



Quandong

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West Australian Nut & Tree Crop Association (Inc)
www.AOI.com.au/wanatca

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Quandong • Third Quarter 2003 • Vol 29 No 3



Male
flowers



Female
flowers



Leaves on twig
with female flowers

Branch
with
male
flowers



Fruit
pod



DON'T MISS THE NEXT WANATCA GENERAL MEETING:**7.30 pm, Tuesday September 9, 2003.**

For our next event we have as our guest **Liz Barbour**, from the Forest Products Commission, who will tell us about:

The Science of Pine Seed Production.

This talk should have application to pine nut growing. Liz will also describe the FPC's new Infinitree Program for productive tree planting in WA. This meeting will be held at our old venue, at Kings Park.

Also, advance notice of our next Field Day in the Mandurah area, when on **November 16 (Sunday)**

we expect to visit **Custom Composts** and **Matt Fowler's Garden.**

Full details on accompanying leaflets. All welcome.

Enquiries to 9250 1888 please

In This Issue

Go-ahead for carobs	3	Tamaluanas meeting generates lots	17
California Dreaming: Compost Facilities and Farms	4	Changes at Australian Olive Grower, Kondinin Group, and Land Management Society	18
First black truffles found in WA	5	Brazil nut oil, a luxury product	19
The "Pentagon Fruit"	7	Sandalwood: On scent of success	21
Good oil on the Wheatbelt	8	China World Leader in Apple Production	22
Olive trees to combat salinity problem	10	Fruit 'salad' a mixed success	23
Tree-farming takes root	12	Ginkgo pill results 'smart'	24
New 'Rooter Pots' aid air-layering	13	Ancient plants mirror modern trees	25
Karragullen on Saturday	13	Sea buckthorn	26
Out-sourcing fruit and nut production — threat or opportunity?	14	Liquorice may tackle SARS	27
Eco-Echidna a party animal	15	WA olive industry gathering real strength	28
Green tea a promising crop	16	WA to lead nation in science R&D	30
Death of Ray Hart hits home	17	HortLine has the answer	30
		Field Day near Williams	31

About the Cover

The cover drawing, from Frans Geilfus' *El Arbol al Servicio del Agricultor*, shows the Carob, *Ceratonia siliqua*. See also the story on page 3.

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[Countryman Horticulture / 2003 Jul 3]

Go-ahead for carobs

A group of Mid West carob growers is close to achieving its aim of forming a co-operative after being given ministerial approval.

The 15 growers intend to buy machinery to process carob products which are currently imported to Australia.

Geraldton carob grower George Matchett has played a big role in forming the co-operative.

Mr Matchett planted his first carob trees about 20 years ago.

He currently uses carob for stock feed, but said it could be used for various products.

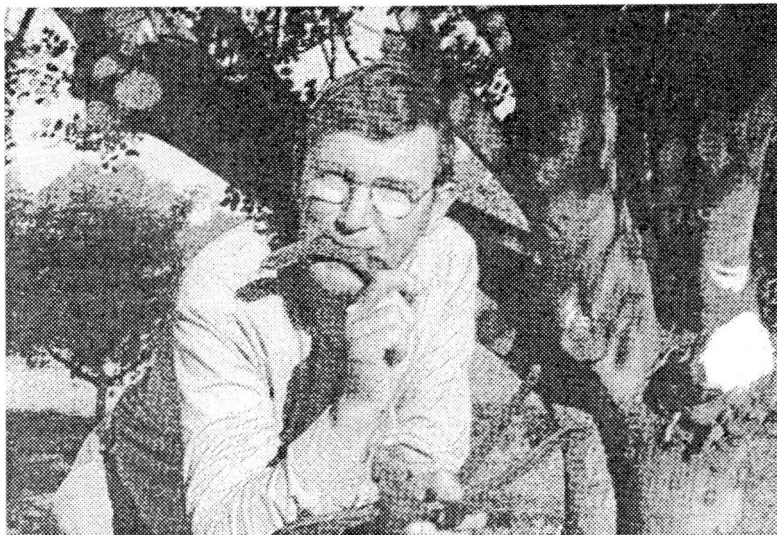
"This will be the first Carob Growers Co-operative in Australia," he said.

"We had a couple of preliminary meetings to ascertain if growers wanted a co-operative or if they were happy for multi-nationals to come in.

"There would be about 30 growers in the Mid West growing up to 2000 trees.

"It wasn't hard to get growers on board because they already had a vision of the value of carob and wanted to see it progress," he said.

Mr Matchett said the co-operative would buy machinery to



George Matchett, of Geraldton, has grown carob for 20 years and is optimistic about Australia's first Carob Growers Cooperative.

Quandong Links to ATCROS

Many of the articles, advertisements, and news items in Quandong refer to organizations and people who are listed in the Directory section of the ATCROS Web Site, which is at:

<http://www.AOL.com.au/atcros>

In this issue, items underlined in the text have Atcros reference numbers listed at the end of an article or elsewhere close by. This is so that readers can get more contact details.

ATCROS usually lists name, address, and phone numbers, also fax, e-mail, and web page details where available.

Quandong: Atcros ref. <A1466>.

process carob pods.

Australia currently imported the product at a cost of about \$15 million a year.

Through the co-operative, growers could achieve great returns for their efforts and have better control on the quality and continuity of supply, he said.

"A lot of people don't grow carob because there is nowhere to process it, so things could change when we get processing equipment," he said.

Mr Matchett can be contacted on 9921 6247.

— *Rebecca Noakes*

[Organic Grower (Organic Growers Association WA) / 2003 Jun]

California Dreaming: A Study Tour of Compost Facilities and Farms

In 2002 a study tour, led by the Dept of Agriculture, visited California to look at compost production and the use of compost in horticulture. This article reviews some of the findings from the official report.

Compost production

Open windrows turned by windrow-turners dominate compost production. Windrow size varies with nature of materials being composted, land area available and production levels. Some capital-intensive production systems such as in-vessel and enclosed positive pressure systems exist. However, the tendency in California has been for composting of growing urban waste streams to be processed in rural areas using open windrows. Static pile composting, usually associated with forced aeration is also practised.

A good example of this is the Community Recycling operation at Lamont near Bakersfield. Considered to be the largest compost producer in the world, they use open windrows to produce 1200 to 1500 tons of finished compost daily!

In California, all manures must be composted before being used in fresh food production and growers favour manure-based compost because of its greater nutrient (nitrogen) value. However, it was noted that one very large compost producer was

successfully converting growers to composts based on yard (green) waste and food waste.

Compost quality

By law, compost producers in California are required to produce records verifying that their compost has undergone adequate pathogen reduction. This requires the compost to be maintained for at least 15 days at or above 55°C and to have been turned at least five times.

The use of biologically based indicators, including those provided by Elaine Ingham's Soil Food Web laboratory and BBC Laboratories, appears to have gained wide acceptance. (See www.soilfoodweb.com).

— *Andy Gulliver, Custom Composts*
<www.customcomposts.com.au>.

Organic Growers Association WA: A1433.

Custom Composts: A3506.

Q Ed: We are visiting Custom Composts during our Field Day on November 16. See the announcement on page 2 of this issue or the flyer available.

First black truffles found in WA

The prized black truffles produced in France have fascinated potential growers in Australia, and have been successfully grown in Tasmania. Now the stories extracted below tell how similar success has come to WA.

[Countryman / 2003 Aug 7]

Truffle father unearths delicacy fit for a king

Guinness the dog earned his keep and caused his owner's heart to skip a beat when the trained labrador-cross dug up the first truffle to have ever been grown on mainland Australia.

At more than 160 g and the size of a cricket ball, the Black French truffle is the first fruit of six years labour and \$5 million investment by Manjimup-based Australian operation, The Wine and Truffle Company.

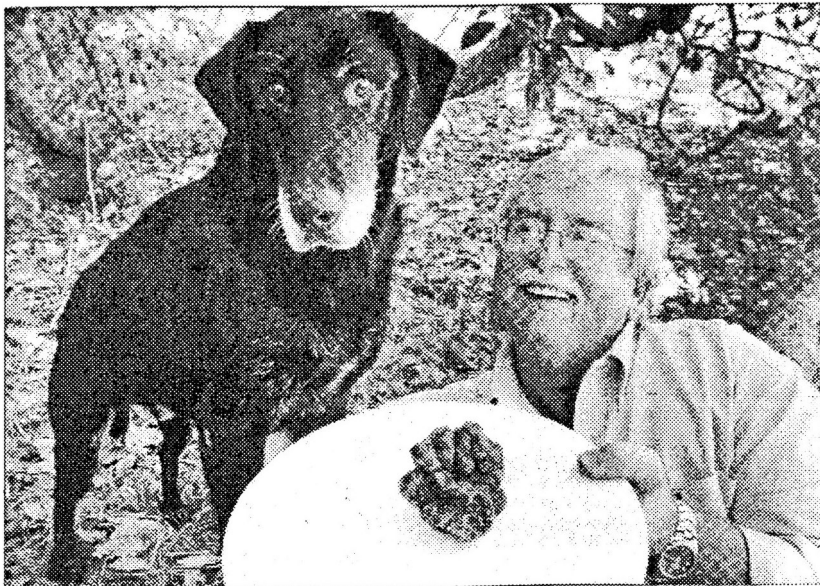
The truffle, prized among gastronomes and purported to have aphrodisiac qualities,

was grown in one of the largest "trufferies" in the southern hemisphere after Nick Malajczuk, considered the "father of truffles" in Australia, infected the roots of 13,000 oak and hazelnut trees with the truffle fungus.

