Rockmelon and honeydew information kit—update

Reprint – information current in 1998



REPRINT INFORMATION - PLEASE READ!

For updated information please call 13 25 23 or visit the website <u>www.deedi.qld.qov.au</u>

This publication has been reprinted as a digital book without any changes to the content published in 1998. We advise readers to take particular note of the areas most likely to be out-of-date and so requiring further research:

- Chemical recommendations—check with an agronomist or Infopest www.infopest.qld.gov.au
- Financial information—costs and returns listed in this publication are out of date. Please contact an adviser or industry body to assist with identifying more current figures.
- Varieties—new varieties are likely to be available and some older varieties may no longer be recommended. Check with an agronomist, call the Business Information Centre on 13 25 23, visit our website www.deedi.qld.gov.au or contact the industry body.
- Contacts—many of the contact details may have changed and there could be several new contacts available. The industry organisation may be able to assist you to find the information or services you require.
- Organisation names—most government agencies referred to in this publication have had name changes. Contact the Business Information Centre on 13 25 23 or the industry organisation to find out the current name and contact details for these agencies.
- Additional information—many other sources of information are now available for each crop. Contact an agronomist, Business Information Centre on 13 25 23 or the industry organisation for other suggested reading.

Even with these limitations we believe this information kit provides important and valuable information for intending and existing growers.

This publication was last revised in 1998. The information is not current and the accuracy of the information cannot be guaranteed by the State of Queensland.

This information has been made available to assist users to identify issues involved in the production of rockmelon and honeydew. This information is not to be used or relied upon by users for any purpose which may expose the user or any other person to loss or damage. Users should conduct their own inquiries and rely on their own independent professional advice.

While every care has been taken in preparing this publication, the State of Queensland accepts no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained in this publication.



Rockmelon and Honeydew Information Kit Annual Update 1998

Technical content

Ross Wright Noel Meurant

Compilation

Jerry Lovatt Glenis Ayling



Queensland Horticulture Institute
Department of Primary Industries, Queensland

Rockmelon and Honeydew Information Kit 1998 Annual Update

From the Agrilink Series, first published 1997 ISSN 1328-0457

Supplement to rockmelon and honeydew information kit ISBN 0-7242-6720-4 QAL 9710 Agdex 264/10

© The State of Queensland, Department of Primary Industries 1998 Copyright protects this publication. Except for purposes permitted by the Copyright Act, reproduction by whatever means is prohibited without the prior written permission of the Department of Primary Industries.

Enquiries should be addressed to: The Agrilink Manager Department of Primary Industries PO Box 5269 SCMC NAMBOUR Qld 4560 Australia

Phone: (07) 5444 9690; Fax: (07) 5444 9694

e-mail: agrilink@dpi.qld.gov.au www.dpi.qld.gov.au/agrilink

Proudly produced by the Agrilink Project Team of Noel Vock, John James, Jerry Lovatt, Irene Kernot, Loraine Chapman, Glenis Ayling, Roy Verge, Lourelle Heintjes, Sue Longin and Peter Rigden.

Acknowledgments

The update authors are grateful for information and advice from Roger Boshammer, Judy Greensill, Shaun Jackson, Bill Johnston, and Rob O'Brien.

Disclaimer: This information booklet is distributed by the Department of Primary Industries as an information source only. The information and other material incorporated by reference is provided solely on the basis that the reader will be responsible for making his/her own assessment of the content and seek professional advice.

Introduction

Welcome to the 1998 edition of the Agrilink Rockmelon and Honeydew Information Kit Annual Update. This is a special service provided to registered purchasers of the Agrilink Rockmelon and Honeydew Information Kit published in 1997.

This 1998 update provides you with any significant changes to the content of the Agrilink information kit since it was published. It does this by giving you a broad overview of the changes in each section, and then providing the specific change page by page.

The booklet is designed to fit into the front pocket of the Agrilink information kit so that it is available for reference whenever you use the kit.

Thank you for being an Agrilink customer. We look forward to continuing to serve you with quality information products.

Contents

Before you start	6
Overview of the 1998 season	
Specific updates	
Prices and throughputs (page 3)	
Production costs and gross margin (page 5)	8
Common questions	10
Overview	10
Specific updates	
Growing the crop	13
Overview	13
Specific updates	13
Varieties	13
Water quality	13
Trace elements	14
Postharvest handling	
Storage	-
Packaging	
Mark packages	
Interstate quarantine requirements	15
Key issues	16
Overview	16
Specific updates	
Gross margin for transplanted rockmelons in north Queensland $\ldots\ldots$	
Things to remember	
Varieties	
Honeydew varieties	
Planting times	
Magnesium	
Diseases	
Bacterial fruit blotch	18

Downy mildew	19
Hot water seed treatment	20
The immediate problem with methyl bromide	21
Cooling	21
Trends in the melon market	21
Problem solver	23
Specific updates	23
Bacterial fruit blotch	
Silverleaf whitefly	23
Contacts and references	24
Specific updates	24
Grower associations	24
Seed suppliers	24
Seedling nurseries	25
Pesticides and spraying	
Suppliers of beneficial insects	
Vermin control	
Plant, soil and water testing laboratories	
Disease and nematode testing laboratories	
Market information	
Horticultural consultants	
Quality management guidance services	
Export associations	
Information on interstate movement provisions	
Queensland government services	
Other information sources	
Agricultural booksellers	
References	36
Crop production handy guide	37
Pest and disease control	37
Problem solver handy guide	38





Overview of the 1998 season

Wet weather made this a difficult year for melon growing in most districts.

