



PY LINES

Botanical Resources
AUSTRALIA

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Australian industry expanding rapidly

The sowing of about 600 ha of pyrethrum crop in Tasmania this year signals the beginning of the industry's major expansion program.

According to BRA Field Operations Manager, Matthew Greenhill, the company is aiming to double the area grown to pyrethrum by the year 2000, and the change to direct drilling has made it all possible.

"This year the sowing went really well - absolutely fantastic," he said.

"We've had good crop establishment and we sowed more area than I originally thought we would."

Additional area will be sown in December following early pea crops, bringing this year's expansion close to 600 ha.

One of the reasons for the success was the development of experience among field staff and growers, and the introduction of new seed drilling technology.

This year BRA joined with local contractor Tom Butler to purchase a new Accord Miniar drill.

This vacuum precision drill is the first of its kind in Australia and BRA Manager of Research and Development, Brian Chung, said the company was 'very happy' with its performance.

"It has done more than half of the new sowings and is giving much better control of depth and accurate spacing of seeds within the row," he said.



• A new Accord Miniar drill has revolutionised pyrethrum sowing in Tasmania.

The good Spring season has also helped the crops, providing warm and mild conditions plus reasonable rainfall.

This had given new growers, in particular, confidence in the crop.

"With the new growers it is hard to convince them that the sowing is a success for

the first 12 weeks because it looks "bloody awful" but after that stage it starts to pick up and get on top of the weeds and the acceptance of the crop is generally very good," Matthew said.

New site for Botanical Resources Australia

The purchase of a new site by Botanical Resources Australia sends a strong signal to growers, customers and employees that the industry is scaling up, and it's here to stay.

The Piper's site, not far from the current Ulverstone site, is already referred to by all as the "Py-shed", and has the potential to significantly reduce costs and improve efficiency.

BRA's Managing Director, Mr Ian Folder, said the 3 ha site with a 2,500m² shed would initially provide much needed storage during harvest.

A 18 metre weighbridge with computer controls and capacity in excess of 60 tonnes will be located at the site this year, and by Spring next year the company aims to have

the site completely purpose built for handling bulk materials.

A pelletiser will be installed during Spring 1998. All of the activities of the existing Eastland Drive site will be moved to the new location in the next few years. If the production growth targets are achieved a second extraction plant could be located on this site.

"We hope that with the significant increase in volumes coming through because of the additional planting of 600 ha of high yielding crop per year for the next few years, this site will give processing security, and by the year 2000 we hope to have everything on the one site," Mr Folder said.

"It's part of our expansion strategy - and it is a good investment."



• The new site for Botanical Resources Australia is 3.0ha with a shed area of 2,500m²

New staff member

John Chilcott has joined BRA two days a week to assist field staff with operational duties, particularly sowing and contracting.

With more than 40 years experience in agriculture in Tasmania, John is known to many farmers through his role as a pea and carrot field officer with Edgell and then with Vecon on onions.

Update

World's latest refinery a success!



• Botanical Resources Australia can now produce high grade pyrethrum using an environmentally friendly process.

The commissioning of BRA's new refinery has been a great success, with the first saleable pyrethrins produced within three months of construction.

Director of Manufacturing with BRA, John Boevink, designed and constructed the plant with the assistance of Jimmy Bower, Martin Anderson and local electrician Horst Lerchbacher with very valuable input from BOC Engineering. Financial support from the Horticultural Research and Development Corporation for this development has been most welcomed.

As far as is known, the refinery is one of the first of this type in the world, making a cleaner, purer product without the use of flammable solvents.

"Before we had our own refinery, all of our oleoresin was toll refined in the USA. Now all that money stays in Tasmania," John said.

"The refinery is environmental friendly and it is possible that it could be used for

refining other products." The addition of this refinery brings long term security to the Australian pyrethrum industry and to all of its customers.

Improvements are planned to increase the plants' capacity in the near future.

New Hobart office

Botanical Resources Australia's Hobart office has moved from Goulburn St in the city to 8 Gregory St in Sandy Bay.

Staff based in this office include Managing Director Ian Folder; Manager of Research and Development, Brian Chung; Planning and Logistics Manager Bill Casey and Office Manager Barbara Biernacki.

The new mailing address is PO Box 852, Sandy Bay, Tasmania, 7006 and the contact numbers are (03) 6224 4511 (phone); (03) 6224 4473 (fax); tasp@trump.net.au.

Staff make the difference

Two people who have made a significant contribution to new developments in BRA in the last year are boiler-maker welder Mark Eaves, and fitter and turner Jimmy Bower.