"This truffle is genetically the same as the French truffle — it has the same quality and the same aroma," he said.

Dr Malajczuk said the Manjimup climate provided the right disparity in temperatures needed for the process to be successful and forecast that the company would reach full truffle production levels within 10 years.

"We anticipate that we'll be producing truffles in quantity over the next two to four years," he said.



Guinness the truffle dog has found the first truffle to be grown on mainland Australia. His owner and trainer, Dr Nick Malajczuk, has been holding his breath in anticipation of the find.

"The entire project has been based on a solid foundation of science from start to finish and we anticipate that truffles produced from the first plantings will be worth in excess of \$5 million a year."

Dr Malajczuk said the Australian truffle season coincided with Europe's off season. "We are already receiving a lot of interest from the Europeans."

Dr Malajczuk trained nine-year-old Guinness to recognise the scent of truffles by introducing him to the pungent, sweet scent of truffle oil imported from Europe and rewarding him with cheese every time he identified the smell.

Strong demand has ensured phenomenal prices are paid for quality truffles — up to \$3000 a kilogram is common.

[Sunday Times / 2003 Aug 10]

Black magic

A six-year partnership has produced the gourmet equivalent of black gold for the first time in WA.

They call it the food of the gods, though to some people it smells of old socks and mice. But to Wally Edwards, managing director of the Wine and Truffle Company, WA's first french black truffle — sniffed out in Manjimup this week — the smell is pure money.

That's \$3000 a kilogram to be precise, making the cricket-ball-sized fungus worth about \$500.

The cricket analogy is appropriate for it was cricket that brought Wally and his partner, scientist Dr Nick Malajczuk, together, sending them on a journey of research to produce WA's first *Tuber melanosporum*, otherwise known as the french black or perigord truffle.

Wally, who opened the batting for

Australia under Ian Chappell and played for WA, was coaching Floreat Park Primary, his son Phillip's cricket team, and Nick's son Andrew played in the same team. The dads became friends.

"Nick, who has a doctorate in forestry and had spent 10 years researching the black truffle, was telling me about his work in helping to set up the trufferie in Tasmania," Wally said. "At the time he was working at the CSIRO, providing all the technical input into the trial plantings in Tasmania."

Nick's enthusiasm and skill persuaded Wally to seek investors to set up an unlisted public company.

As a civil engineer, Wally had built up a successful irrigation business and had dabbled in startup projects in agriculture, such as wildflowers. But he is the first to admit he is no foodie.

"I had never tasted a truffle. I knew that it was black gold in a gourmet sense — it all sounded a bit mysterious," he said.

With the \$5 million raised, they bought Hazel Hill Estate, a 52 ha property in Manjimup. According to Nick's research, the area provided the ideal climate and soil conditions for the fungus to establish its symbiotic relationship with the roots of oak or hazelnut trees.

"We planted 11 ha of wine grapes and, over 21 ha, planted 13,000 oak and hazelnut trees, making this the largest trufferie in Australia," Nick said.

Using DNA fingerprinting, Nick set about importing the right fungus from France. Then they started training sniffer dogs after an ill-fated mission with a pet pig called Missy.

"They say the smell of the truffle is similar to the male pig's pheromones. But Missy kept

missing", Wally said.

"We got a deaf dog called Bandit from the dogs' refuge home and Nick trained his dog Guinness with frozen truffles from France."

Nick said the dogs began their daily sniffing missions about two years ago — and then the waiting game for the partners began. "The pressure to produce has really been building," Wally said.

The call Wally had been waiting for came out of the blue this week and, appropriately, it was Nick who made the discovery.

"I had only just arrived at the property and thought I'd take the dogs for a late afternoon walk," Nick said. "We meandered along and at precisely 3.34 pm Guinness started to paw around the tree. It wasn't a vigorous dig, so I knew he'd discovered something. I put the fork in and discovered the truffle."

Nick was on the phone straight away. Wally's reaction was predictable, if not hysterical.

"It was like making a century", he said.

— Gail Williams

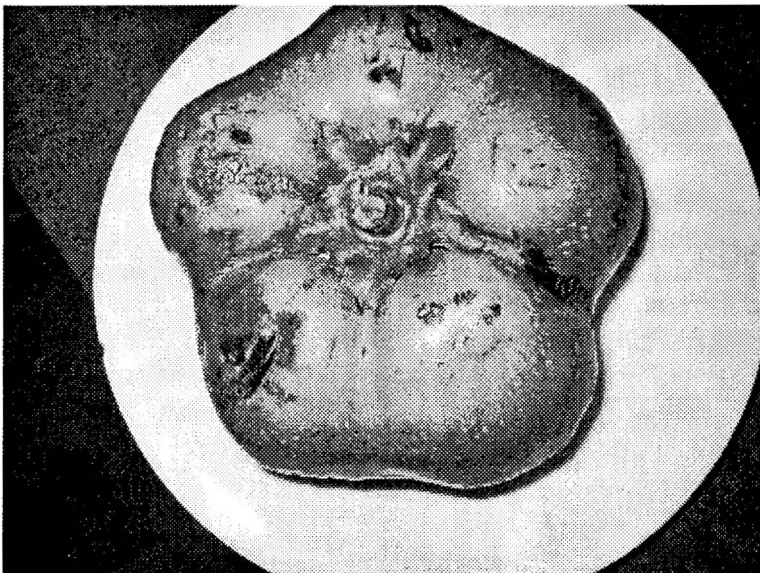
The "Pentagon Fruit"

In a local store which had a supply of Chocolate Pudding Fruit (or Black Sapote, *Diospyros digyna*), I noticed one fruit which was quite different.

This was quite large, about 18 cm across, and had 5 distinct lobes. I don't know if this was a single strange fruit from a normally-producing tree, or was from a different variety,

Inside, the fruit had the normal brown flesh, darkening as it ripened. Digynas are highly astringent until they are really ripe, when they do indeed have the flavour of chocolate pudding. I'm awaiting this ripeness stage to find out about the flavour, and extract and grow on any seeds.

— David Noel



[West Australian / 2003 Jul 31]

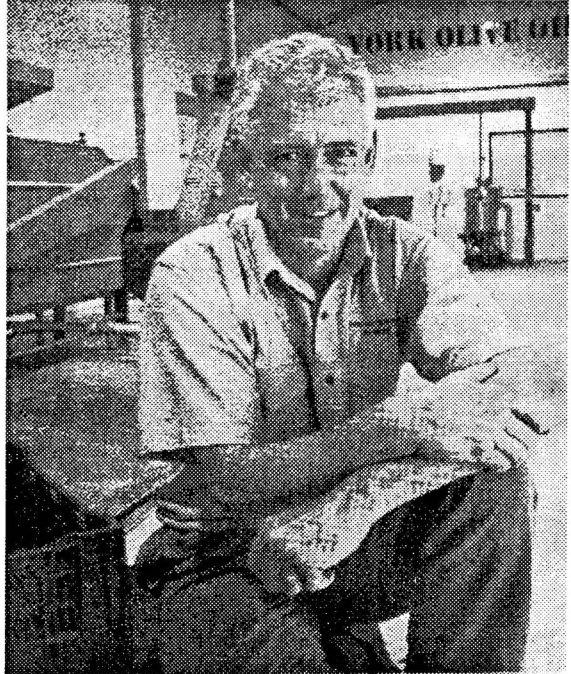
Good oil on the Wheatbelt

It took Arnaud Courtin a year to fashion a bridge over the small creek which runs through his farm near York after he moved to the property six years ago.

Twelve months to build a bridge — and half an hour to watch it wash away a week later after a record 100 ml of rain bucketed down on the notoriously dry town on the edge of the Wheatbelt.

It is a measure of the Frenchman's determination that he was out again the next day, rebuilding the bridge that provided the only entry point to the bare block he had planted with 200 olive trees. And it is that determination which Courtin believes, more than any scrap of Gallic culinary nous, has helped him carve out a place among the growing pool of local olive oil producers.

Courtin drove taxis and buses for Greyhound and Transperth after moving to Perth by way of the Sahara 20 years ago. As he puts it Europe seemed "a little bit boring" after two years running a tourist camp in the middle of one of the world's fiercest deserts, so Perth seemed an obvious choice.



Arnaud Courtin

Growing up in ultra-urban Paris, far from the olive groves of Provence, the only contact Courtin had with the good oil was in his mother's cooking. "In France when you do quality cooking you always use olive oil and for other cooking you use peanut oil," he says.