Bowen/Burdekin

Prices were only mediocre for most of the season with only short periods of good prices for the Dry Tropics region. Mosaic virus became a major problem after August. Yields were moderate, but higher rainfall than normal caused fruit losses at times. Quality varied with weather conditions.

Bacterial fruit blotch caused very large losses in both the Burdekin and Gumlu areas, with smaller losses around Bowen. Blotch had previously only been of economic importance in watermelons, but DPI pathologists have established that there are different strains of blotch. For more information on bacterial fruit blotch refer to page 18 of this update.

Silverleaf whitefly infestations were severe around the Burdekin and to a lesser extent around Gumlu and Bowen. The problem in the Burdekin was accentuated by:

- some growers not leaving a sufficient time period of no cropping over summer
- failure to control volunteer plants
- widespread occurrence of wild cucurbits, for example wild gherkin and prickly cucumber.

Urgent research is required into the control of silverleaf whitefly.

Bundaberg

A wet and stormy spring created a range of problems for melon growers in the Bundaberg district. Hail wiped out some blocks, while the wet weather made conditions ideal for downy mildew and gummy stem blight. Fruit symptoms of gummy stem blight were unusual, appearing as slightly depressed dark spots on undamaged skin with a shallow reddish-brown discolouration just under the skin, rather than the deep, dark discolouration that usually occurs. Wet weather also reduced fruit quality and increased the number of rejects, so the supply of fruit was down and prices during the Bundaberg season were higher than normal.

Several growers suffered heavy losses from a dark blemish on the fruit that penetrated just under the skin into the flesh of rockmelons. Growers wish to thank DPI plant pathologist Rob O'Brien and local extension staff who inspected several farms and, after microscopic examination at DPI's Indooroopilly laboratories, identified the problem as a different symptom of gummy stem blight. Leaf symptoms of bacterial fruit blotch, rockmelon strain, were also found on one farm.

South-West

After a wet start at planting time the South-West finished up relatively dry through November. A few days of rain in early December and over New Year caused some problems with cracking. Gummy stem blight was not as severe as in other seasons, however powdery mildew came back with a vengeance. Prices were generally good for quality fruit through December, with fluctuations starting in January after the Griffith and South Australia areas started to pick.

Specific updates

Prices and throughputs (page 3)

Prices and throughputs for the 1997 season in the Brisbane and Sydney markets are shown in Figures 1 to 3. For comparison, the three-year average for 1994 to 1996 is also graphed.

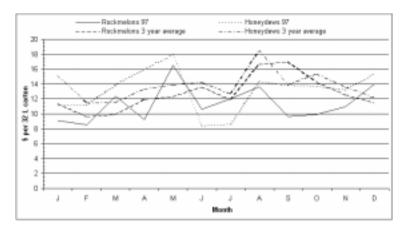


Figure 1. Average price, 1994 to 1996 and 1997 average price per 32 L carton on the **Brisbane** market for rockmelons and honeydews

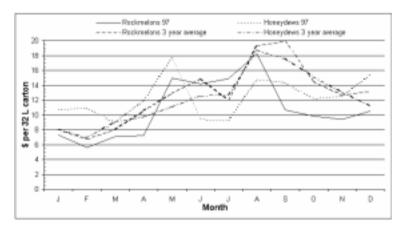


Figure 2. Average price, 1994 to 1996 and 1997 average price 32 L carton on the Sydney market for rockmelons and honeydews

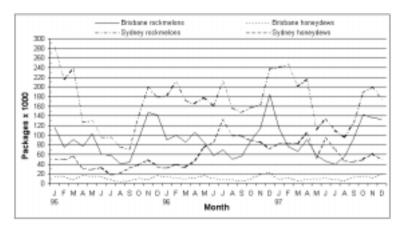


Figure 3. Throughput for 1995 to 1997 on the **Brisbane** and **Sydney** markets for rockmelons and honeydews

Production costs and gross margin (page 5)

These figures have been updated. Refer to page 16 of this update.



Common QUESTIONS

Overview

Some additional questions, particularly related to diseases, chemical use and quality standards, have been raised since the *Agrilink Rockmelon and Honeydew Information Kit* was first published. Following are some questions that the Department of Primary Industries' extension officers have been asked recently and their answers.

What is bacterial blotch of melons?

Bacterial blotch is a bacterial disease that can affect all types of melons, making them unsaleable. For more detail refer to page 18 of this update.

What causes 'exploding' melons?

'Exploding' may be a little imaginative, but melons in which bacterial soft rot organisms are active can suddenly release gas noisily. The soft rot organisms enter the melon through small wounds or other disease lesions, for example blotch, and rapidly break down the internal tissues, creating carbon dioxide. If the small entrance wound is blocked, considerable pressure can build up. Eventually gas and sometimes liquid material 'explodes' through the weakest point in the rind.

How often and for how long do I pick melons?

Harvesting may have to be done every one to three days depending on temperature; a summer crop could be picked daily. Harvesting may extend over two to four weeks.

How do I get spray accreditation?

