

# Papaw information kit

Reprint – information current in 2000



## REPRINT INFORMATION – PLEASE READ!

For updated information please call 13 25 23 or visit the website [www.dpi.qld.gov.au](http://www.dpi.qld.gov.au)

This publication has been reprinted as a digital book without any changes to the content published in 2000. We advise readers to take particular note of the areas most likely to be out-of-date and so requiring further research: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](http://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- Financial information—costs and returns listed in this publication are out of date.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.dpi.qld.gov.au](http://www.dpi.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 2000. 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 mangoes. 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.



Queensland Government

# Papaw Information Kit

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**AgriLink**  
your growing guide  
to better farming  
**SERIES**  
**QAL9910**

Queensland Horticulture Institute  
Department of Primary Industries, Queensland

## **Papaw Information Kit**

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Agrilink concept devised by Noel Vock and Brian Cull

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This information kit is distributed by the Department of Primary Industries as an information source only. The information contained in the kit and other material incorporated by reference is provided solely on the basis that readers will be responsible for making their own assessment of the content and seek professional advice. Readers must note that the information contained in this kit has been developed for growers in Queensland, Australia and the Department of Primary Industries gives no warranty that the information is suitable for conditions outside Queensland, Australia.

# Foreword

The Queensland Horticulture Institute is a business unit of the Department of Primary Industries with staff located at 17 centres across the State. It is the service delivery arm of the Queensland Government's support for the fruit, vegetable and amenity horticultural industries.

The core business of the Queensland Horticulture Institute is providing effective technical, scientific and market driven solutions for the horticultural industries. A key element of this is information. Our team of researchers, extension officers and other skilled professionals generates, formats and distributes information to advance the horticultural sector.

Agrilink is an innovative concept in developing and packaging the information that is regularly sought by producers of horticultural commodities.

Each Agrilink kit has been designed to be both comprehensive and practical. As the kits are arranged to answer questions of increasing complexity, they are useful references for both new and experienced producers of specific crops. Agrilink integrates the technology of horticultural production with the management of horticultural enterprises.

Agrilink is a team effort. Each kit has been conceived and written by a team of extension and research staff with specialist knowledge of the crop and commodity. Most of the kits have been field-tested by producers and other users. Agrilink products are being produced to high quality standards so that you can obtain maximum benefit from your investment in information.

Technology and crop management information are changing rapidly. Agrilink has been designed so that each kit can be regularly updated and kept relevant as a practical aid for horticultural producers.

The Queensland Horticulture Institute aims to be the key provider of innovative research services and support for the development of horticulture in Queensland. We seek to find solutions through science. Agrilink is a means of bringing that information to you.

Grant Hall  
Director  
Queensland Horticulture Institute

# Acknowledgements

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We also thank Carol Kroger for providing the line drawings, Ethna Brown for digitising the colour photos and Emma Smith and Larissa Bartel for assisting with Section 6, *Contacts and references*.

# Preface

To be viable and competitive, horticultural growers face many challenges. These require significant economic and social restructuring and the adoption of new, complex and high risk technologies. The main prerequisite for these decisions is the availability of high quality, timely and relevant information.

Producing this information was the challenge that triggered the Agrilink information concept in 1992. Agrilink evolved from research that showed our existing information at that time lacked completeness, quality, easy access and regular updating. Agrilink developed and trialled a new information system to address these deficiencies and in 1996 introduced this series of information kits.

Agrilink is built around several important principles. Its products focus on the core information that is most needed and regularly sought by growers. The information is presented in line with how it has been sought from us over the last 15 years. The contents are packaged into integrated information kits that make access and information retrieval easy. For the first time, we are providing a commitment to updating the information. The whole system operates under quality management to guarantee product quality and integrity.

The development of Agrilink has been a team effort. I thank all of the DPI staff, consultants and growers who have cooperated in our information gathering workshops. I also thank the artists, printing consultants and editors who have helped to turn the raw information into information kits. This latest stage of Agrilink is possible through the funding support of DPI's New Initiatives Program, for which I am particularly grateful. This support has enabled a specialist project team to be developed to carry on the work. I thank this team for the wonderful effort they have put in to getting this new stage off the ground.

Four people deserve special mention. Brian Cull helped to develop the Agrilink concept and has vigorously encouraged its development. Geoff Behncken provided the initial funding and was instrumental in helping secure the special funding for this new stage. Loraine Chapman has provided a range of specialist design and desktop publishing skills, a contribution which has been outstanding. Cheryl Hutchings helped to develop the Agrilink logo and has provided valuable commercial advice throughout.

I believe that Agrilink has made considerable progress in the challenge to provide high quality, timely and relevant information to Queensland's horticultural industries.

Noel Vock  
Agrilink Project Leader

# About the authors

## **Phil Ross**

Phil has left DPI's Queensland Horticulture Institute at South Johnstone to become farm operations manager for a new commercial venture, Coffee Management Australia, near Casino in New South Wales. He joined DPI seven years ago as an extension officer, first based at Innisfail and then at the Centre for Wet Tropics Agriculture, South Johnstone. Phil has seven years' experience working with the papaw industry. For the last four years he participated in helping the Queensland papaw industry become more strategically focused. Phil also produced the Queensland papaw news bulletin *Papaya Post*.

