy and Morocco Cont'd...

Bergamot citrus production will decline as returns from the oil is reducing due to alternative products in the marketplace. In an attempt to increase market opportunities, the Italian government is heavily subsidizing research into the value adding of this oil and its traceability, to prove that there are minimal or no chemical residues in the product.

The majority of orchards are less than 10 hectares and growers are finding it financially difficult to change over to other varieties and still maintain a viable income.



Bringing picked lemons from orchard to headland in Siracusa

Moroccan Citrus

The Moroccan citrus industry, I believe, is following the lead of the Spanish and developing orchards with Clementines to meet the easy peel market throughout Europe. They are developing their orchards in similar ways with mounding and fertigation systems. It seems that many Spanish experts are assisting in this development. However, the industry still has a long way to go to catch up to the Spanish.

The Afourer mandarin is an interesting variety. So interesting, that it seemed we were destined not to see it. The Afourer was bred in Morocco, but was a very seedy variety. For this reason it was not widely planted until developed as seedless without pollinators. The variety has now taken off around the world, leaving the Moroccan industry upset that it has expanded so quickly, without them reaping the rewards.

While I didn't see a tree, I did get to see and taste some fruit. From information gathered, if Australian growers wish to grow the Afourer mandarin, they will need to manage it and other Clementines differently to other orange trees (they reportedly require different management strategies).

Citrus is relatively cheap to produce and with a lot of the country still having third world characteristics, (still with shepherds and their flocks) this will probably continue for some time.

ISC Congress

Having never attended an ISC Congress before, this event was a real eye-opener. To speak with researchers from around the world and hear their opinions on the industry and their research results was very interesting. It seems that everyone is striving for the one piece of fruit through breeding programs which will satisfy the needs of all. However, it is not quite that easy. Crop regulation was an important topic, particularly with increasing plantings throughout the world of the Clementine variety (reportedly very alternate bearing) Nutrition information was wide and varied, with again no one recipe that was a standout.

Orchard management was a component of all presentations. With several of the trials being laboratory or small hot house based projects, the research needs to be transferred to the field to determine if what works in the lab is also successful in the field. Protection of trees with shade cloth or applied sprays is to be monitored, as these may prove to be best practice in orchards in the future.

Research funds are reducing and there will be a need to conjoin research bodies around the world to work together for the benefit of the world citrus community. This includes health issues, as citrus is competing with so many other fruits and vegetables in the marketplace.

VARIETAL INFORMATION - SUMMARY OF NOTES

Tarocco Blood Oranges

Very interesting oranges to observe with the different varieties having differing marketing windows. They will need to be researched in Australian conditions to determine nutrition and other management requirements. Processors will also need to learn how to handle the juice, as the requirements differ to those for Navel or Valencia juices.

Bergamot oranges – oil production

Observations of the Bergamot orange are that production is being reduced due to limited markets, which are being taken over by other oil products. The Italian government is attempting to increase sales of the oil by researching 'value adding' options and by proving there is no chemical residue in the product.

Sidi Aissa

Sidi Aissa is not alternate bearing and tends to crop year in, year out. Fruit can be carried from October through to December. Crop loads do not vary from 250kg per tree on Citrange rootstock. Planting densities range around 2mx7m or 3.5mx6m. Aiming for 50t/ha production with density of 3.5mx6m.

- More productive than Nules Clementine.

Ain Taoujdate

Picking of Ain Taoujdate in Morocco is in November, the same time as Sidi Aissa.

- More productive than Nules Clementine.

Nova

It is difficult to set fruit on Nova. Attempts have been made through pruning and growth regulators. Trees are improving as they get older. Splitting is a huge issue with up to 30% of fruit in younger trees effected. At this stage it is thought that splitting is related to wet weather and there is a need to monitor irrigation so as not to over water. Various pruning, fertiliser, and growth hormones have been trailed, but do not seem to reduce the splitting. Some granulation occurs, but the cause has not been identified as yet. A lot of fruit was lost last season, mainly at fruit drop, and even more so in hot summers with days of 45oC and a hot east wind. (Late June in

Morocco). Nova is best for the local domestic market. It is self-incompatible and needs a pollinator. It is therefore necessary to improve fruit set and other fructification parameters to achieve higher yields. The Marakesh climate is best for Nova.