Spray accreditations can be obtained by attending a course provided by an accredited Chemsafe Training Queensland trainer. *Contacts and references* on page 26 gives a contact to help you find your nearest trainer.

Do I need training in the safe use of chemicals?

In some Australian states you cannot buy chemicals unless you have a current spray accreditation. Currently, by law in Queensland, you only need training in safe use of chemicals if you are a contractor spraying on other people's land or you want to buy restricted chemicals.

However, most customers now see it as highly desirable for their growers to be able to demonstrate safe responsible use of chemicals. One of the best ways to demonstrate this is to obtain a Chemsafe accreditation. Remember spray accreditations must be renewed every five years.

How should I store my chemicals?

Chemicals need to be stored in accordance with the AS2507–1998 standard. This does not mean you will have to spend a fortune on elaborate storage facilities. You do, however, need to be aware of several safety, environmental and food safety factors whenever you deal with chemicals. Further information on correct use of chemicals is covered in the chemical user course. Agsafe or Chemsafe accredited trainers also understand these requirements and employees of farm chemical resellers with Agsafe accreditations are also a useful source of information.

Do I need to keep a diary of spraying records?

Yes, you do. Records of chemical application are now one of the most important pieces of documentation you will need to be able to prove what you have done with chemicals. All the merchants and agents supplying the retail sector now expect you to keep spray records showing at **least** what was applied, how much, by whom, and when the application took place.

What level of quality assurance (QA) do I need?

You will need different levels of QA depending on to whom you supply your melons. If you supply direct to a retailer, in some instances you may need a full quality management system, which is accredited by a third party. If you supply to a processor you will need to meet their requirements. There is more information on QA under *Key issues* on page 21.

Specific updates

What causes yellow margins on leaves? (page 8)

This symptom also appears to be associated with excessive applications of copper sprays used to control bacterial fruit blotch.





Overview

This section briefly updates changes to *Growing the crop*, relating to varieties, weed and disease control and marketing. More information on some of these areas appears in *Key issues* on page 16.

Specific updates

Varieties (page 5)

Add Moon Rocks to the rockmelon varieties and Classique and Solid Gold to the honeydew varieties. See page 17 for descriptions of these varieties and an update of Table 1.

Water quality (page 7)

When using trickle or furrow irrigation, water with a conductivity up to 2500 microSiemens per centimetre has been used with careful management, however yields are reduced.

Table 13. Herbicides for controlling weeds (page 25)

Add:

Chemical	Products	Rate per		
		ha	100 L	
Chemicals for use be	tween rows			
glyphosate-ipa	Squadron	2.5 – 4 L (boom)	0.4 - 0.6 L (hand)	

Notes on use:

Shield the nozzle to prevent drift onto plants or plastic mulch. Residues on plastic can be absorbed by plants touching the plastic.

Trace elements (page 25)

Boron. Be cautious about applying more than one application of boron.

Table 15. The three groups of fungicides for control of downy mildew (page 28)

Add:

Group D (phenylamide)	Group X (unspecified)	Group Y (multi-site activity)
	systemics	protectants
Axiom Optica Ridomil Gold Zee-mil		copper ammonium carbonate

Postharvest handling (page 39)

See comments on storage temperatures for honeydew on page 21.

Storage (page 40)

See comments on storage temperatures for honeydew on page 21.

Packaging (page 40)

The major retailers may not accept polystyrene packages; check with your wholesaler.

Mark packages (page 41)

A key food safety requirement is traceability. All melons need to be identified and documentation maintained to support a trace-back system. Traceability is important as a means of finding the cause of a problem when it occurs, so those growers know how their produce has been handled once it has left the farm.

Traceability is helpful for:

- tracing the source of a possible contamination
- pinpointing areas of poor stock rotation in the marketing chain
- allowing isolation of only a small amount of the farm if there is a problem.

Apart from grower details such as name and address, a 'traceability' code, for example a 'packed on' date, harvest code or batch number needs to be incorporated so the date of harvesting/grading and the farm block from which the product came can be determined.

Many growers prefer not to use a 'packed on' date. Some have letters of the alphabet printed on the carton, then circle a different letter for each day or block, and record the information for this code for future reference. Computeraided equipment that puts a code on each carton is also available.

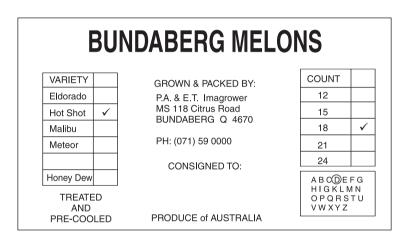


Figure 16. End panel labelling for a melon package including a traceability code

Interstate quarantine requirements (page 44)

These requirements change frequently, so we have included the contact details for each state on page 32.





Overview

The disease bacterial fruit blotch has caused serious losses this year (see page 18 of this update for details on this problem and how to hot-water-treat seed). The gross margin for north Queensland has been updated. There has been a trend towards greater quality assurance in melon marketing and this has been covered in this update.

Specific updates

Gross margin for transplanted rockmelons in north Queensland (page 2)

The gross margin for a crop yielding 1800 cartons per hectare and a price of \$13 per 17 kg carton has been reworked. The results are shown in the table.