Jimmy has been involved in the construction of the new refinery, and more recently both have been involved in the construction of new harvesters for the 1997/98 season.

Director of Manufacturing with BRA, Mr John Boevink, said Jimmy was an engineering whiz without whom the refinery project would have been much more difficult.

"Every time there was a problem he could fix it nearly instantaneously," John said.

Jimmy started in the industry more than 10 years ago repairing the planters, then moved onto field work, cutter-rower development, field maintenance and then on to the refinery.

Since that time, things have changed a great deal - but that's what Jimmy thrives on.

"I love the job because everything is different - what you do is usually something that hasn't been done before," he said.



• Fitter & turner Jimmy Bower and boiler-maker welder Mark Eaves with one of the harvesters for the season.

Mark, who has been with the industry for only 16 months, also enjoys the variety and the originality of the work.

As the Australian champion apprentice boiler-maker welder in 1983, Mark came 18th in the world championships, and returned to Tasmania to work for local engineering firms.

He originally joined Radford Harvesting for four months to build the first header - and he's been there ever since.

Like Jimmy, Mark is keen to do quality work.

"I don't like sending anything out that I would not like anybody to see," he said.

"And I have a boss who lets you do what you want. Peter will listen to your ideas and take on suggestions - he's pretty down the middle."

Research News

Research improves returns

Much of the potential for increasing the efficiency of pyrethrum production will come from research and development, according to BRA Manager of Research and Development, Brian Chung.

"Being new the industry has more scope to reduce costs and increase yields and we anticipate we will be able to increase profitability by at least 10% by the year 2000," he said.

Research is funded through a grower contribution of 2.5% of their returns which is then more than matched by BRA and then again by the Horticultural Research and Development Corporation.

"The total value of R&D projects for the next three years is in excess of \$1.6 million and this is spread across a wide range of projects with a large number of highly skilled researchers," Brian said.

Cost reductions will come from better weed control, better disease control and better crop establishment. Yield increases will come from

higher crop densities of the seeded crops, most of which will be harvested for the first time this year.



• Botanical Resources Australia Manager of Research and Development, Brian Chung.

Future plans made

A strategic plan for all of the local stakeholders of the pyrethrum industry has identified industry expansion, research and development and industry diversification as the three key objectives for the future.

The plan, developed by 18 participants selected to represent the whole industry, said it wanted "a progressive, profitable and sustainable industry which by the year 2000 will have 1500-2000 ha of high yielding crop and will supply a significant proportion of the world demand for pyrethrum products."

Participants included growers, BRA staff, research providers and the Horticultural Research and Development Corporation.

BRA Manager of Research and Development, Brian Chung, said the meeting started by undertaking an analysis of the strengths, weaknesses, opportunities and threats facing the industry.

"As things stand we have more strengths than weaknesses and our major weakness is not enough production to meet the market opportunity," he said.

The participants also saw great potential to increase efficiency through research and development; and to increase income by better using BRA's available technology, equipment and expertise.

In addition to creating a strategy, the meeting had spin offs in terms of giving the growers, and the research and development people, a better feeling of where the company thinks the industry can go.

Current research & development

1. **Weed management research**
The aim is to develop a weed management strategy for direct seed crops that is effective, of reasonable cost and does not cause a threat to rotational crops
2. **Crop development studies**
The aim is to develop effective crop establishment practices, compare cultivars in various regions and improve seed production techniques
3. **Seed quality and crop agronomy**
The aim has been to identify seed quality, optimum plant density and best sowing times for direct drilled crops.
4. **Disease management research**
The aim is to develop integrated management programs for pyrethrum ray blight and Sclerotinia minor which include seed treatment, biological control and fungicide sprays.
5. **Nutrition research**
The aim is to develop a procedure on lime or other additives which could assist with the crop sowing operation and establishment.
6. **Commercial crop development**
The aim is to ensure the industry achieves the expansion targets and adopts the outcomes of the research projects.
7. **Grower survey**
The aim is to identify farmers attitudes and knowledge of pyrethrum and BRA so a communication strategy can be developed to assist the expansion of the industry.
8. **Harvesting options**
The aim is to develop various options for improving the efficiency and effectiveness of the harvest operations.
9. **Development of the refinery**
The aim has been to develop a new and innovative refinery facility for pyrethrum.
10. **Soil quality research**
The aim is to develop measurable soil parameters to identify the effects of different cropping regimes (such as pyrethrum) on soil quality.
11. **Remote sensing for crop management**
The aim is to study the possibility of using satellite technology as a tool for crop and soil monitoring.
12. **Apparent benefit of crops following pyrethrum**
This involved preliminary studies of the likelihood of yield benefits to crops following pyrethrum
13. **Benefit to cost analysis of pyrethrum research and development**
The aim has been to define the economic benefits of R&D projects to the pyrethrum industry.