Nules

Nules are on citrange rootstock due to the salt content of the soil and to encourage early maturity (October in Morocco). There are no issues with cross-pollination and seeds, even with neighboring Valencia Late due to the different flowering times.

Fortune

Fortune is not suitable in the Marakesh area due to the high acid content, even though it has good size etc. These have been topworked to Washington Navels and Nules.

Nour

Last season, Nour produced 60t/ha with an average of 30t/ha. The previous season was 27t/ha. Nour is very alternate bearing. With an on-crop it can achieve 100kg fruit per tree in the 57 to 65mm size range.

Late Lanes

It is anticipated that Late Lanes will be picked in January. They do not currently use hormones to hold fruit on the tree as with other varieties.

Afourer

Afourer was first planted in Marrakech. The variety becomes seedy if it is not isolated from pollinators. Speculation re distance from pollinators ranges up to 6-10 klms with no pollen producing barriers. The suggestion is to only plant in a designated area. It likes dry conditions. Under humid conditions it produces a fine weak skin and is difficult to pack. It is very sensitive to sunburn and is generally picked late in mid-January. After March, it becomes too sweet. It doesn't require GA. No thinning is undertaken with Afourer, as the market prefers smaller count ranges 48-52mm diameter. Afourer is worthless in orchards where cross-pollination can occur due to seeds.



Loading fruit picked into bins in an orchard in Siracusa.

ROOTSTOCK INFORMATION – SUMMARY OF NOTES

- UCP of Les Domaines are breeding new rootstocks: Troyer and Carrizo citranges, Volkameriana (claimed to be vigorous, but not as good as Sour Orange) and Sour Orange. Only 30% of trees are now grown on Sour Orange rootstock due to the Tristeza virus.
- Young trees on citrange are growing faster than on Sour Orange. There is an awareness of citrange problems on calcareous soils, therefore mounding.

- Using Volkameriana rootstock which causes slightly earlier maturity, higher production, but there is a slight issue with peel and taste. It won't carry fruit on the tree.
- Volkameriana is an earlier maturing rootstock, but quality is poorer than Macrophylla.
- Macrophylla has been the most successful for Nules in calcareous (high lime content) soil. Trifoliata is not successful in this situation.

Take Home Messages

- *Netting/shading* may become a component of the best practice orchard in the future.
- *Messenger (Harpin technology)* A watching brief needs to be maintained.
- *Clementines* require their own management techniques particularly regarding:
 - Crop regulation, setting or reducing fruits.
 - Pollinator segregation, ensuring there is sufficient distance between varieties that become seed when pollinated and varieties that act as pollinators.
 - Preferred densities. The Moroccans prefer single planted orchards rather than removing trees from high-density plantings.
- *Presenters* - South African presenters were excellent and spoke in growers' terms. A list of possible presenters to bring to Australia has been compiled.
- *Easy peel future*. All production increases seem to be based on Clementine easy peel varieties. How much can the world market consume annually?
- *Variety Rights*. The majority of new varieties coming onto the breeding lists are patented. Growers will have to understand the rules and regulations regarding these varieties before planting them.
- *Organic* - niche markets are available. Returns to growers are going to determine the level of production, due to higher production costs.
- *Fertigation* and mounding is the way of the future, particularly with ground that has poor topsoil layers and salt content in both soil and irrigation water.
- *With Eurepgap regulations*, the use of 2,4DP spray is prohibited. This will possibly effect the sale of Australian fruit into the European Market.

(*Note FAO is putting out a paper on the various QA requirements in Central America.)

Poster Presentation

In conjunction with my attendance at the congress, I also included an abstract, manuscript and poster in the conference proceedings. The title of the research was "Murray Valley Citrus Crop Database". I had to be present during the poster presentation session on the Monday of the conference from 5.00pm to 6.30pm. I had nearly 20 enquiries from people representing 7 different countries.

Overall, it was a very interesting and worthwhile experience, with a number of potential benefits to our industry being identified for further investigation.

Peter Morrish Industry Development Officer and Citigroup Co-ordinator, MVCB

Images from the ACG 56th Annual Conference



Top (Left-Right):
1 Field day display of major sponsor, The Mildura Co-operative Fruit Company. 2 Kevin Cock enacting the role of W. E. Makin, General Manager of Mildura Fruit Co-operative from 1904-1907, with a much younger Joy Eagle. 3 Field day site at Dareton Agricultural Research Station.

Bottom:
Field day at Dareton Agricultural Research Station.



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