Summary of gross margin for transplanted rockmelons in north Queensland

	\$/tray	\$/ha	
Total preharvest costs	\$2.98	\$5 364	
Total postharvest costs	\$4.40	\$7 890	
Total marketing costs	\$3.88	\$6 981	
Total variable costs	\$11.26	\$20 235	
Gross margin	\$1.74	\$3 165	

\$4 740

\$6 315

,	0 0	•	' '
\$/tray	Gross income	Variable costs	Gross margin
\$11	\$19 800	\$19 785	\$15
\$12	\$21 600	\$20 010	\$1 590
\$13	\$23 400	\$20 235	\$3 165

\$20 460

\$20 685

Income, costs and gross margin per hectare at several prices per carton

Things to remember (page 7)

\$25 200

\$27 000

Add:

\$14

\$15

• Regularly check the conductivity (salinity) of your water.

Varieties (page 10)

There have been some changes to the varieties grown and planting and harvesting times.

Add:

Moon Rocks. A firm, oval, non-sutured, well-netted hybrid melon suited to warm to warm harvest periods if medium sized melons are required. It has a small cavity and excellent flavour. A vigorous plant with tolerance to powdery mildew race 1 and 2, and fusarium race 0 to 2, plus sulphur applications. Suitable for export to New Zealand.

Table 2. Rockmelon varieties and main planting and harvesting times for main production districts

District	Variety	Planting time	Harvest time
Bowen-	Dubloon, Eastern Star, Eldorado, Flinders,	February	April to
Burdekin	Hammersley, Hot Shot, Ivanhoe, Malibu, Mission, Mondo, Morocco, Oakley, Otway,	to September	December
	Pablo, Picnic, Premiere, Sahara, Stirling		
Rockhampton– Emerald	Eldorado, Eastern Star, Hammersley, Hot Shot, Malibu, Moon Rocks	June to July	Late September to October
Bundaberg	Eldorado, Eastern Star, Hammersley, Hot Shot, Malibu, Moon Rocks	Mid July to September	Late October to mid December
Gayndah-	Eldorado, Eastern Star, Hammersley,	August to	November
Mundubbera	Hot Shot, Malibu, Moon Rocks	September	to December
Chinchilla-	Dubloon, Eastern Star, Hiline,	September to	December
St. George	Hot Shot, Malibu, Mission	January	to April

18 Key issues

Honeydew varieties (page 10)

Note comments on cooling on page 21 of this update.

Add:

Solid Gold. Mid to early season, slightly oval melon with yellow rind and white flesh.

Classique. Summer/shoulder season, 10 to 20% larger than Sweet Success, a white, long shelf life type.

Planting times (page 11)

Table 4 shows a suggested planting schedule for the Bowen–Burdekin district. Harvesting is 10 to 16 weeks after planting, depending on variety, temperature, and whether planted as seed or transplants.

Table 4. Suggested honeydew variety and sowing schedule Bowen-Burdekin

Variety	J	F	М	Α	М	J	J	Α	S	0	N	D
Dewsweet, Dewcrisp,												
Honeymoon Full Moon, White Mist		_										
Dewette	_			_					_			
Sweet Success, Honeybabe, Solid Gold	_											
Casper, Glacier, Limelight												

Magnesium (page 15)

Magnesium can regularly become unavailable to the plant following regular applications of potassium and calcium-based fertilisers.

Diseases (page 32)

Bacterial fruit blotch

Bacterial fruit blotch disease can affect all melon types. It is caused by the

bacterium *Acidovorax avenae* subsp. *citrulli*. There are two strains, one affects watermelon and honeydew but not rockmelon, a second strain affects all melons. The bacteria can be seed-borne.

On young seedlings water-soaked areas appear on the undersurface of cotyledons. These areas collapse and turn brown to dark brown. In the field, leaf symptoms are inconspicuous unless frequent showers increase the severity of the disease. The brown spots usually run alongside veins or occur around leaf margins. Symptoms can easily be confused with those of gummy stem blight.

Water-soaked areas occur on the skin of young fruit and severely affected fruit may drop off. Symptoms on older fruit vary depending on the strain of bacterium and the type of melon. On watermelon a water-soaked blotch can cover much of the fruit surface. On rockmelons, lesions can be very small but are usually indicated by poor development of netting around the infection point. On honeydew, small water-soaked spots occur which later become open scab-like lesions.

Below the rind, a firm brown discolouration of the flesh develops. Melons rapidly decompose once secondary fungi and bacteria enter the fruit.

Bacterial fruit blotch is favoured by warm, humid conditions. Showers, wind and hail damage greatly increase severity. Copper sprays applied regularly will reduce disease spread in the field. As it is difficult to cover the large area of tangled vines, it is important to build-up spray deposits through regular applications of copper.

Although seed companies test watermelon seed for bacterial fruit blotch, rockmelon and honeydew seed is not tested. Hot water treatment of seed (55°C for 30 minutes) will reduce seed infestation and is recommended until seed merchants test seed. Most seed lines tested have not suffered reduced germination by this treatment, however it is advisable to test a small sample before treating large lots of expensive seed. Plant seed within 48 hours of treatment. See page 20 of this update for a method of hot water treating seed.

Downy mildew (page 33)

For changes to Table 16 refer to page 14 of this update.

Hot water seed treatment

WARNING Do not treat seed if it has already been treated by the seed supplier.

