Sweet corn information kit

Reprint – information current in 2005



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 2005. We advise readers to take particular note of the areas most likely to be out-of-date and so requiring further research: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- Financial information—costs and returns listed in this publication are out of date.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 2005. 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 sweet corn 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.



GROWING GUIDE

Sweet corn grower's handbook

Main authors

Ross Wright ¹ John Duff ¹

Peter Deuter ¹ Bronwyn Walsh ¹

Tony Napier ² Lionel Hill ⁴

Rob Dimsey ³ Stewart Learmonth ⁵

Contributing authors

Glenn Geitz ¹ Brendan Nolan ¹

Sue Heisswolf ¹ Jason Olsen ¹

Noel Meurant 1

Coordinator

Jerry Lovatt 1

¹DPI&F Queensland, in collaboration with Departments of Primary Industries in ²NSW, ³Victoria, ⁴Tasmania, and ⁵Western Australia Department of Agriculture











Sweet corn grower's handbook

First published 2005

Grower guide series: ISSN 0727-6273

Q105023

National Library of Australia Cataloguing-in-Publication

Sweet corn grower's handbook

Includes index

ISBN 0724267360

1. Sweet corn - Queensland. I. Queensland. Dept. of Primary Industries. (Series : Growing guide).

635.672

© The State of Queensland, Department of Primary Industries & Fisheries 2005

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 & Fisheries.

Enquiries should be addressed to:

Department of Primary Industries and Fisheries Bookshop GPO Box 46 80 Ann Street Brisbane 4001 Qld Australia

Free call: 1800 816 541 Ph: (07) 3239 3163

Fax: (07) 3239 6509 Int Code: + 61 7

Email: callweb@dpi.qld.gov.au Web:www.dpi.qld.gov.au/agrilink

Disclaimer

This book is distributed by the Department of Primary Industries & Fisheries as an information source only. The information contained in it 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. Readers must note that the information contained in this book has been developed for growers in Australia, and the Department of Primary Industries & Fisheries and its collaborators in this product give no warranty that the information is suitable for conditions outside the Australian areas for which it is written.

Contents

	Acknowledgments iv
	About the authors v
	Using this guidevi
Chapter 1	Before you start
Chapter 2	Common questions
Chapter 3	Growing the crop
Chapter 4	Key issues
Chapter 5	Contacts & references 239 a list of industry organisations, product suppliers and further reading
Chapter 6	Handy guides
Chapter 7	Index

Acknowledgements

The authors are grateful for information and technical advice provided by Eric Coleman, Rodney Collins, Garry Fullelove, Tonia Grundy, Craig Henderson, Iain Kay, John Maltby, Heidi Martin and Dave Murray, from the Department of Primary Industries and Fisheries (DPI&F), Queensland; Bob Davis and Noel Meurant formerly of (DPI&F); and Gary Dwyer formerly from the Department of Natural Resources, Mines and Energy in Queensland.

Thanks also to Clarrie Beckingham, Sandra McDougall and Lowan Turton, New South Wales Department of Primary Industries; Neville Fernando and Peter Ridland, Department of Primary Industries, Victoria; Jeff Mortimore and Chris Robinson, Department of Agriculture, Western Australia; Jamie Cupples, Farmsafe Queensland; Bob Gaussen, Retail Grocery Industry Ombudsman; Ray Collins, University of Queensland and John Whitehead of Farm Chemicals Consultants.

Information sources used include:

- Growing sweet corn, Agfact H8.1.39, C.R. Beckingham, (1999), NSW Agriculture.
- Hungry crops: a guide to nutrient deficiencies in field crops, N.J. Grundon, (1987), Department of Primary Industries, Brisbane.

· Plant nutrient disorders 4, Pastures and field crops, R.G. Weir and G.C. Cresswell, (1994), New South Wales Agriculture, Sydney.

Figure 45 provided by Melina Miles, DPI&FF, Figure 48 from *Pesticide application manual* (2nd edn), (1990), Department of Primary Industries, Brisbane. Figure 52 came from the book *Forced air cooling* by J.B. Watkins, Department of Primary Industries, Queensland.

The summarised market price information was kindly provided by Market Information Services, Brisbane, and Sydney Market Reporting Service, Sydney.

Chemical information was extracted from Infopest produced by the Department of Primary Industries and Fisheries, Queensland.

We also thank Loraine Chapman for her many publishing and desktopping skills, and her patience.

About the main authors

Ross Wright is a Senior Horticulturist at the DPI& Bowen Horticulture Research Station in Queensland. Ross has 35 years experience in the agronomy and plant improvement of a range of vegetable crops. His experience in sweet corn crops has involved research and development work in plant improvement, crop agronomy and nutrition, crop scheduling, weed control and pest and disease management.