"I knew about that but I knew nothing about trees or how it was made. But I like challenges, and then once I have mastered the challenge I like to move on to a new one and I think this is a big one."

There was also an ongoing interest in food, cultivated first in the Brussels restaurant which Courtin managed before departing

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Europe for the Sahara, and later in the patisserie he established in Perth, which supplied French pastries to the city's top hotels and restaurants.

Courtin admits to doing little research before he started building his factory, which now trades as the York Olive Oil Co. and is capable of processing 450 kg of fruit an hour, putting it in the boutique range of WA's producers. He was struck with the idea while listening to an expert on ABC Radio who claimed WA's climate was ideal for olive production and wondered at the absence of such an industry. "To be honest I didn't do much research; it was the same when I came to Australia, I didn't do much research, I just had a gut feeling," he said. "I planted my trees and as soon as my trees were planted I started making oil."

Courtin sidestepped the usual five to six-year lag between planting and first harvest, harnessing the hitherto wasted bounty from mature trees in the northern Wheatbelt for his first pressing. The trees, found in abundance around Moora, were planted during the soldier settlement scheme after World War II and immediately abandoned. Courtin approached the land owners and was granted permission to harvest the olives for a token payment.

"I would say 'Can I harvest your olives?' and then give them a couple of bottles," he says. "After a year or two I saw everyone else planting and I realised that it was going to turn into primary production, so I stopped."

Courtin works mostly with hobby farmers in York, Chittering, Gingin, and Popanyinning, advising the growers throughout the year and visiting their farms to determine the optimum time to harvest. The olives are removed from the trees with customised rakes, preventing the bruised fruit that can result from mechanical harvesters and damage to the root

system from the vigorous shaking favoured by hand-pickers.

In the traditional European olive oil industry, trees were planted on the non-arable hills surrounding agricultural areas and harvested by peasants as a supplementary income. "In Australia it is totally different," Courtin says. "It is systematic and organised with plantings, irrigation and training which is really very scientific. In Europe they are dragged down by tradition. You visit some of the oil mills in Europe and you think 'My God'; it is just bad practice."

Courtin presses olives for about 60 growers, from Albany to Moora, and bottles the oil for various labels and for Greek and Italian families who harvest their own olives each year for the home kitchen.

Australians are the biggest consumers of olive oil outside the Mediterranean, imbibing on average one litre a person a year. Greeks

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top the list at 21 litres with Italians second at 14 litres. Courtin credits Australia's big Greek and Italian populations with the oil's popularity here, but points to a more general trend of culinary experimentation. Courtin's new-world enthusiasm is shared by his business partner, South African neighbour Jenny Baxter. Baxter stepped in to fill the breach created when Courtin's wife Danielle left for the Congo as a volunteer with Medecins Sans Frontieres two years ago. "You couldn't do it on your own; you need teamwork; you need someone as mad as you about the subject," he says.

Courtin's financial partners include Loose Box chef and fellow Frenchman Alain Fabrigues, with whom he has just released a vanilla-infused oil. Fabrigues' smiling face graces the bottle's label in place of Courtin's familiar visage.

The label has helped place Courtin in an ambassadorial role for York, supported by

tastings at his cellar door outlet and upmarket grocers across the metropolitan area. His oil is now being exported to Singapore and he is seeking to expand its distribution to Europe and Asia.

Courtin hopes that his success has helped to cement York's place on the map and his place within the community. He has built a house on his property west of the town and raises Boer goats which keep him busy once the annual harvest is over.

"When I came here there was not one olive tree on this stretch of road and now from the highway to here on only 6 km of road there are six olive groves," he says. "There are days when you just hate olives, like when the parrots take 100 per cent of your crops. In the city you seem to have everything under control and regulated but here you have to live as nature."

— Alison Bennett

[*Australian Olivegrower & Processor* / 2003 Aug]

Olive trees could combat salinity problem

A Tasmanian olive company has suggested that planting salt-tolerant olive trees could play an important role in combating the state's dry-land salinity problem

In a recent news release, Carolyn Frichot, spokesperson for Tasmanian Olive Enterprises (TOE), said about 18,000 hectares of cleared agricultural land in Tasmania was already saline-affected and "a recent analysis suggests significant risk of more land being salinised." (CSIRO Land and Water).

"Massive tree-planting of the perennial, woody variety, is emerging as the easiest, most cost-efficient, and more importantly, most effective method of combating the expanding salinity menace," Carolyn said.

CSIRO scientists are working on a great number of programs, in conjunction with

farmers, environmentalists and businesses, to address the problem of salinity on many levels. Some of those programs include:

- *Development of commercial tree production systems and/or novel tree species for large areas of current crop and pasture zones affected. These include trees for fruit, nuts and oils.*

- *Ways to pinpoint the best location for tree crops, other perennial plants and high-value annuals to meet targets for water quality and quality.*

- *Selection of suitable woody and herbaceous perennials.*

• *Rehabilitate the use of salt-affected land.*

According to TOE's pedologist, Leon Hennessy (certified by CRC Soil and Land Management Group), olive trees fit into each category.' [Note: pedology is the science of natural soils]. Based on the Mediterranean olive growing history, olive trees should be planted alongside other crops and grazing land to control salinity, with the added benefit of providing farmers with additional income.

TOE's saline solution is backed up by current salinity research at the University of Western Australia which is looking at the viability of irrigated olive production in the wheat belt. Olive trees are being used to reduce recharge alongside with surface drainage that channels damaged water to storage dams to be used again as irrigation (during the summer months, therefore reducing even further the recharge effect. (GRDC Project UWA251)

Leon Hennessy believes that some farmers' solutions of simply draining or storing affected water and running it off the property is not addressing the issue. It simply moves the affected water somewhere else. The only permanent solution is to reverse salt levels. By planting olives, the trees themselves change the nature of the soil, drawing up salt for their own use. Surface water can be stored to be re-used for irrigation and slowly the salt content is altered to a more acceptable level — for good.

Mr Hennessy explains one method that

some clever farmers have been practising to solve salinity solutions for many years — the use of a marching army of olive trees. The trees are planted at a distance from the affected water site and as the salinity levels drop in the original plantation, more trees are planted closer and closer to the contaminated site until the soil no longer presents salinity problems.

"Other countries with high-salt soil content have used olive trees to great effect. Let's use their experience to our best advantage", he said. "Plant more olives, reduce and reverse salinity and at the same time provide farmers and investors with crop income. What could be a better solution?"

— *Carolyn Frichot*

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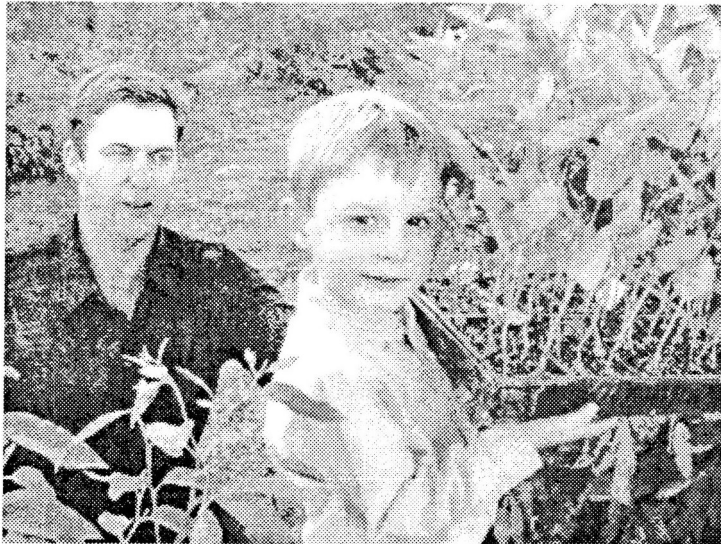
[West Australian / 2003 Jun 7]

Tree-farming takes root

The need for balance between farming and conservation has prompted third-generation Tenterden farmer Harvey Gillam to get on board the State Government's new tree-farming project.

The \$21 million Infitree program, a commercial venture between farmers and the Forest Products Commission, is not only aimed at farm diversification but will also help tackle the State's growing salinity problem.

Farmers provide cleared land for up-front cash payments and a share of the timber crop at harvest. They can also receive a share of carbon revenue



From little things, big things grow: Harvey Gillam watches son Henry, 4, hold bluegum seedlings to plant on the Tenterden farm, north of Mt Barker

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and can earn extra income by planting and tending the trees.

Mr Gillam said tree farming made good sense because it had financial benefits as well as addressing salinity and fitting in with farm management.

Premier Geoff Gallop, who launched the program yesterday at the Gillams' farm Yongarup, said Infitree would offer solutions to land degradation problems and generate new regional industries and employment opportunities.

But the project has been deemed ineligible to be part of the National Action Plan for Salinity and Water quality, so has not received

any commonwealth money.

Dr Gallop called on Prime Minister John Howard to break through the politics and match the State's funding, because the program had community support.