Commercial laboratories will treat seed for you or you can do it yourself. Commercial hot water baths are also available from some laboratory supply stores; otherwise you will need the following equipment to treat small quantities (up to 100 g) of seed:

- an accurate thermometer (0–60°C, calibrated in half degrees)
- electric frypan
- large saucepan
- fine mesh kitchen sieve
- spoon
- clock
- absorbent paper tray.

To treat seed at 55°C, practice the method without seed to help the operator maintain a constant water temperature during seed treatment.

- 1. Warm the electric frypan. Add water (slightly above 55°C from a hot water system or electric jug) to a depth of 3 to 4 cm. Fill the saucepan two-thirds full of water at the same temperature. Stand the saucepan in the frypan on two pieces of wire about 2 mm in diameter to reduce the 'bottom heat' effect of the frypan during treatment. Gently stir the water in the saucepan with the spoon until the temperature drops to 55°C. When reading the thermometer, immerse the tip to half the depth of the water.
- 2. Heat the water to 55.5°C to allow for the drop in temperature when the seed is added. Pour the seed into the water and stir it with the spoon until it is wet. If some seed floats, stir more vigorously. For hard to wet seed add two drops of wetting agent (such as household detergent) to the water. Keep the seed in motion by gently stirring.

Read the temperature and heat when necessary by turning up the thermostat switch of the frypan until the red light comes on, heating for five to 10 seconds, and then turning the thermostat switch down until the red light goes off.

Repeat the procedure every one to two minutes or when the temperature drops below 55°C. If the temperature rises quickly and approaches 56°C,

lift the saucepan and rest it on the frypan edge or add cold water until the temperature drops to 55°C. Maintain the water temperature at 55°C in this way until the recommended seed treatment time has elapsed.

3. When the hot water treatment is complete, pour the contents of the saucepan through the sieve and spread the seed on the absorbent paper tray, away from direct sunlight, until it is dry.

Points to remember

- Accurate control of temperature and time of immersion are critical.
 Excessive time and temperature may result in poor germination and the development of unthrifty seedlings.
- Store seed in muslin or paper bags (not in sealed tins or jars) and do not store for long periods. The shorter the storage period, the better. It is best to hot-water-treat only the quantity of seed you intend to plant almost immediately.

The immediate problem with methyl bromide (page 36)

The phase out date for methyl bromide in Australia is now 2005.

Cooling (page 40)

Last season some honeydews suffered cold injury when held at the normal temperatures for honeydews. New early maturing varieties of honeydew have a high sugar content and are more susceptible to chilling.

DO NOT hold or transport these varieties below 12°C or chilling damage could occur. Chilling injury appears as small measles-like spots on the skin. Contact your seed company to discuss the storage temperatures suitable for the honeydew variety you are growing.

Trends in the melon market (page 42)

There has been a move towards buyers demanding some level of QA in melon marketing. Some possible levels of QA designed to meet the requirements of different customers are as follows:

22 Key issues

1. Approved supplier to certified packing shed/merchant/marketing group

This level will require several measures to be documented, some of which may already be in place. These measures are negotiated with the customer and may include:

- property map
- crop history (spray diary)
- calibration and records
- chemical user training
- correct storage of chemicals
- pest control
- packing record
- product specification
- completed food safety check-list.

2. Supply via a certified merchant

A merchant may have a quality management/food safety system and you will need to be an approved supplier to this system. If you have a large packing/ washing operation you may also need a Hazard Analysis and Critical Control Point (HACCP) plan in place for the shed to cover food safety.

3. Direct supply

If you supply someone like a retailer who requires a full Quality/Food Safety Management System (Q/FSMS) such as SQF 2000, ISO 9002, HACCP or Woolworths Vendor Quality Management Scheme (WVQMS), you will need to implement one of these systems and be certified by a third party organisation. Likewise, if you intend to do this in the future, you will need to meet your particular customers' supply requirements.





Specific updates

Bacterial fruit blotch

Symptoms of this disease include leaf spots in seedlings and plants and fruit rots. Refer to page 18 of this update for details.

Silverleaf whitefly (page 7)

Control of this pest depends on having a two to three month period free of host plants.



Contacts and REFERENCES

There have been some changes in the Contacts and references section.

Specific updates

Grower associations (page 3)

Queensland Fruit and Vegetable Growers has an e-mail address and Web site: e-mail: qfvg@qfvg.org.au www.qfvg.org.au

The new address for Bio Dynamics Association of Australia is:

Biodynamic Agricultural Association of Australia

c/- Post Office

POWELLTOWN VIC 3793

Ph: (03) 5966 7333; Fax: (03) 5966 7433

Biological Farmers of Australia has an e-mail address:

e-mail: bfa@icr.com.au

National Association for Sustainable Agriculture Australia Ltd has an e-mail address: e-mail: nasaa@dove.mtx.net.au

Seed suppliers (page 4)

Note the following changes.