Liz does what she loves best

Name: Liz Mann

Position: Industry Development Officer

Date appointed: April 1995

Background: Grew up on a farm in White Hills, outside Launceston

Education: Bachelor of Agricultural Science (Honours) "Cover crops as a method of decreasing weeds in vegetables"

Favourite aspects of the job: Being out and about talking to farmers

Least favourite aspects: Being outside on rainy windy days - getting blown off Table Cape.

Interests: Rural Youth at district, regional, State and Agfest level; and Sunny (her horse)

Liz Mann always wanted to work in farming and she always wanted to be a field officer. So when she was appointed as an Industry Development Officer for the pyrethrum industry she filled all her ambitions at once.

Originally from a family farm at White Hills, on the outskirts of Launceston, Liz decided to study agricultural science at the University in Hobart as a means of pursuing a career in the rural sector. After four years of study, Liz came out with first class honours and itching to get a position as a field officer - which she did.

As an Industry Development Officer, Liz's aim is to educate farmers to take greater ownership of their crops. This is done by working with about 40 growers to provide them with recommendations for crop management practices, both through field days and individual visits. Liz is responsible for crops from Ulverstone to Boat Harbour and also in Scottsdale. Each crop is visited at least every couple of weeks. Whether or not Liz sees the farmer depends on how much

time she has available. A normal week involves three or four days in the field going around the crops and a couple of days in the office.

When Liz first joined the company she had to learn about the crop, the farmers and how to get about. She is grateful for the support of her workmates in helping her learn about the crops.

"It's pretty good because I have the support when you have problems. It's nice having back-up," she said.

"I had no idea about the industry when I started - I knew nothing about pyrethrum - I had seen one crop years ago and that was about it. Not being from the North West Coast I was not familiar with any of this sort of industry."

As a young female graduate starting out in the industry, Liz found that the farmers were generally fine about working with her.

"There were a few who weren't - but once they realised I was from a farm there was not a problem," she said.

Liz feels she gets on well with most of her farmers and she appreciates their enthusiasm for the crop and the industry.

She particularly enjoys working with the good farmers.

"Generally it's the good farmers that seem to get the good yields - they are keen to learn, keen to do everything. When you write out recommendations and tell them why, they show an interest in the crop. At other times they will ring you up and say they've noticed something happening in their crop - what should they do?," she said.

For Liz, joining the pyrethrum industry at this time has been pretty exciting, particularly with all the changes going on.



• Field officer Liz Mann with grower Groene McKenna, of Gawler.

"The industry has really taken off," she said.

"There is quite a bit of confidence out there with the direct seeding and I think it will be really successful."

Markets strong

Pyrethrum markets continue to be strong for the Australian product.

Managing Director of BRA, Ian Folder, said although production was picking up, all producers still had significant back orders for the product and the market remained strong.

"There are some supply problems at the moment because of the back orders and rationing of the product," he said.

Luckily, however, the supply problems coincided with a poor pest year in the US which normally purchases about 70% of world sales.

"BRA is linked into long term supply agreements and we fell marginally short of our contracts this year but within two years we will be able to meet them, and depending on the current season we should go close this coming year" Ian said.

"Ultimately I would like our buyers to see BRA as just another supplier of a specialty chemical product. They don't need to be concerned about pyrethrum coming from an agricultural production base, just that we have a good product which is there when you want it, at a fair price. However, the challenge remains for the industry in Tasmania to continue to improve productivity and reduce costs so our product can be price competitive with other producers"

Harvest on target

A good harvest is expected for Botanical Resources Australia this year, according to the company's Planning and Logistics Manager, Mr Bill Casey.

Despite the forecasts for El Nino to influence Australian weather patterns, rainfall in Tasmania has been little different from most years, and all growers are able to irrigate crops as required.

"It is looking to be a heavy yielding season," Mr Casey said.

"And hopefully the rain will stay away during the harvest period."

This year up to 14 harvesters will be used to thrash the crop, working from Christmas through to the second week in February.

Four harvesters are coming from interstate, two of which will be used for the first time.

Increased efficiencies in harvest will be achieved following the purchase of the new

shed in Ulverstone with its increased storage space and new weighbridge.

Further trials will be conducted by this year to evaluate alternative harvesting methods and next year it is expected an additional six harvesters will be needed to cope with the increased production.



• The harvesting research group: John McPhee, DPIE David Armstrong, consultant and Bill Casey, BRA harvest manager.

PYLINES

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