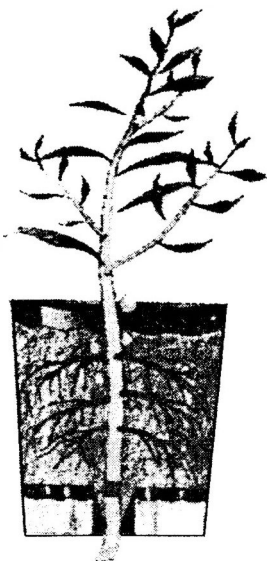
— *Cian Manton*

Q Ed: Liz Barbour will be giving a brief introduction to the Infinitree program during her September 9 talk to WANATCA.

New 'Rooter Pots' aid air-layering

Air-layering or marcotting is a technique whereby roots are induced to form on a branch of a tree by cutting off a cylinder of bark and wrapping the incision with a moist porous medium such as peat moss inside a plastic bag.

When the new roots are sufficiently established, the branch is cut off below the new roots and you end up with a new tree on



its own roots. Unlike a conventional cutting, the technique is safe, if slow, as the branch is not severed until the new roots are right.

Now new 'Rooter Pots' are available in WA which make the whole process easier. Essentially they consist of a two-part pot in the conventional shape, but with two hinged sections which can be swung open, filled with medium, then swung shut over the prepared branch. Two sizes are available, for smaller and larger plant stems.

I have bought some of these pots from a Bunnings Warehouse, but not yet trialled them, although they should work OK.

The pots are made in Spain. Trade enquiries should go to GD Plastics on 08-9470 2409.

— *David Noel*

Karragullen on Saturday

The Karragullen Horticulture Field Day, held this year up in the Perth hills on September 20, is presented this year on a Saturday.

Previous presentations have been on Friday. It is hoped that the new Saturday timing will make it easier for those with week-day commitments to attend.

This field day is one of the most useful for WANATCA members and all smallholders involved in fruits, nuts, and other tree crops, Your Association will have a stand there, with plenty of books, information, and advice available.

Out-sourcing fruit and nut production — threat or opportunity?

Anyone going to a local hardware store these days, say to buy a new electric drill, can notice an invariable occurrence. Even though the item may be marked "designed in Australia by XYZ, an Australian-owned company", in fact it will be made in China. Or possibly Korea.

That's the reality of today's Global Marketplace. It's just too costly for manufacturers to make locally the things they sell in Australia. While indeed all the design and testing work may be done in Australia, and also all the skilled stuff of running a company and developing effective sales and advertising procedures, the actual factory and its workers have moved. To China.

Now this isn't just a matter of the company buying their products from the Chinese. It's more like the position where the company has its head office in Sydney, and branch factories in Wollongong in NSW, Geelong in Victoria, and Bunbury in WA. Only now some of these outliers have been pushed over the border, into another country.

The sales, management, and design staff will still be in Sydney, and the quality-control and testing teams will still be in the factory. Or possibly the factories, if the electronic components are made up in Japan, and the castings in China. Even now in Australia, a company like Holden doesn't make its cars all themselves, instead parts come in from specialist component makers, some overseas.

Back home in the nut or fruit orchard, the grower also expects to outsource parts of his operation. Ground preparation such as deep ripping or levelling will be given to a contractor with dedicated equipment. Most orchardists

will buy their new trees for planting from a specialist nursery. Spraying and fertilizing operations may be contracted out.

After the harvesting stage, some of which may be done by contractors, the product may be passed on to processors. Most macadamias and many other nuts are cracked and processed at massive plants off the orchards. Some of these processing operations may already be overseas; Australian chestnuts are sent to China for processing by one grower, and cashew nuts grown in Mozambique will go to India for shelling. Even the huge American pistachio industry sent its non-split nuts to China for opening until new machinery was developed.

One small step

So it would be only a small further step to outsource the actual growing of fruits and nuts to somewhere like China. However, this would be a step that could be labelled as disloyal, un-Australian, and so on, many would be unable to accept such an idea.

Under such an arrangement, Australians would use their skills and technical expertise to produce and sell fruits and nuts from properties which happened to be outside our borders. Of course, there could be quarantine concerns, but these are increasingly being solved for more and more agricultural commodities. And for some export-orientated crops, like macadamias, where the bulk of the crop is exported anyway, there wouldn't be such worries.

And in fact the out-sourcing suggested is already happening elsewhere. Japan grows much of its peach requirements in China, and onions too. So the choice for Australian horticultural producers may, in the future, be a stark one — fight production out-sourcing, or embrace it!

— *David Noel*

Eco-Echidna a party animal

Everyone these days is looking to use ecology-friendly methods where they can. But sometimes the materials or equipment you'd like to use, such as predatory insects to fight pests or diseases, are hard to track down. And it has been almost impossible to get all these things in the one place.

Now the situation, in Perth at least, is set to brighten up considerably. A new company called Eco-Echidna has started up with all the good organic agents and materials, and it is targeted especially at the gardener or smallholder level.

Run by Alison Lawrie of South Fremantle, the company aims to supply such items as non-detergent-based soil

wetting agents which don't harm beneficial soil organisms, pelletized sheep dags which act as a concentrated slow-release fertilizer (high in potassium and with beneficial proteins from the wool components), blended rock dusts, packets of freeze-dried soil additives containing 23 strains of beneficial bacteria and fungi, worm-casting fertilizers enhanced with the same bacteria, and worm-farm units.

As well, Alison has organic fertilizers containing fish emulsion and neem oil, organic insecticides based on neem and citronella oils, fruit-fly traps, and a range of beneficial control insects — predatory mites to counter two-spotted mites, ladybirds for mealybug and scale, green lacewing for aphids, mites, whitefly, and moth eggs, and *Trichogramma* and *Encarsia* wasps to combat whitefly and moths.

In a novel marketing approach, the



Alison Lawrie with some of the 'Good Bugs'

company is offering 'Eco-Echidna Parties', where their consultant comes round to a group of interested people at your house, shows the products available, and talks about the whole concept of ecology-friendly gardening and plant raising.

All the products and the rationale behind them are described in a beautifully-produced free booklet, *What do you get when you put an Echidna in your garden?*, available from Alison at 08-9331 4561, mobile 0422-371 222, or PO Box 209, South Fremantle WA 6160. You can book an 'Eco-Echidna Party' in the metro area at the same contact points.

— *David Noel*

Eco-Echidna: A3507.

¥

(Projected WANATCA meeting with Alison on November 18).

[Sunday Times / 2003 Jul 6]

Stirring times for locals: green tea a promising crop

There's something brewing out the back of Manjimup.

Yabukita, sayamakaori arid shunmei could be growing alongside pink lady, royal gala and red delicious apples in paddocks around the South-West town.

In a unique experiment, Japanese tea giant Kunitaro is growing green tea bushes at the Department of Agriculture's horticultural research institute.

If the project is successful it will reap a multimillion-dollar harvest for the cash-strapped community.

The signs are good and Japanese experts were in town last week pruning the 10 varieties of green tea bushes for the first time.

The department's 400 sq m "mother block" is the first step in the long-term project.

It is predicted that within 12 years about

1500 ha of green tea bushes could be under cultivation, injecting \$20 million into the town's economy.

Kunitaro's dream is to have 4000 ha of the South-West sprouting tea-leaves. Processing plants, each costing about \$5 million, will be built within an hour's drive of every crop.

A local nurseryman has already started propagating cuttings.

They were quarantined for 12 months before they were allowed into the South-West soil.

About 90,000 tonnes of green tea are grown annually in Japan.

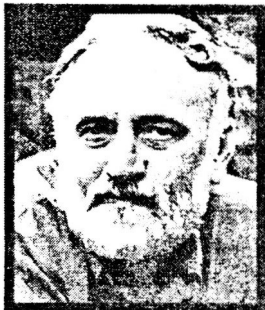
But with production declining, Kunitaro started looking overseas and found the perfect climate, soil and rainfall in the Manjimup area.

¥



Growth industry: David Doolan with tea plants in Manjimup.

Picture: Tom Rovis-Hermann



Ray Hart

Death of Ray Hart hits home

We report with sadness the death of Ray Hart, 51, after a heart attack and a car crash near Gingin in May 2003.

Ray and his wife Roz supported WANATCA from its early days. Both were active also in the permaculture movement in WA. Ray's death represents a real loss to the community at large and to plant-based organizations in particular.

A full obituary on Ray was published in *The West Australian* for June 10 this year. Ray was passionate and active about the environment, and was founding president of the Environmental Consultants Association of WA.

He was a pioneer in mine-site rehabilitation in WA, along with a range of other environmental activities, and an expert on the influence of the fungus disease Jarrah Dieback (*Phytophthora cinnamomi*) on local vegetation.

Our deepest sympathies to Roz, who is continuing with the work of their environmental consultancy business, Hart Simpson and Associates.

Tamaliunas meeting generates lots

The last WANATCA general meeting, on June 17, was well attended and generated a lot of information new to many.

