

Cashew information kit

Reprint – information current in 1999



REPRINT INFORMATION – PLEASE READ!

For updated information please call 13 25 23 or visit the website www.deedi.qld.gov.au

This publication has been reprinted as a digital book without any changes to the content published in 1999. We advise readers to take particular note of the areas most likely to be out-of-date and so requiring further research: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- Financial information—costs and returns listed in this publication are out of date.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 1999. 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 cashew 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



Contacts & **REFERENCES**

Want more information? This section helps direct you to the other important providers and sources of cashew information. The Contacts directory contains the names and contact details of people and organisations serving the cashew industry. The References section contains a list of information that is useful reading for anyone involved in the industry.

Contents



Contacts

2

Grower associations, special product suppliers, consultants and technical information services



References

10

Books, articles, brochures, journals, magazines and newsletters



Contacts

Names are provided solely for assisting readers to make contact. Inclusion of a person or organisation does not constitute an endorsement by the Department of Primary Industries or the authors, nor does it endorse a particular person or organisation over others not mentioned.

This section is up-to-date at the time of printing. If you supply special services to the cashew industry you may provide your details for consideration. Please forward you details to Agrilink, Department of Primary Industries, PO Box 5269 SCMC, Nambour QLD 4560. Phone: (07) 5444 9690; Facsimile: (07) 5444 9694; Int Code: +61 7.

Grower associations	2
Plant and seed suppliers	3
Irrigation consultants	3
Project management, processing, marketing	4
Soil/plant tissue testing laboratories	4
Equipment suppliers	4
Cashew processors	5
Government technical services	6
Agricultural booksellers	8
Contacts through the Yellow Pages	8

Grower associations

International Cashew Society

Committee member — Ian Duncan

Ph: (02) 9909 1624; Fax: (02) 9953 7298

e-mail: ied@oze-mail.com.au

Plant and seed suppliers

Northern Territory

CSIRO Horticulture Unit, Darwin

Private Mail Bag 44

WINNELLIE NT 0821

Ph: (08) 8944 8400; Fax: (08) 8947 0052

Northern Territory Department of Primary Industry & Fisheries

PO Box 79

BERRIMAH NT 0828

Ph: (08) 8999 2292; Fax: (08) 8999 2049

Queensland

Department of Primary Industries, Queensland

Attn: Pat O'Farrell

PO Box 1054

MAREEBA QLD 4880

Ph: (07) 4092 8555; Fax: (07) 4092 3593

Cashews Australia

PO Box 112

DIMBULAH QLD 4872

Ph: (07) 4093 6161

New South Wales

Australian Cashew Company

Director — Ian Duncan

PO Box 432

NEUTRAL BAY NSW 2089

Ph: (02) 9909 1624; Fax: (02) 9953 7298

e-mail: ied@ozemail.com.au

Irrigation consultants

Piccone Horticultural Consultancy Pty Ltd/Piccone PHC

201 Bruce Highway

EDMONTON QLD 4869

Phone: (07) 4045 3277; Mobile: 0417 616 476;

Fax: (07) 4045 3613

e-mail: piccone1@internetnorth.com.au

Darwin Irrigation Supplies

42 Stuart Park

DARWIN NT 0820

Ph: (08) 8941 1955

Project management, processing, marketing

Australian Cashew Company

Director — Ian Duncan

PO Box 432

NEUTRAL BAY NSW 2089

Ph: (02) 9909 1624; Fax: (02) 9953 7298

e-mail: ied@ozemail.com.au

R & D Consultants

Executive Director — Dr J.C. Ascenso

PO Box 572

2795 Carnaxide

PORTUGAL

Ph: 0011 351 1418 8766; Fax: 0015 351 1417 4712

Soil/plant tissue testing laboratories

Incitec Ltd

PO Box 140

MORNINGSIDE QLD 4170

Ph: (07) 3867 9300; Fax: (07) 3867 9310

Pivot Agriculture Laboratories

160 Queens Street

MELBOURNE VIC 3001

Ph: (03) 9605 0400; Fax: (03) 9605 0445

Brisbane

Ph: (07) 3268 6000; Fax: (07) 3268 1612

Sydney

Ph: (02) 9756 4544; Fax: (02) 9756 4544

Perth

Ph: (08) 9350 5575; Fax: (08) 9350 5585

Adelaide

Ph: (08) 8475 0222; Fax: (08) 8824 0309

Equipment suppliers

Harvesting equipment

Suppliers of macadamia harvesting equipment may be able to supply suitable equipment. Check with the Australian Macadamia Society for contacts:

Ph: (02) 6622 4933; Fax: (02) 6622 4934

Flory Industries — Marlin Flory

CALIFORNIA USA

Ph: 0011 1 209 545 1167

Weiss McNar — Larry Demner
CALIFORNIA USA
Ph: 0011 1 916 391 6214

Processing equipment

Jessie Industries — Gale Wells
CALIFORNIA USA
Ph: 0011 1 916 342 2909

Oltremare

Via Piemonte 5
40069 201a Predosa
Bologna
ITALY
Ph: 39 51 758 816; Fax: 39 51 752 805
e-mail: tradco@tradco.ch
www.tradco.ch/ot.html

Natural Resources Institute

Graham Anstee
Central Avenue
Chatham Marine
KENT ME4 4TB UK
Ph: 44 1634 883 880; Fax: 44 1634 880 066
e-mail: graham.anstee@nri.org

MDR Systems

Bill Nicholls
15 Beck Road
Carlisle
CUMBRIA CA2 7QL UK
Ph/Fax: 44 1228 593 621

Cashew processors

For information on processors, shellers, exporters, and importers, contact:

International Cashew Society

Committee Member — Ian Duncan
Ph: (02) 9909 1624; Fax: (02) 9953 7298
e-mail: ied@ozemail.com.au

Australian Cashew Company

Director — Ian Duncan
PO Box 432
NEUTRAL BAY NSW 2089
Ph: (02) 9909 1624; Fax: (02) 9953 7298
e-mail: ied@ozemail.com.au

R & D Consultants

Executive Director — Dr J.C. Ascenso

PO Box 572

2795 Carnaxide

PORTUGAL

Ph: 0011 351 1418 8766; Fax: 0015 351 1417 4712

Government technical services

CSIRO, Horticulture Unit, Darwin

Private Mail Bag 44

WINNELLIE NT 0821

Ph: (08) 8944 8400; Fax: (08) 8947 0052

CSIRO Land and Water, Atherton

Attn: Dr Noel Grundon

PO Box 780

ATHERTON QLD 4883

Ph: (07) 4091 8800; Fax: (07) 4091 3245

Northern Territory Department of Primary Industry & Fisheries

PO Box 79

BERRIMAH NT 0828

Ph: (08) 8999 2292; Fax: (08) 8999 2049

Department of Primary Industries, Queensland

Attn: Pat O'Farrell

PO Box 1054

MAREEBA QLD 4880

Ph: (07) 4092 8555; Fax: (07) 4092 3593

Forestry extension officers

Forestry extension officers are available for expert assistance with tree use on farms including windbreak design and species selection, clearing, timber production and forest enrichment. Your state government agency can put you in contact with your nearest forestry extension officer.

Land conservation extension officers

Land conservation extension officers are available to provide expert assistance in planning farm layouts and providing advice on land management. Your state government agency can put you in contact with your nearest land conservation officer.

Farm financial counselling service

State government agencies provide business advisory services to producers who are in difficulty from continuing environmental and economic pressures. Trained counsellors can help in the analysis of

financial situations and the development of business plants. Your state government agency can put you in touch with your nearest financial counsellor.

Water resources extension officers

Water resources advisory officers are available for expert assistance on all aspects of water use on farms including dam construction and maintenance, stream licensing, bore development, irrigation selection and design and water quality. They also provide advice on farm drainage problems. Your state government agency can put you in contact with your nearest water officer.

Library and literature search services

The DPI's Central Library in Brisbane provides several special information services that may be of interest to growers. These include:

- access to the library's extensive book and journal collection
- on-line public access catalogue terminals that provide access to the DPI library catalogue and to material held in the State Library of Queensland
- literature searches from CD-ROM databases (fee charged).