Henderson Seeds

c/- Adam Winter

PO Box 7586 Mail Centre

TOOWOOMBA QLD 4352

Ph: (07) 4630 9944; Fax: (07) 4630 9955; Mobile: 0417 077 857

e-mail: awin@ozemail.com.au

Head office: Ph: 1800 80 2295; Fax: (03) 9850 6794

S & G Seeds is now:

Novartis Seeds

PO Box 51

BRISBANE MARKET QLD 4106

Ph: (07) 3892 4500; Fax: (07) 3892 2408

Yates Vegetable Seeds

c/- TAS Seeds

PO Box 66

COOPERS PLAINS QLD 4108

Ph: (07) 3277 5611; Fax: (07) 3277 0829

Seedling nurseries (page 4)

Bowen, add:

A. & J. Paterson

Telegraph Road

BOWEN QLD 4805

Ph: (07) 4786 2216; Fax: (07) 4785 2028; Mobile: 0417 744 508

Bundaberg, add:

Bundaberg Seedlings

Lot 3, Hoods Road

BUNDABERG QLD 4670

Ph: (07) 4159 9566; Fax: (07) 4159 9863; Mobile: 015 629 730

Lockyer Valley, delete:

Helidon Nursery, Lockyer Seedlings and Pohlmans Nursery

Granite Belt, add

Evans Seedlings

MS 50, Spring Creek Road

AMIENS QLD 4352

Ph: (07) 4683 3175, Fax: (07) 4683 3221

Pesticides and spraying (page 6)

AVCARE Ltd now has an e-mail address:

e-mail: avcare@ozemail.com.au

For training in pesticide application contact the address below to find nearest accredited trainer.

Chemsafe Training Queensland

PO Box 3128

SOUTH BRISBANE OLD 4101

Ph: (07) 3844 7261; Fax: (07) 3844 7307

e-mail: chemsafe@powerup.com.au

Suppliers of beneficial insects (page 6)

Bio-Protection Ptv Ltd

PO Box 35

WARWICK QLD 4370

Ph: (07) 4666 1592; Fax: (07) 4666 1639

e-mail: bioprotn@flexi.net.au

Integrated Pest Management

also trading as Bugs for Bugs

Bowen Street

MUNDUBBERA QLD 4626

Ph: (07) 4165 4663; Fax: (07) 4165 4626

e-mail: dan@bugsforbugs.com.au

www.bugsforbugs.com.au

Vermin control

For information on controlling native birds or bats contact your nearest Department of Environment office. To locate these offices contact QFVG on Freecall 1800 654 222. To control other vermin contact your nearest office of the Department of Natural Resources.

Plant, soil and water testing laboratories (page 7)

Crop Tech Laboratories Pty Ltd now has an e-mail address: e-mail: CROPTECH@b130.aone.net.au

Disease and nematode testing laboratories

Biological Crop Protection

Dr G. Stirling 3601 Moggill Road MOGGILL QLD 4070

Ph: (07) 3202 7419; Fax: (07) 3202 8033; Mobile: 0412 083 489

e-mail: biolcrop@powerup.com.au

Market information (page 10)

The market information has been updated and expanded.

For information on who to talk to about problems in the market, such as disputes over payment, wholesalers looking for new growers or products, packing and presentation, or contact numbers for government officers or industry representatives, contact the appropriate person from the list below.

Ausmarket Consultants

The **Ausmarket Consultants** group offers uniformity in Australian fruit and vegetable market price reporting and market intelligence, historic data as well as outturn reporting and product assessment. Participating services operate separate businesses within Australia's terminal markets under independent trading names.

The Ausmarket Consultants name covers activities where two or more of the group members combine resources to provide services, which extend beyond each of their individual areas of operation. Their contact addresses are listed below, and on:

www.users.bigpond.com/Ausmarket

Adelaide

Adelaide Market Services

Bill Bishop

PO Box 6014, Halifax Street

ADELAIDE SA 5000

Ph: (08) 8232 5555; Fax: (08) 8232 1311; Mobile: 0419 868 265

Brisbane

Market Information Services

Trevor Brewer

D Block Brisbane Market

PO Box 229

BRISBANE MARKETS QLD 4106

Ph: (07) 3379 4576; Fax: (07) 3379 4103; Mobile: 0417 712 427

Infocall: 1902 262 580 (\$2.50 per minute, covers Adelaide, Brisbane,

Sydney and Melbourne)

e-mail: Ausmarket@bigpond.com

Melbourne

DataFresh Melbourne Market Reporting Service

John Popilieff

Box 170 Melbourne Markets

FOOTSCRAY VIC 3011

Ph: (03) 9689 3444; Fax: (03) 9689 3411; Mobile: 0411 117 578

e-mail: info@datafresh.com.au

Sydney

Control Quality Services

Chris Cope

PO Box 350

FRENCHS FOREST NSW 2086

Ph: (02) 9746 3437; Fax: (02) 9746 1075; Mobile: 0416 108 639

e-mail: cqs@accsoft.com.au

Other market price information sources

Perth

Perth Market Reporting Service

Perth Market Authority

Mail Point 1

280 Bannister Road

CANNING VALE WA 6155

Ph: (08) 9455 2900; Fax: (08) 9455 2902

Market reports: 1900 983 304 (recording); 75 c per minute

e-mail: market@tpgi.com.au

Sydney

Flemington Market Reporting Services

Northern B Block Warehouse

PO Box 1

FLEMINGTON MARKETS NSW 2129

Ph: (02) 9764 3516; Fax: (02) 9763 1773

Market reports: 1900 123 038 (recording); 75 cents per minute

Dial-a-fax: 1900 123 039 (\$2 per fax)

Payment problem contacts

If you have a disagreement over payment for produce or want a list of registered farm produce commercial sellers, the following contacts should be helpful.