Joe Tamaliunas talked on 'Novel Methods in Propagating Unusual Fruits & Nuts'. He described his method of growing new clonal plants from giant cuttings, started in pieces of drainpipe and surrounded by potting mix. The pipes are first placed horizontally, and only raised more vertically after the cuttings have commenced growth.

Joe also showed us the rooting of cuttings in water, placed in old plastic cool-drink containers. We saw the beginnings of roots forming on Andean Walnut, *Juglans neotropica*, normally regarded as almost impossible to root from cuttings. The secret, according to Joe, was to use only pure rainwater in the containers.

Among the rarer species Joe has worked on are: Panama Berry, Yellowhorn, and Cudrania (all easy); Boldo, Sugarberry, Sapodilla, and Sausage Fruit (medium); and Peach Palm, Parajubaea, Brazil Nut, Jujube and Chinese Bayberry (hard). He is also working on Podocarpus, sweet-berried

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Junipers, Cacao, Peanut Tree, Coyo Avocado, Crambe tatarica, Kangaroo Apples, and Kwai Muk.

Honey for cuttings

At the same meeting, Graham Fellows passed on a tip about improving rooting in cuttings. His information was that dipping cutting bases in fresh unprocessed honey greatly promoted root formation, as with hormone powders.

Tithonia

Richard Clarke has been doing some work

on use of *Tithonia diversifolia* for biomass conversion.

Apparently this plant, sometimes called Mexican Sunflower, is a rapidly-growing shrub useful as green manure, high-nutrition cow and goat fodder, a mulch source, as hedges, and it also has medicinal uses.

In Richard's experience, *Tithonia* is hard to propagate from cuttings in pots but easy as large-diameter cuttings ('truncheons') in the open ground. South African data indicate that the bigger the diameter, the better.

Changes at Australian Olive Grower, Kondinin Group, and Land Management Society

Some readers may be confused about changes occurring with local tree-crop players. The first change occurred when Olives Australia, the publishers of *Australian Olive Grower*, the excellent magazine for olive producers, decided to pull out of publishing and concentrate on their olive nursery and equipment businesses.

OA sold the rights to the magazine to the WA-based Kondinin Group, an information and publishing group catering principally for broad-acre farmers, although their ambit was extending into horticultural and smallholder crops in recent years. To reach this group, Kondinin started a new magazine, *Australian Small Farmer*, in around 2001.

Kondinin published two issues of *ASF* in 2002 which incorporated issues of *Australian Olive Grower*. Unfortunately, in late 2002 they got into financial difficulties, attributed to drought affecting their customers and their cash flow, and ceased publishing, eventually going into receivership. Later they were able to source funding and stage a recovery, but they sold the rights to *Australian Olive Grower* and *Australian Small Farmer* to South-Australia-based Ryan Publications, long-time publishers of another industry journal, *Australian Grapegrower & Winemaker*.

Ryan have since published another issue of the olive magazine, under the title *Australian Olivegrower & Processor*. There are apparently no current plans to resume publishing *Australian Small Farmer*.

In an unrelated move, the WA-based Land Management Society has ceased operations.

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with the retirement of Gaye and David Chambers, who were the mainstay of the LMS for the many years of its life. The LMS will be missed. Sadly, many organizations which depend on volunteer efforts for their continued existence are nowadays finding it

hard going.

Olives Australia: A2771.

Kondinin Group: A2925.

Australian Olivegrower & Processor: A3505.

[Non-Wood News / 2003 Mar]

Brazil nut oil, a luxury product

Virgin Brazil nut oil "made in Amapa" is being exported worldwide. It is hoped that, in the long term, the oil will challenge the dominance of olive oil on the national and international markets.

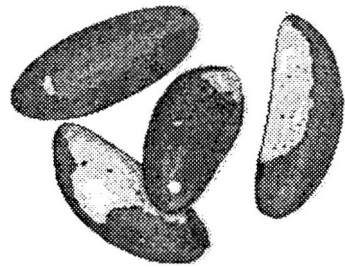
As well as being nutritious and rich in selenium, the product comes with a "green seal".

The production area in Laranjal do Jan, Brazil, is protected by environmental laws and is managed by cooperatives formed by the traditional populations of the region. (Source: Amazon News, 4 April 2002.)

The nut that could help save the Amazon
Brazil nuts are the only commercial nut found exclusively in Amazon forests. Sustainable harvesting of these nuts not only provides a livelihood for people, but also protects the forests from being cleared for agriculture.

The Martinez family has a 300-ha plot of forest next to Tambopata National Reserve in Peru's southeastern Amazon rain forest. But instead of cutting down the forest for farmland as other homesteaders in the area have done, the Martinez family harvests Brazil nuts.

The Brazil nut tree (*Bertholletia excelsa*) is found in the forests of Peru, Bolivia and Brazil. It is one of the Amazon's longest-living trees, often reaching 1 000 years, and has a very complex and specialized biology. Its flowers depend on orchid bees for pollination. Once pollinated, a coconut-sized seed pod containing some 20 seeds, or nuts, develops for at least 15 months before falling



to the forest floor. The only way for the nuts to get out of the seed pod is if a 3-kg rodent, the agouti, releases them. Squirrel-like in appearance and habits, the industrious agouti — the only forest creature capable of gnawing through the fallen seed pods — eats some nuts and buries others for the future, inadvertently planting new trees.

Brazil nuts do not only make good food for agoutis — humans like them too. Attempts to cultivate the tree on plantations have failed, making Brazil nuts the only commercial nut found exclusively in Amazon forests. "This important distinction has converted Brazil nut harvesters into guardians of the forest," explains Martinez.

There are about 1 000 Brazil nut concessions in and around the Tambopata National Reserve. When side activities such as transportation and processing are considered, the Brazil nut industry generates employment for some 20 000 people — or 25

percent of the Amazonian state of Madre de Dios. Concessions are granted by the Peruvian Government and harvesters must pay a tax based on production. Most operations are small family businesses, struggling to meet basic needs during the short January to March harvesting season.

The work is exhausting, even for the hardy. Harvesters use machetes to split open the hard seed pod and empty the tiny nuts inside, still in their dark-brown shells, into large sacks. A full sack weighs 75 to 85 kg, and must be carried out of the forest on the harvester's back, attached by a strap around the forehead. Some of these sturdy adventurers walk for several hours before reaching a road or river to transport their cargo to processing plants, where the nuts are shelled and packaged for sale.

Martinez decided there must be a better way. He and a brother teamed up with other harvesters and the Amazon Conservation Association (ACCA) to devise simple methods to improve their labour. One of Martinez's favourite methods is a small, human-powered cart that enables harvesters to wheel numerous sacks out of the forest at a time. The team has also mapped more than 40 000 ha of Brazil nut forest concessions to help the harvesters' activities. In addition, they have produced a short, local television series. The show's star attraction is the legendary Don Pancho, an elderly Brazil nut harvester who teaches the trade to his young nephew and a visiting student.

However, falling prices are threatening the struggling industry: just two years ago Brazil nuts were fetching more than double their current rate. Peruvians outside the Amazon region have not yet acquired a taste for the homebred nut, leaving Brazil nuts at the mercy of the international market which favours cashews, almonds and peanuts.

"Marketing is a major problem," says Vanessa Sequeira, field director of ACCA's

Brazil nut project, explaining that most people outside the Amazon are not aware of the nut's important conservation role. In response, the group mounted a consumer education campaign under the banner "Save the Amazon, eat a Brazil nut". ACCA, together with the World Wide Fund for Nature (WWF), also promoted certification of Brazil nut forests. In March 2001, Peru's standard for Brazil nut harvesting was recognized by the Forest Stewardship Council (FSC) - the first FSC standard for a non-timber forest product.

Despite these advances, Sequeira worries that time is running out for the majority of Peru's harvesters. This past year, she says, many could not afford to harvest their concessions because of low prices and high transportation costs. In addition, the Peruvian Government has not yet established a regulatory framework that would facilitate Brazil nut harvesting. If the trend continues, many harvesters could be forced to turn to damaging extractive industries for economic survival, such as panning for gold or slash-and-burn agriculture, converting these longtime friends of the forest into foes.

The Brazil nut tree is part of the delicate web of life in the Amazon. Apart from orchid bees, agoutis and the Brazil nut harvesters, the life of many other plants and animals is intertwined with this tree. The empty seed pods, for example, fill with rainwater and provide breeding grounds for damselflies, a poison frog and a toad, all of which depend on these small ponds on the forest floor. The major threat to the trees and the myriad forms of life that depend on them - is forest clearing. The sustainable harvesting of Brazil nuts is therefore a vital way of providing protection for Peru's forests.

(Source: WWF International Press Office [Press@wwfint.org], written by Stephanie Boyd, a freelance journalist based in Peru.)

[Western Suburbs Weekly / 2003 Jul 21]

Sandalwood: On scent of success

Selling Indian Sandalwood to the Indians might sound about as sensible as selling ice to the Eskimos, but there's every chance a West Perth company will be doing just that in years to come.