General enquires can be directed to:

Brisbane: Phone: (07) 3239 3126; Fax; (07) 3239 3128

Or to the following DPI library staff:

Robin Gallagher Ph: (07) 3239 3124

Pat Abbott Ph: (07) 3239 3131

Other information sources

Farmfax is a DPI, Queensland information service designed to allow quick access to new and frequently changing information on a range of topics. It provides information 24 hours a day, 7 days a week for the cost of a phone call. Information can be either faxed back within minutes or mailed out the next day. You can ring the Farmfax number to receive an index, from which you can select the items you require. The Farmfax number is (07) 3322 2966.

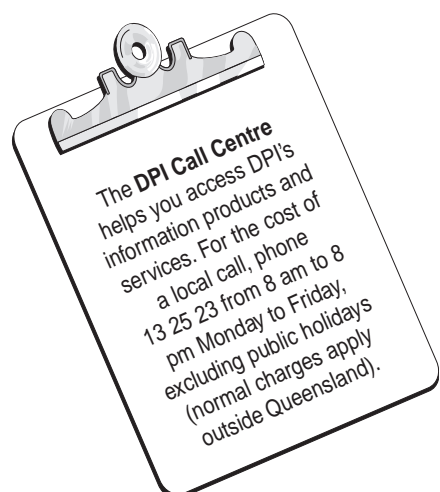
AgriInfonet is a DPI, Queensland marketing information access service aimed at assisting small to medium agricultural enterprises in searching for new business opportunities in export markets. Information on the range of services can be obtained from:

The AgriInfonet Project Manager

GPO Box 46

BRISBANE QLD 4001

Ph: (07) 3239 3312; Fax: (07) 3239 6292



Agricultural booksellers

These booksellers specialise in agricultural books.

D & A Information Services

PO Box 163
MITCHAM VIC 3132
Ph: (03) 9210 7777; Fax: (03) 9210 7788
e-mail: service@dadirect.com.au

Granny Smith's Bookshop

PO Box 27
SUBIACO WA 6008
Ph: (08) 9388 1965
e-mail: granny@aoi.com.au
www.aoi.com.au/granny

Johima Books

PO Box 4048
PARRAMATTA NSW 2124
Phone: (02) 9687 1922; Fax: (02) 9687 1027

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

Morescope Publishing

638A Burwood Road
HAWTHORN EAST VIC 3123
Phone: (03) 9882 9922; Fax: (03) 9882 9239
e-mail: mscope@internex.net.au

NRE Information Centre

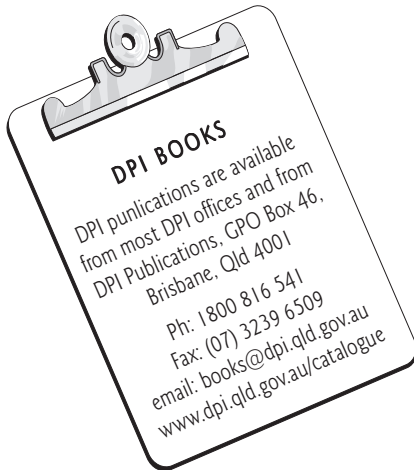
PO Box 500
EAST MELBOURNE VIC 3002
Ph: (03) 9637 8080; Fax (03) 9637 8150

Contacts through the Yellow Pages

The following headings cover the main topics for which contacts may be needed. Check the listings under the appropriate heading. If you are looking for other products and services, the following Yellow Pages headings may be useful.

Chemicals/fertilisers

Chemicals, agricultural
Fertilisers
Insecticides, herbicides and fungicides
Lime



Chemical suppliers

Soil conditioners and treatments

Consultants

Farm and agricultural advisory services
Horticultural consultants

Economics and marketing

Fruit and vegetable wholesalers
Grain and produce
Transport services

Equipment, irrigation, machinery

Agricultural machinery
Engineers, manufacturing
Farm equipment and supplies
Instruments — scientific
Irrigation

Manufacturers of harvesting and/or grading machinery

Agricultural machinery
Carriers
Engineers, general
Engineers, manufacturing
Farm equipment and supplies

Pesticides and spraying

Aerial spraying
Fertiliser and/or insecticide spreading
Protective clothing
Spray equipment and/or supplies

Postharvest handling and packaging

Fruit and vegetable packing
Food processing and/or packing machinery
Grain and produce packaging materials
Refrigerated transport trucks and equipment



References

Note: This is not an exhaustive list of references for cashews. It consists of references which the authors recommend as important sources of information and reading for the cashew grower. If you require more detailed information on a subject, use the literature search facilities available from most libraries.