Adelaide

South Australian Chamber of Fruit and Vegetables

c/- Adelaide Produce Markets Ltd

Ph: (08) 8349 4528; Fax: (08) 8349 5922

Brisbane

Farm Produce Commercial Sellers

Deputy Registrar

Ph: (07) 3239 3233; Fax: (07) 3239 3379

e-mail: janetzn@dpi.qld.gov.au

Sydney

Prompt Pay

Freecall: 1800 247 787; Fax: (02) 9764 2776

Melbourne

Farmpay

Freecall: 1800 060 321; Info Fax; 1800 678 062

Perth

Chamber of Fruit and Vegetable Industries

Robert Naudi

Ph: (08) 9455 2742; Fax: (08) 9455 4923

Wholesaler information

Contact the appropriate number below for information about farm produce commercial wholesalers in the markets.

Adelaide

Adelaide Produce Markets Ltd

Diagonal Road

POORAKA SA 5095

Ph: (08) 8349 4493; Fax: (08) 8349 6574

Brisbane

Market Line

Freecall: 1800 631 002

www.brisbanemarket.com.au

Melbourne

Victorian Chamber of Fresh Produce Wholesalers Inc.

PO Box 113

542 Footscray Road

FOOTSCRAY VIC 3011

Ph: (03) 9689 3233; Fax: (03) 9689 9223

Perth

Perth Market Authority

Mail Point 1

280 Bannister Road

CANNING VALE WA 6155

Ph: (08) 9455 2900; Fax: (08) 9455 2902

Sydney

Sydney Markets Ltd.

PO Box 2

SYDNEY MARKETS NSW 2129

Ph: (02) 9325 6200; Fax: (02) 9325 6288 e-mail: sydma@sydneymarkets.com.au

www.sydneymarkets.com.au

Horticultural consultants (page 10)

There are some new consultants:

Armstrong Rural Services

PO Box 1438

TOOWOOMBA QLD 4350

Ph/Fax: (07) 4630 3667

Valley Crop Monitoring Service

Julian Winch 20 Smith Street GATTON OLD 4343

Ph/Fax: (07) 5462 2096; Mobile: 015 640 450

Quality management guidance services

A.S.A.P. Quality Assurance and Management Service

Wally Collins Unit 29, 367 Algester Road ALGESTER OLD 4114

Mobile: 018 069 355; A/H: (07) 3272 2246

Export associations (page 10)

Changes of address:

Australian Horticultural Exporters Association

Institute of Horticultural Development

Private Bag 15

SOUTH EASTERN MAIL CENTRE VIC 3176

Ph: (03) 9210 9380; Fax: (03) 9210 9381; Mobile: 0419 999 889

e-mail: ahea@ozdocs.net.au www.ozdocs.net.au/~ahea

Queensland Horticultural Exporters Association

PO Box 857

HAMILTON CENTRAL QLD 4007

Ph: (07) 3868 1888; Fax: (07) 3868 4722

Information on interstate movement provisions

Requirements for interstate movement change rapidly; to allow you to get the latest information we have included the contacts for each state below.

Queensland

Senior Operational Support Officer

Department of Primary Industries

GPO Box 46

BRISBANE QLD 4001

Ph: (07) 3239 3330; Fax: (07) 3211 3293

New South Wales

Regulatory Operations Coordinator (Plants)

Locked Bag 21

ORANGE NSW 2800

Ph: (02) 6391 3583; Fax: (02) 6361 9976

Australian Capital Territory

Quarantine and Inspection Officer

Environment ACT

PO Box 1038

TUGGERANONG ACT 2901

Ph: (02) 6207 2265; (02) 6207 2268

Victoria

Supervisor Plant Standards

Plant Standards Centre

Box 126

FOOTSCRAY VIC 3011

Ph: (03) 9687 5627: Fax: (03) 9687 6746

Tasmania

Quarantine Officer

Quarantine Centre

PO Box 347

NORTH HOBART TAS 7022

Ph: (03) 6233 3036; Fax: (03) 6234 6785

South Australia

Program Leader—State Quarantine Inspection Service

46 Prospect Road

PROSPECT SA 50582

Ph: (08) 8269 4500; Fax: (08) 8344 6033

Western Australia

Senior Inspector

Western Australian Quarantine and Inspection Service

280 Bannister Road

CANNING VALE WA 6155

Ph: (08) 9311 5333; Fax: (08) 9455 3052

Northern Territory

Senior Adviser, Plants

NT Quarantine and Inspection Branch

GPO Box 2268

DARWIN NT 0801

Ph: (08) 8981 8733; Fax: (08) 8941 0223

Queensland government services (page 11)

Change of address for melon inquiries:

Oueensland Horticulture Institute

DPI Gatton Research Station

Locked Mail Bag 7, MS 437

GATTON QLD 4343

Ph: (07) 5466 2222; Fax: (07) 5462 3223

Consumer Affairs Queensland

Consumer Affairs offices manage the *Trade Measurement Act 1990* and can provide current information on marking packages and the requirements for ensuring correct weight in all packages. You can locate your nearest office or obtain information by contacting them on Ph: (07) 3836 0411; Fax: (07) 3836 0424.