Tropical Forestry Services (TFS) is the world's largest Indian Sandalwood plantation manager, maintaining more than 350 ha in Kununurra, which is set to grow by up to 100 ha per year.

Indian Sandalwood is the world's most valuable exotic hardwood. Its oil has a warm, sweet, slightly spicy fragrance, with fixative qualities, making it an ideal base for perfumes.

The product can be found in many of the world's leading fragrances, including Chanel No 5, Opium, by Yves Saint Laurent and Samsara, by Guerlain.

It is also used in soaps, lotions and incense, as well as aromatherapy.

Though historically more than 90 per cent of the world's supply has come from India, where it is grown mostly in natural stands, rather than plantations, over-exploitation and smuggling are taking a significant toll.

Enter accountant Graeme Scott and lawyer Frank Wilson. The pair came together in a business project for winery Vasse Felix, in 1998.

Scott, of Karrinyup, is Janet Holmes a Court's accountant and the principal of Graeme Scott and CO, while Wilson, of Peppermint Grove, is managing partner of law firm Wilson and Atkinson.

The Wilyabrup winery had even greater



Frank Wilson, marketing officer Kate Gray and Graeme Scott. Picture: Andrew Ritchie

significance for Wilson, a member of the Cullity family. His uncle, Dr Tom Cullity, was more or less responsible for the start of the Margaret River wine explosion.

In 1965, Dr John Gladstones produced a report about the region's suitability for wine growing. Two years later Dr Cullity planted vines and Vasse Felix was born.

The Cullitys are also synonymous with the WA timber industry and Wilson has acted as adviser to various forestry groups. TFS believed it was on solid ground by planting in Kununurra.

Indian Sandalwood had been grown in the Ord River Irrigation Area since the mid 1980s, when trial plots were planted by the Forests Department (now part of CALM) which indicated considerable promise for the area.

"We were always confident we would

succeed, because the project was based on sound scientific research," Mr Scott said. "The doomsayers said our sandalwood wouldn't produce oil, but not only are we producing, it's been a lot quicker than we predicted.

"The heat, soil and water are absolutely ideal in Kununurra — there really isn't anywhere better to grow it."

TFS already employs 30-40 workers at certain times of the year and hopes to eventually become a big export earner, with numerous opportunities for value-adding to the lucrative product.

"Demand continues to increase and supply continues to diminish for Indian Sandalwood, they just can't get enough of it," Mr Scott said. "Nothing succeeds like success. The better you get at it, the easier it becomes."

— *Martin Turner*

[Chronica Horticulturae / 2003 Jun]

China Now World Leader in Apple Production

Since the late 1980s China has become the world's largest apple producer, with large plantings in the central and northeastern parts of the country, particularly Shaanxi and Shandong Provinces.

In 2002, China had 2.5 million hectares under cultivation with production of 20.5 million tons of apples, about half of the world's production (FAO data), nearly five times US production (4.0 million t) and 30% larger than all of Europe (15.8 million t). Average yield per hectare is 8.2 t/ha as compared to 22.8 t/ha for the USA and 10.8 t/ha for Europe.

Apples are stored in caves, cellars and long ventilated tunnels. Although most production is for domestic market, much of

the surplus is being put on the world market, especially juice concentrate, which ends up in the US, Russia, Germany, The Netherlands, Sweden, Australia and elsewhere.

The Chinese share of the American apple juice concentrate market jumped from about 1% in 1994 to 16% in 2001. The large increase in apple production has negatively affected world juice prices. The loss to American growers has led to a compensation of 94 million USD this year for losses incurred in 2000.

This has led to trade problems within the World Trade Organization; China is opposed to trade protectionism under the name antidumping. Although prices had been high, prices received by China are now tumbling and the increase in planting may level off. However, production will likely increase as new orchards come into production and because Chinese horticulturists are working to improve productivity. ¥

[Countryman Horticulture / 2003 Aug 7]

Fruit 'salad' a mixed success

Avocados, winegrapes, limes, oranges and tamarillos are all part of the fruit salad of produce grown on Mariner's Rest in Denmark.

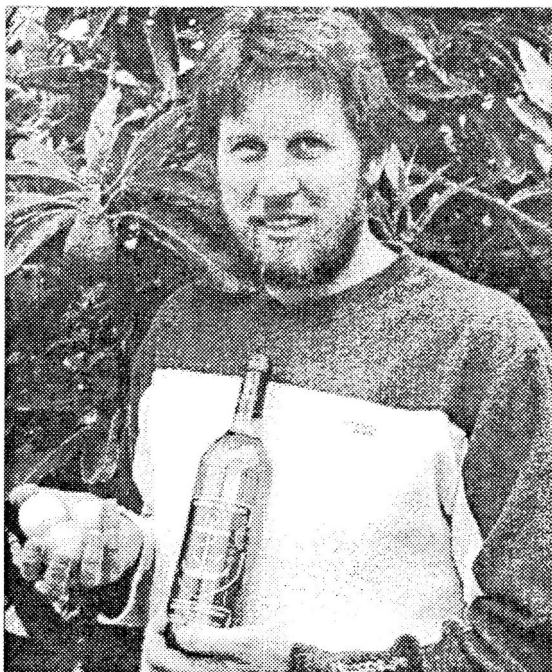
But the crop selection is no haphazard mix, it is the result of careful strategic analysis by owner operators, the Cocking family.

Established more than 20 years ago by seafarer Ron Cocking, the property is now under the management of Ron's son, Peter, although the entire family has had a hand in operations.

Explaining the unusual mix of enterprises, Peter Cocking said the family had sat down and analysed what strategic advantages their skills and the property could provide.

Mr Cocking said avocados had emerged as the greatest earner, limes provided income when the avocados were not producing and Mariner's Rest wines had developed a substantial following through mail order and seven-day cellar door sales.

"Dad had established and managed



Peter Cocking shows some of the many fruits of his family's labour at Mariner's Rest, Denmark

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vineyards so we had a good leg into the wine industry, and we also identified the late season supply window of cool climate avocados," he said.

"It's a difficult crop to grow — water management and nutrition have to be spot on, and pruning is important to keep them at a manageable height, but it is a high value crop."

Mr Cocking said while significant in northern regions, Hass avocado levels tapered off around Pemberton, which created a big window in the market for a local product from February to May.

[The Australian / 2003 Mar 25]

Ginkgo pill results 'smart'

A daily dose of an ancient Chinese herb dubbed the "smart pill" has "substantially" boosted the memory of healthy older Australians in an Adelaide study.

Adelaide University and CSIRO researchers have measured the cognitive ability of volunteers aged over 55 after three months of consuming ginkgo, a herbal extract promising brain building powers.

The 93 men and women in the study were administered 120 mg of generic over-the-counter ginkgo herb extract or placebo three times a day for 12 weeks.

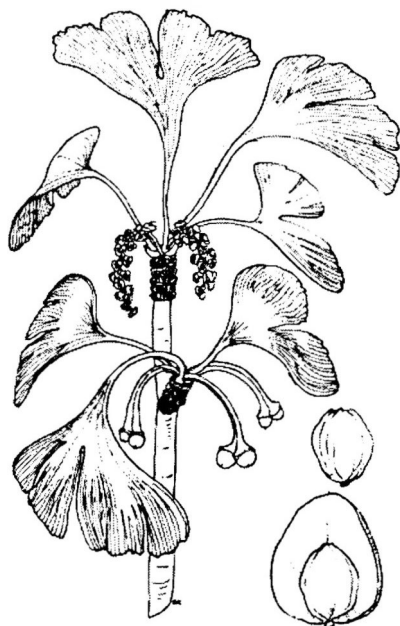
After a series of memory tests, the researchers found the ginkgo group outsmarted the others in long-term memory by the equivalent of six IQ points.

"It was a significant improvement in memory performance." Adelaide University psychology lecturer Nick Burns said yesterday. "While it doesn't make them smarter, it makes them better at remembering things."

Surprised by the findings, Dr Burns plans to replicate the study to reconfirm the ginkgo benefits on older Australians. He is now conducting a study on the herb's effects on men aged between 18 and 40.

"People spend a fortune on this stuff and there is no consistent evidence as to whether it works," Dr Burns said. "If we can provide evidence as to the efficacy of ginkgo, then it's useful to consumers."

The joint study, funded by Adelaide University with Blackmores supplying the herb extract and placebo, is the first well-controlled research measuring the psychological effects of ginkgo on healthy older Australians.



Ginkgo leaves, flowers, fruit, nut

A recent European study of 90 people reported positive results in attention and memory, while another study on 214 European patients with dementia or age-related cognitive impairment found no neuropsychological benefits.

Ramesh Manocha, from the natural therapies unit of the Royal Hospital for Women, welcomed the Adelaide study's findings in providing consumers with scientifically backed research on herbal remedies.

— *Rebecca DiGirolamo*

[www.nature.com/nsu/030616/030616-9.html]

Ancient plants mirror modern trees

Herbal medicine's favourite tree, the Ginkgo, is a living fossil. Newly found specimens that grew more than a hundred million years ago are remarkably similar to present-day plants.