## **Paul O'Hare**

Paul is a senior extension horticulturist with DPI's Queensland Horticulture Institute at Gympie. He has been the papaw extension specialist for south-east Queensland since 1981. Paul has been involved in production, breeding, postharvest handling and marketing in the papaw industry. He is the author of the DPI book *Growing papaws in south Queensland*. Paul is a papaw enthusiast and has won prizes for his fruit in local shows.

## **Nick Macleod**

Nick has recently joined Golden Circle Ltd as a horticulturist after 15 years as the principal extension horticulturist with the DPI's Queensland Horticulture Institute based at Rockhampton. He has broad experience in marketing and agronomy of tropical fruit crops. Nick helped develop the Queensland papaw breeding program which started in central Queensland. He led the crop management in papaws project, which demonstrated the benefits of trickle irrigation, mulching and ratoon management of the crop. This project also measured the performance of the major commercial varieties grown in Queensland.

## **Patricia Chay-Prove**

Patricia is an information extension officer with the Centre for Wet Tropics Agriculture, South Johnstone. She has more than 15 years' experience as a plant breeder, with broad knowledge in plant breeding and physiology of field crops, including canola, grain legumes and rice. She also has an extensive background in tropical fruit and conducted research on the breeding and improvement of papaw when it was initiated in South Johnstone.

## **Irene Kernot**

Irene is a senior information extension officer at the DPI's Centre for Tropical Agriculture, Mareeba. She has worked on the development of several information products for growers. These include computer-based decision packages for the avocado and macadamia industries as well as print products for the papaw and banana industries. She has been a member of the team that helped to encourage farming diversity under the DPI's CHOICES program on the Atherton Tableland through information products and practical demonstrations on a wide variety of horticulture crops.

### **Darryl Evans**

Darryl is a soil conservation officer with the Department of Natural Resources at the Centre for Wet Tropics Agriculture, South Johnstone. He has more than 30 years' experience in soil conservation throughout Queensland, including 16 years working with the north Queensland papaw industry.

### **Kathy Grice**

Kathy is an experimentalist in plant pathology based at the Centre for Tropical Agriculture, Mareeba. Kathy has worked on diseases of papaw for the past nine years. She has conducted research on the management of papaw diseases including trials on *Phytophthora* root and fruit rot and black spot.

### **Lynton Vawdrey**

Lynton is a senior plant protection officer with the Centre for Wet Tropics Agriculture, South Johnstone. After joining the DPI in 1975, he established and operated a disease diagnostic service for horticultural producers in Bowen, Bundaberg and more recently in the Wet Tropics. Lynton is conducting research into the cultural control of *Phytophthora* root rot of papaw.

### **Nick Richards**

Nick currently works for Agriculture Western Australia as a horticulture extension and development officer, based at Kununurra. From 1995 to 1997 he worked for DPI at South Johnstone as a research horticulturist and completed trials on papaw nutrition and irrigation requirements. He has worked for 18 years in tropical agriculture for commercial, government and United Nations organisations in Papua New Guinea, Tanzania and Australia.

### **Allan Blair**

Allan is a FutureProfit extension officer with the DPI, Centre for Wet Tropics at South Johnstone. He has extensive experience in pesticide application technology.

### **David Astridge**

David is a research entomologist with the DPI's Centre for Wet Tropics Agriculture at South Johnstone. He is responsible for developing integrated pest control systems specialising in biological control. David is researching the control of two-spotted mite in papaw and has other projects in the tropical fruit industries of north Queensland.

## What's in a name?

What's the difference between a papaya, pawpaw, papaw and paw-paw? Well, it depends on where you were born.

Australians, particularly Queenslanders, identify *Carica papaya* fruit as papaw, pawpaw or paw-paw. Growers of the red and pink-fleshed fruit type use papaya to differentiate their product from the yellow-fleshed papaw.

Irrespective of its flesh colour, *C. papaya* is generally known as papaya overseas. In other countries an unrelated plant, *Asimina triloba*, native to north America, is called 'papaw'.

Papaw is the name we used throughout this kit and refers to *C. papaya*, except that we commonly describe the fruit as yellow-fleshed papaw and red-fleshed papaya to follow common Australian practice.



# CONTENTS

## Section

### Before you start

*A checklist of things you need to know before you start growing the crop*

1

### Common questions

*The twenty or so most commonly asked questions about the crop*

2

### Growing the crop

*Our guide for selecting varieties, and establishing, producing and marketing the crop*

3

### Key issues

*More detailed information on the key issues and important decisions affecting the crop*

4

### Problem solver

*A picture series of the common problems with notes on what you can do about them*

5

### Contacts and references

*A list of industry organisations, product suppliers, information sources and further reading*

6

### Index

*An A to Z index to help you find information quickly*

7

### Your info

*A place to store information that you have collected*

8