Peter Deuter is a Principal Horticulturist with DPI&F. He has 32 years experience in a wide range of fruit and vegetable crops and many years experience in all aspects of sweet corn agronomy. Peter is based at Gatton Research Station and leads the national IPM in sweet corn project funded by Horticulture Australia.

Tony Napier is a District Horticulturist with NSW Department of Primary Industries at Yanco Agricultural Institute. He has 14 years experience in horticulture including pest management, agronomy and disease management of sweet corn. He also worked as a Field Officer for a vegetable processing company and as a Production Agronomist for a seed company.

Rob Dimsey is a Senior Horticulturist with the DPI in Victoria. He has 23 years experience in a wide range of fruit and vegetable crops in several regions in Victoria. Rob has been based at Bairnsdale in Eastern Victoria for 13 years. His experience in sweet corn has involved work based on industry and state funded projects covering aspects of agronomy, cultivars, nutrition and IPM.

John Duff is an Entomologist with the DPI&F at the Gatton Research Station. He has been working in vegetable Integrated Pest Management for over seven years in brassica, sweet corn, lettuce and green bean crops. Bronwyn Walsh is an Entomologist with the DPI&F and based at the Gatton Research Station for nine years. She has expertise in developing integrated pest management systems in a range of vegetable crops including sweet corn, brassicas and potatoes. Her other research has been with thrips and other horticultural pests.

Lionel Hill commenced work with the Tasmanian Department of Primary Industries, Water and Envirionemnt in 1985 as a Regional Entomologist servicing the vegetable crops of north-western Tasmania. Since then his role has broadened considerably but he continues to work with agronomists from the growing private sector to bring new ideas to local growers.

Stewart Learmonth is a Research Entomologist with the WA Department of Agriculture, based at Manjimup in south-west WA. He has 30 years experience in economic entomology in both temperate and tropical zones and has been involved with assisting sweet corn growers adopt IPM principles for protecting sweet corn crops, with an emphasis on pest monitoring.

Jerry Lovatt is a Senior Information Extension Horticulturist with the DPI& Bundaberg Research Station in Queensland. Jerry has 37 years experiences working at six centres around Queensland where he has accumulated a wealth of knowledge about Queensland horticulture, particularly vegetables. Jerry joined the Agrilink project team in 1993 and has been responsible for the development of nine information packages for vegetable crops.

Using this guide

The handbook is constructed around two important principles. Firstly, it focuses on the core information that is most needed and regularly used by growers. Hence, it does not provide detailed information on all areas of growing the crop; where additional information is available and considered useful for further study, references are provided. Secondly, the information is presented in line with how it has been sought from the authors over a number of years. Hence, there are different chapters of the handbook designed to suit different needs. Here is a brief roadmap:

If you are an:

Intending grower (thinking about growing sweet corn)

Start with:

Before you start—a checklist of the things you need to know before you start growing the crop, and will give you the best introduction into other sections of the handbook. Other useful chapters are:

Common questions—the most commonly asked questions about growing the crop

Contacts—a list of industry organisations, product suppliers

References-further reading

New grower (about to establish a crop, in the process of doing so, or taking over a farm as a new grower) Growing the crop—the authors' guide for establishing, producing and handling the crop and will refer to other appropriate sections of the handbook where needed. Other useful chapters are:

Key issues—detailed information on the key decisions for sweet corn growers

Contacts—list of industry organisations, product suppliers

References—further reading

Chemical selector—list of chemicals currently registered in Australia and their registered uses

Remember that the handbook contains a detailed index.

Established or more experienced grower

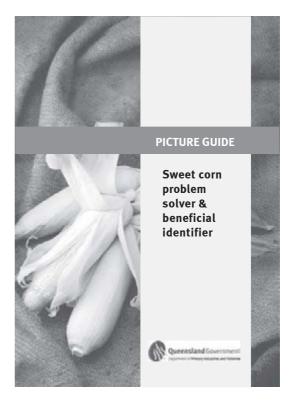
Key issues—chapter contains the most detailed technical information on the key decisions for growers. Other useful chapters are:

Chemical selector—list of chemicals currently registered in Australia and their registered uses

Limitations

There are some limitations in using this handbook. These include:

• The book does not contain colour pictures of pests, diseases or other problems that occur in sweet corn. Phototgraphs of these, along with suggestions on how to solve them, are found in the companion book—*PICTURE GUIDE: Sweet corn problem solver & beneficial identifier.*



The book is available from most DPI&F offices and DPI&F Publications
GPO Box 46
BRISBANE QLD 4001

Ph: 1800 816 541
Fax: (07) 3239 6509
Email: books@dpi.qld.gov.au
Web: www.dpi.qld.gov.au/
catalogue

- We do not intend that the handbook be used as the only tool in reaching key management decisions. We always recommend that you also seek independent advice from consultants or other professionals in your area.
- Chemical registrations can change. Always check the registration details on the label before using the product. Sources of updated information are contained in Chapter 5, Contacts and references.

viii		