Extracts of the Ginkgo or maidenhair tree, a distant relative of the conifer, are believed to improve concentration and stave off dementia. Some specimens in Chinese monastery gardens are over three thousand years old. Others, such as those in Utrecht and Kew Gardens, are approaching three hundred. Wild specimens are extinct.

Previous fossils revealed that Ginkgo species have remained unchanged for the past 51 million years, and that similar trees were alive and well 170 million years ago, during the Jurassic period. But what happened between the two dates was unknown. The

new finds, from the 121-million-year-old Yixian rock formation in northeast China, provide a much-needed missing link between ancient and more modern plants.

Their perfectly preserved leaves and reproductive organs show that the Ginkgo's "morphology has changed little for over 100 million years", say Zhiyan Zhou and Shaolin Zeng of the Chinese National Institute of Geology and Paleontology, Nanjing, who analysed the relics.

There are subtle differences between living Ginkgo species and Jurassic examples. The leaves of the Jurassic plants are divided into several lobes - similar to those of the chestnut tree. The new fossils show that 50 million years later, the lobes had joined up into the small fans of today's specimens.

The way that seeds are formed has also changed. Today's Ginkgo makes a few seeds, only one of which reaches full maturity, on a single stalk. Jurassic trees have sprays of stalks, each sporting a single seed. The new fossils are a halfway house, with multiple seeds on a single stalk.

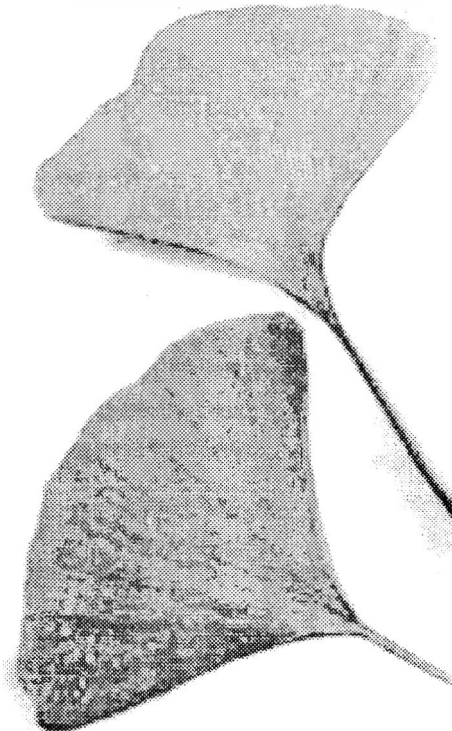
There is now little doubt that today's Ginkgo is a direct descendent of forebears that provided food for the dinosaurs.

— *Christopher Surridge*

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2. "The Ginkgo Pages": <http://www.xs4all.nl/~kwanten>.



Wild specimens of Ginkgo are extinct

[Non-wood News / 2003 Mar]

Sea buckthorn

Sea buckthorn (*Hippophae* spp.) is a thorny temperate bush which grows in temperate climates and is indigenous to the regions of Lahaul and Spiti, Kinnaur and some parts of Chamba in Himachal Pradesh, Kumaon and Gharwal Hills of Uttaranchal, the Ladakh area of Jammu and Kashmir and some parts of Sikkim.

It grows widely and abundantly in the temperate climates of Europe and Asia. In Asia, it is commercially grown in China, the Russian Federation, Nepal and Pakistan. It is regarded as a "magic plant" because of its high nutritional value, medicinal properties and its ability to replenish and conserve the soil in the fragile ecosystem of the temperate Himalayas.

It is indigenous to the temperate Himalayan region, but it is paradoxical that few people

know of its existence and tremendous medicinal value. It is time for research institutions, government agencies and the pharmaceutical and cosmetic industries to understand the global trends and benefits of evolving advanced technologies for utilizing sea buckthorn and bring about a new revolution in the Asian economy.

Sea buckthorn is a thorny bush which grows in temperate climates. It grows selectively in the snow-covered mountains of the Himalayas and can withstand temperatures as low as minus 40°C. It can even flourish in rocky, sandy or marshy soils. Its well-developed root systems extend 3 m vertically and 10 m horizontally, producing 30 to 40 sister plants of several generations, which hold soil particles and stones even on steep slopes. Its extensive root system protects the soil against erosion by high-velocity winds, which are a common feature of cold deserts. Thus, the plant is considered to be an effective soil binder in the erosion-prone soils of cold and barren mountains.

Sea buckthorn has many reputed nutritional and medical properties. Its fruit and other plant parts are used in making herbal remedies against malnutrition, skin diseases, lung problems, ulcers, gastrointestinal problems and colds. It is reported that it can also be used against cancer to counteract the effects of free radicals. It has been prescribed for patients with coronary disorders since it is believed to reduce cholesterol levels drastically.



Sea Buckthorn, Hippophae rhamnoides

It is rich in Vitamins A, B and K and is the richest source of Vitamin C. It is also a potential source of proteins, organic acids, carotenoids and flavonoids, etc. The fruit is the main repository of these compounds but the whole plant is a rich source of nutrients. It is also extremely rich in minerals such as iron, cobalt

and molybdenum. Thus, sea buckthorn has great medicinal properties and is currently used in about 200 industrial products such as medicines, cosmetics and health food products.

(From an article by A.K. Choudhary and A.C. Jaggi in Tiger Paper, 29(1), January-March 2002.)

[www.nature.com/nsu/030609/030609-16.html]

Liquorice may tackle SARS

After trying all sorts of compounds, SARS researchers say a root extract from the legume shrub, *Glycyrrhiza glabra*, looks promising.

Liquorice seems an unlikely ally in the fight against sudden acute respiratory syndrome (SARS). But in the lab at least, an extract of the plant's root blocks the SARS virus from growing inside cells, new research reveals. The study is part of an ongoing search for a treatment for SARS. The flu-like disease has claimed more than 750 lives since it emerged last year in Guangdong Province, China.

High doses of the liquorice extract, called glycyrrhizin, practically wipe out the SARS virus in infected monkey cells, find virologist Jindrich Cinatl of Frankfurt University Medical School, Germany and his colleagues. The drug is more potent than ribavirin, the most commonly used treatment for SARS. Glycyrrhizin makes it difficult for the SARS virus to attach to and invade a target cell, the team found. It also hinders virus reproduction, slowing its spread from one cell to the next.

"We don't have many leads [for effective drugs] at this point, so this is very exciting," says virologist Robert Baker from the US Army Medical Research Institute of Infectious Diseases (USAMRIID) in Fort Detrick, Maryland. But glycyrrhizin has drawbacks: large amounts are needed to affect SARS-infected cells. "It's unlikely to result in a treatment for the disease," says biochemist

Rolf Hilgenfeld who studies the virus at Lübeck University, Germany. "I can't imagine swallowing a tablet that big," he says.

Broad search

Glycyrrhizin is the molecule responsible for liquorice's peculiar flavour. It hampers the growth of other viruses, including herpes, and helps restore liver function in patients with hepatitis C. It is currently being assessed as a treatment for HIV infection, as it slows the replication of the virus in cultured cells.

The liquorice extract is one of many candidate compounds being tested against SARS. As the epidemic intensified, so too did efforts to find effective drugs.

In the past two months, for example, Baker and other researchers at USAMRIID have tested over 200,000 compounds, sent in from laboratories across the world. "We're using a combination of brute force — screening just about every compound we can get our hands on — and a more rational approach — screening drugs that have already been licensed," says Baker.

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WA olive industry gathering real strength

The WA olive industry is showing an interesting dichotomy as it approaches maturity, in both location and product type. The inner Wheatbelt and coastal plains north of Perth have established themselves as the giant, bulk-producer areas. The Southwest wine-growing areas 300 km south of Perth have become the favoured sites for boutique producers, going for top-quality prize-winning oils. The following articles describe advances in both sectors

[West Australian / 2003 Jun 18]

Olive boom beaten

The boom in olive planting over the past few years will produce a big increase in yields next year as thousands of trees have their first commercial crop.

Anticipating a jump from five tonnes this year to about 150 tonnes next year, the State's biggest grower, Dandaragan Estate, is trying out the first mechanical over-tree harvester in WA.

The French-built Gregoire harvester is used in Europe.

But according to Dandaragan operations manager Jim Hollingworth, olive trees in WA grow differently and the machine has been modified to make it effective here.

