

# Custard apple information kit

Reprint – information current in 1998



## REPRINT INFORMATION – PLEASE READ!

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

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 We advise readers to take particular note of the areas most likely to be out-of-date and so requiring further research: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](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- Financial information—costs and returns listed in this publication are out of date.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.deedi.qld.gov.au](http://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 custard apple production. 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

# Custard Apple Information Kit

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**AgriLink**  
your growing guide  
to better farming  
**SERIES**  
**QAL9904**

Queensland Horticulture Institute, Department of Primary Industries, Queensland, in collaboration with Rural Industries Research & Development Corporation, Horticultural Research & Development Corporation, Australian Custard Apple Growers' Association

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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 a new concept in developing and packaging the information regularly sought by producers of horticultural commodities.

Each Agrilink kit has been designed to be both comprehensive and practical. As they 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.

Kathryn Adams  
Director  
Queensland Horticulture Institute

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- *Diseases of fruit crops*, D. Persley (ed), Department of Primary Industries, Queensland.
- *Insect pests of fruit and vegetables*, G.A. Swaine, D.A. Ironside and R.J. Corcoran (eds), Department of Primary Industries, Queensland.
- *Plant nutrient disorders 1—Temperate and subtropical fruit and nut crops*, R.G. Weir and G.C. Cresswell, NSW Agriculture.

Some of the information and photographs for the kit were derived from *Custard apples—cultivation and crop protection* by Garth Sanewski, and the prototype version of the *Agrilink Queensland custard apple information kit* by Jodie Campbell and Noel Vock.

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# 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. Over the last four years, Agrilink has developed and trialled a new information system to address these deficiencies. This has culminated in this new 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 each year. The whole system is being operated 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 new 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 since. 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. The Agrilink project team looks forward to continuing the work into the new millennium.

Noel Vock  
Agrilink Project Leader

# About the authors

## **Alan George**

Alan is a Senior Principal Horticulturist with DPI's Queensland Horticulture Institute, based at Maroochy Research Station, Nambour. He has 26 years' experience in tree fruit agronomy and physiology, much of that in custard apples. He has travelled extensively in South-East Asia, undertaking consultancies in the development of temperate zone fruits for tropical and subtropical regions, and has provided extensive training for Asian research and extension staff. In custard apples, Alan has been instrumental in the development of new varieties and management techniques for the crop.

## **Jodie Campbell**

Jodie is a former Extension Horticulturist with DPI's Queensland Horticulture Institute, and was based at Maroochy Research Station, Nambour. She has 12 years' experience in extension work with temperate and subtropical fruit industries including low chill stonefruit, persimmon and custard apple. In custard apples, she was instrumental in the development of new domestic and export marketing opportunities for the fruit.

## **Bob Nissen**

Bob is a District Experimentalist with DPI's Queensland Horticulture Institute, based at Maroochy Research Station, Nambour. He has 26 years' experience in physiology and propagation of a range of subtropical and tropical tree fruits, as well as a special interest and involvement in software engineering. He has been involved with consultancy and training in Sri Lanka, the South Pacific and South-East Asia. Bob has been involved in custard apple research with Alan George for 15 years, with projects in variety evaluation, flowering and crop manipulation, nutrition and hand pollination.

## **Lyn Smith**

Lyn is a Senior Physiologist with the postharvest group of DPI's Queensland Horticulture Institute, and is based at Hamilton in Brisbane. He has 20 years' experience in postharvest physiology and quality evaluation in a range of subtropical fruits. Lyn has been involved in custard apple research for seven years, with projects in maturity assessment, cool storage, export market development, controlled atmosphere transport and packaging.

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Geraldine was a Senior Laboratory Technician with the postharvest group of DPI's Queensland Horticulture Institute, based at Hamilton in Brisbane, before moving to the DPI's Redlands Research Station to work with the Queensland Flower Growers Association. She has 18 years' experience in technical support to agricultural research, with the last seven years in postharvest physiology of horticultural crops. During that time, Geraldine was involved in custard apple research.

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Roger is a Senior Principal Horticulturist with DPI's Queensland Horticulture Institute, based at Maroochy Research Station, Nambour. Roger has 25 years' experience in agriculture, both as an entomologist and horticulturist. He has played a major role in developing and testing integrated crop protection systems for horticultural crops and has co-written and edited a range of books, videos and wall charts. He is currently extension specialist for the custard apple, subtropical banana and ginger industries where he manages projects dealing with a range of production and marketing issues.

## **Noel Vock**

Noel is a Principal Information Extension Officer with DPI's Queensland Horticulture Institute, based at Maroochy Research Station, Nambour. He has 25 years' experience in developing information systems in agriculture, initially in plant pathology, and for the last 17 years in horticulture. In 1992, he co-jointly developed the Agrilink information concept and has since led the Agrilink project.

## **Peter Rigden**

Peter is a Temporary Extension Support Officer with DPI's Queensland Horticulture Institute, based at Maroochy Research Station, Nambour. He has 18 years' experience in horticulture in Papua New Guinea, Vanuatu, Solomon Islands and Swaziland as a plantation manager. Since joining DPI in 1996, Peter has been responsible for providing advisory services to commercial producers in the Nambour region. He has also assisted with information coordination for Agrilink.





# 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