Other information sources (page 12)

DPI Web site: www.dpi.qld.gov.au

Agricultural booksellers (page 13)

Agmedia no longer exists. The NRE Information Centre sells many of their titles. Add:

Granny Smith's Bookshop

PO Box 27

SUBIACO WA 6008

Ph: (08) 9388 1853; Fax: (08) 9388 1852

e-mail: granny@aoi.com.au www.aoi.com.au/granny

Landlinks Press

PO Box 1139

COLLINGWOOD VIC 3066

Freecall: 1800 645 051; Ph: (03) 9662 7666; Fax: (03) 9662 7555

e-mail: sales@publish.csiro.au

NRE Information Centre

PO Box 500

EAST MELBOURNE VIC 3002

Ph: (03) 9637 8080; Fax (03) 9637 8150

NSW Agriculture

Publications Sales Unit

Locked Bag 21

ORANGE NSW 2800

Orders: Freecall: 1800 028 374; Ph: (02) 6391 3433; Fax: 1800 642 065

References

DPI information products (page 15)

Developing an approved supplier program for fresh produce: a guide for customers and suppliers, National Quality Management Working Group, (1999), Department of Primary Industries, Queensland and Horticultural Research and Development Corporation.

Available from:

Ms J. Barker

c/- Entomology Building

DPI Queensland

80 Meiers Road

INDOOROOPILLY QLD 4068

Ph: (07) 3896 9385; Fax: (07) 3896 9446

Other books (page 16)

The 1998 edition of the Australian vegetable growing handbook edited by J. Salvestrin is now available.

Annual publications (page 17)

Brisbane markets business directory

Available from:

Brisbane Market Authority

PO Box 8

BRISBANE MARKETS QLD 4106

Ph: (07) 3379 1062; Fax: (07) 3379 4903

www.brisbanemarket.com.au

Prices and throughput for the Brisbane market 1998

Available from:

Market Information Services

PO Box 229

BRISBANE MARKET QLD 4106

Ph: (07) 3379 4576; Fax: (07) 3379 4103; Mobile: 041 771 2427

Melbourne markets business directory

Available from:

Melbourne Market Authority

PO Box 1

542 Footscray Road

FOOTSCRAY VIC 3011

Ph: (03) 9258 6100; Fax: (03) 9687 7714

e-mail: info@mma.vic.gov.au

Sydney markets users guide

Available from:

Sydney Market Ltd

PO Box 2

SYDNEY MARKETS NSW 2129

Ph: (02) 9325 6200; Fax: (02) 9325 6288 e-mail: sydma@sydneymarkets.com.au

www.sydneymarkets.com.au

Crop production handy guide

Pre-plant

Destroy all volunteer melon plants and wild cucurbits in the vicinity for control of bacterial fruit blotch, mosaic virus, silverleaf whitefly and other pests and diseases.

Planting to harvest

In warm, humid or showery weather apply regular copper sprays to protect against bacterial diseases.





Note these changes for control of pests and diseases of rockmelons and honeydews. This information is taken from the DPI's *Infopest* CD, V2.1.

Chemical	Controls	Trade name	Add trade name	Delete trade name	WHP (days)*
chlorothalonil	Alternaria leaf spot, anthracnose, downy mildew, gummy stem blight, rhizoctonia ground rot	Bravo 750, Chlorothalonil, Crotop, Echo, Elect, Fung-o-nil	V		1
chlorpyrifos	Cutworm	Pyrinex, Strike-out	~		NS NA
copper ammonium carbonate	Downy mildew	Liquicop	~		1
copper hydroxide	Angular leaf spot, bacterial spot	Blue-Side, Copper hydroxide, Flo-Bordo	~		1
copper oxychloride	Angular leaf spot, bacterial spot	Vincop	~		1
copper oxychloride	Alternaria leaf spot	Copper fungicide and bactericide	~		1
cuprous oxide	Angular leaf spot, bacterial spot	Nordox, Norshield, Norshield 750	~		1
dimethoate	Aphids, cucumber fly, green vegetable bug, jassids, mites, thrips	Dimethomax, Romethoate	~		1

Chemical	Controls	Trade name	Add trade name	Delete trade name	WHP (days)*
imidacloprid	Green peach aphid	Confidor	~		1
maldison	Aphids, green vegetable bug, jassids, Rutherglen bug	Fyfanon, Maldison	~		3
mancozeb + metalaxyl	Alternaria leaf spot, anthracnose, downy mildew, gummy stem blight	Axiom, Optica, Zee-mil	~		7
mancozeb + metalaxyl M	Alternaria leaf spot, anthracnose, downy mildew, gummy stem blight	Ridomil Gold	-		7
metalaxyl	Damping-off	Axiom 50G, Optica 50 G	~		7
phosphorus acid	Downy mildew, sudden wilt root rot, gummy stem blight	Agri-Fos Supa 400 (off-label permit)	~		0
zineb	Anthracnose, downy mildew	Zineb	~		7
chlorpyrifos (bait)		Pirifoz		X	
chlorpyrifos (spray)		Chlorfos, Cyren, Iban, Pirifoz		X	
demeton-S- methyl		Metasystox		X	
diazinon		Gesapon		X	
dimethoate		Danadim		X	
endosulfan		Bar		X	
zineb		Cyneb		X	

^{*} WHP: Withholding period (days); NS: None supplied on label; NA: Not applicable.

Notes

These are all the changed items that we are aware of. If there are any additional changes, please contact Agrilink's Customer Service Officer on 1800 677 640 or send fax details to (07) 5444 9694. You can also e-mail us on: agrilink@dpi.qld.gov.au