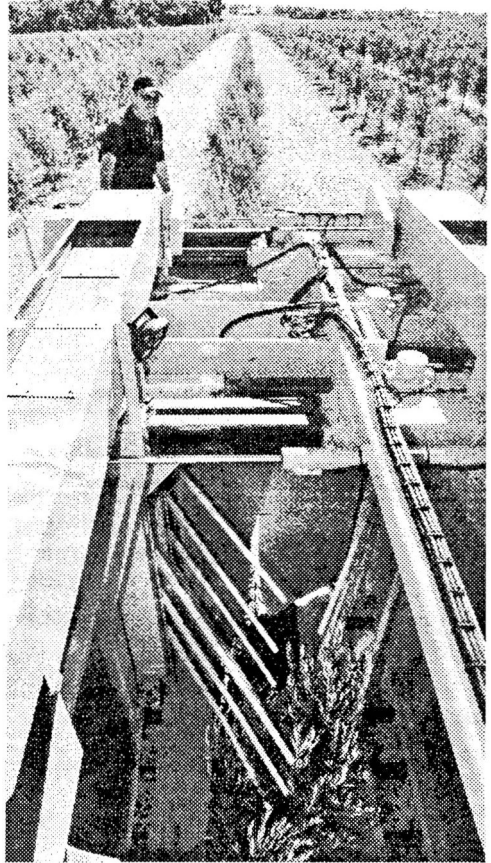
The \$200,000 French harvester uses rods which beat the trees from both sides, knocking the olives on to horizontal plates from which they are conveyed to a hopper.

It has been promoted around WA by the Margaret River-based company MRV Contractors.

Dandaragan Estate has 215,000 trees planted over 385 ha east of Dandaragan.

The seven varieties of trees are two and three years old and in full production are expected to yield more than 4000 tonnes of olives a year.

The company has installed a five-tonnes-



Max Henderson operates an over-tree olive harvester in Dandaragan. Rods each side beat the trees, knocking the olives down.

Picture: Tony Feder

an-hour oil press costing \$2 million to handle production for the next five years.

— Peter Trott

[West Australian / 2003 Jun 20]

Stone-pressed olive oil produced in Mt Barker

The fledgling olive industry is preparing to spread its wings as production starts to rise.

Frankland River Olive Producers Association chairman Tony London said the region produced high-quality, extra virgin cold-pressed olive oil by getting the olives pressed within 36 hours of picking.

He said the association, with almost 30 members, had been reluctant to promote olive oil from the region too heavily because until now the quantities had been small.

Mr London said the oldest olive trees in the Great Southern were probably five to seven years old and it was 10 to 12 years before trees were fully mature.

Most of the growers in the region had between 200 and 6000 trees and those who had produced oil so far had consumed it with their family and friends.

The biggest player was the Frankland River Olive Company, which probably had more trees than the rest of the growers in the region put together.

It has one of WA's biggest olive plantations with about 110,000 olive trees on about 420 ha. This is only the company's second year of production and, so far, it has won a medal in every competition entered.

A future challenge for the smaller growers will be harvesting and processing their olives as the trees mature and produce greater volumes. To serve the small and mid-sized growers, Harry Goff, who grows olives himself, decided to set up The Olive Factory with a stone press in Mt Barker.



Harry Goff, of The Olive Factory, beside a crushing wheel

He said there were only two stone presses in Australia. He chose stone rather than a modern hammer mill because it reportedly gave the oil a softer taste. Tourists could phone 9851 2911 to arrange a visit during pressing, from April to July.

Mr Goff also plans to set up a shopfront to sell olive oil from the region. Mr London said marketing was another challenge for growers.

"There's the possibility of using the Great Southern logo and having some sort of generic oil which may be a blend," he said.

[Countryman / 2003 Aug 7]

WA to lead nation in science R&D

Plans to create the biggest science research and development organisation in Australia were unveiled by the WA Government last week.

Premier Geoff Gallop announced the proposed research institute, created by amalgamating research divisions of the Department of Agriculture and the State's three main universities — the University of WA, Murdoch and Curtin.

The institute, incorporating agriculture, food and natural resources research, is due to start operations on July 1 next year.

"It is the biggest thing that has happened in science in WA's history," said WA Agriculture Minister Kim Chance. "WA will have the biggest science R&D organisation in Australia.

"We are creating a single research and development institute which will have \$90 million available to it annually."

Mr Chance said the \$90 million amount was the combined research budget of the four bodies, of which \$57 million was the Department of Agriculture's research component which included \$25 million of funding sourced externally.

He said the present system - the department and the three universities each running programs and competing for external funds - was inefficient.

— *Lara Ladyman*

David Noel comments: I was amazed to see the above article appear. I'll be even more amazed if the stated reorganization actually occurs, whether in July 2004, or ever.

The plan seems to have lost sight of the

fact that the WA universities are quite independent bodies, and certainly not under the control of the State Government.

Moreover research activities, whether agricultural or otherwise, are carried on in the universities under their individual departments, which make most of their own decisions on what is carried out and how.

It's quite fanciful to suggest that the universities will willingly give up these activities, and the associated funding and day-to-day control, to an amalgamated body responsible to the State Government.

It's also interesting that the Department of Agriculture extracts almost half its running funds from local industry, and fanciful again to think that industry will support a monolithic institute to the same tune.

Maybe they really mean formation of a Cooperative Research Centre, in which the different organizations contribute if they wish, rather than by fiat. That could work.

[Countryman Horticulture / 2003 Aug 7]

HortLine has the answer

Answers to horticulture questions are just a phone call away thanks to the Department of Agriculture's HortLine.

The service provides an experienced team to handle telephone enquiries and electronic and written requests.

Regional workshops and seminars will also be developed as part of the service.

HortLine officers will deal with calls or refer them to other specialists within the Department.

Calls for the HortLine service should be directed to the Department of Agriculture's South Perth office on 9368 3333 or may be redirected via regional offices.

Field Day near Williams

William and Kelly Newton-Wordsworth are having an open farm field day on Sat 27th September, at their farm "Boraning", located 17 kms west of Williams, 2 hours drive from Perth.

The field day will focus on what they have created and learnt from 15 years experience as biodynamic/organic growers operating a broadacre commercial farm specialising in beef cattle, mixed broadacre horticulture and limited cropping. Special features of the field day will be :-

- Biodynamic farming methods - what it is, use of preparations to enliven the soil, creating soil structure, natural fertilisers, stock rotations...

- Biodynamic/organic orcharding methods...demonstrations of orchard mowing machinery, irrigation methods and design...

- Focus on diversification, especially pistachio growing (800 tree orchard), olives (oil and table varieties), almonds, pecans, citrus, figs and other fruit

- Water harvesting. An opportunity to see a creative system utilising interconnected dams and bores and illustrating the potential ability to water harvest and open up intensive farming options in an area which is not traditionally horticultural.

- Farming pastures, cattle, sheep and crops in a biodynamic system

- Gardening in a biodynamic/organic and creative way

- Areas set aside for conservation and conscious creation of beauty

- Value adding of products - the Newton-

Wordsworths' through their business Williams River Produce market olive oil, olives and marmalade Australia wide as well as fresh fruit and beef in WA.

This is a field day which would be of interest to people interested in biodynamics and organics, conservation, creative land use, diversification, value adding, tree crops and real clean green agriculture.

We also welcome consumers and people who are interested in biodynamic/organic food and want to see what happens on farm and find out how the food is grown and why it is different from normal "shop food".

Field day commences 10.00 sharp - to approx 4.00pm. Gather from 9.30 am for a coffee/tea at "The White House", Boraning. Directions- travel 17 kms west of Williams on the Quindanning Rd, proceed to 100 metres west of the big bridge over the Williams River then turn north into farm entrance.

Please phone 08-9885 1181 — RSVP required so we know numbers and can give further directions. Map can be faxed if requested. Cost \$30 per person, \$50 family, BYO own lunch to share.

Come prepared to walk if you are physically able. E-mail: Newton Productions, newtone@treko.net.au. ¥

**WILLIAMS RIVER PRODUCE
OPEN FARM FIELD DAY
AT "BORANING"
Sat 27th September, 2003**

William and Kelly Newton-Wordsworth
Phone 08-9885 1181
E-mail: (Newton Productions)
newtone@treko.net.au

West Australian Nut & Tree Crop Association (Inc)

PO Box 565 Subiaco WA 6008 Australia

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CALENDAR OF FORTHCOMING EVENTS

(See also www.AOI.com.au/wanatca/Events)

Deadline for next issue: Sep 20

- 2003 Aug 26-28 • Dowerin Agricultural Field Days
- Sep 9 Tue * Wanatca General Meeting: Liz Barbour - "The Science of Pine Seed Production" and "The Infinitree Program".
- Sep 20 SAT • Karragullen Horticulture Field day
- Sep 29-Oct 4 § 2nd International Macadamia Symposium, NSW.
- Oct 28 Tue Wanatca Executive Committee Meeting
- Nov 16 Sun * Wanatca Field Day, Mandurah area -Custom Composts plus Matt Fowler Garden.
- Nov 18? Tue * Wanatca General Meeting: ?Alison Lawrie - ?"The Eco-Echidna enterprise for sustainable plant-raising".

2004

Jun 14-18 § 6th International Congress on Hazelnut, Tarragona, Spain.

Sep 20-24 Acotanc-2004, Gatton, Queensland

*General Meetings are held starting at 7.30pm. *Venue: As noted in each case.*

These meetings usually include a display of current world tree-crop magazines for sale.

• Event with WANATCA participation; § Refer to news item in this issue of *Quandong*.

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