Books	10
Journals and magazines	11
Articles, brochures, and bulletins	11

Books

Cashew, Ohler, J.G. (1979). Koninklijk Instituut voor de Tropen, Amsterdam, Netherlands.

Cashew tree culture in north east Brazil, de P.M.S. Lima, V. (1988). Translated by and available from Rural Industries Research & Development Corporation, Canberra.

Fruits: tropical and subtropical, Bose, T.K. & Mitra, S.K. (1996). Naya Prokash, Calcutta, India.

Pests and diseases of cashew, Piteira, M.C.C. (1996). Setubal. (In Portuguese.)

The book of edible nuts, Rosengarten, F. Jr. (1984). Walker & Co., New York, USA.

Tropical fruits (2nd edition). Samson, J.A. (1986). Longman Group, UK Ltd, Harlow, UK.

Tropical tree crops, Opeke, L.K. (1992). Spectrum Books Ltd, Ibadan, Nigeria.

Impact of native vegetation on cashew insect pests. (1998). Peng, R.K., Christian, K. & Gibb, K. Rural Industries Research & Development Corporation, Canberra. Publication 98/69.



Journals and magazines

Indian Cashew Journal (quarterly) and the *Cashew Bulletin* (monthly).

Publishers:

Cashew Export Promotion Council of India

PB No. 1709 Chittoor Road

COCHIN INDIA 682016

Ph: 91 484 361459; Fax: 91 484 370973

e-mail: cashew@ker.nic.in

www.cashewindia.com

The Cashew (quarterly)

Issued by:

The Director

Directorate of Cashewnut & Cocoa Development

Government of India

Ministry of Agriculture

COCHIN INDIA 682016

Ph: 91 484 351 751

Fax: 91 484 373 239

Articles, brochures, and bulletins

General

All aspects of cashew culture, processing, and marketing from an Australian viewpoint have been covered in more than 90 papers presented at workshops co-sponsored by the industry (including Peter Shearer Pty Ltd; Nabisco; Britannia Industries) and government instrumentalities (including CSIRO; DPIF, Northern Territory; DPI, Queensland; Rural Industries Research & Development Corporation (RIRDC); and Agriculture Western Australia).

Limited copies of the following proceedings are available. Enquiries should be directed in the first instance to Rural Industries Research & Development Corporation, Canberra or to one of the co-sponsor government instrumentalities.

- Working Papers of the Second Annual Cashew Research and Development Workshop, May 1989, Darwin, Northern Territory.
- Working Papers of the Third Annual Cashew Research and Development Workshop, February 1990, Darwin, Northern Territory.
- Working Papers of the Fourth Annual Cashew Research and Development Workshop, 9 April 1991, Redlynch, North Queensland.

- Working Papers of the Fifth Annual Cashew Research and Development Workshop, 18–19 May 1992, Kununurra, Western Australia.
- Working Papers of the Sixth Annual Cashew Research and Development Workshop, 25 May 1993, Darwin, Northern Territory.
- Working Papers of the Seventh Annual Cashew Research and Development Workshop, 17 May 1994, Cairns, North Queensland.
- Working Papers of the Eighth Cashew Research and Development Workshop, 6 August 1996, Kuranda, North Queensland.

Bleeker, P. & Laut, P. (1987). *A soil survey and land evaluation for oil palm and cashew nut of the Lockhart River Valley, Cape York, Queensland*. CSIRO Division of Water and Land Resources, Divisional Report No. 87/1. 67p.

Chacko, E., Baker, I. & Downton, J. (1990). *Towards a sustainable cashew industry for Australia*. *Agricultural Science* 3, 39–43.

Duncan, I. (1988). *Cashew marketing in Australia*. Department of Primary Industries, Northern Territory.

Duncan, I. (1992). *World cashew market study: a review of world production processing, world trade and consumer markets*. Rural Industries Research & Development Corporation.

Gunn, R.H. & Cocks, K.D. (1971). *Potentialities for cashew in Northern Australia*. *The Journal of the Australian Institute of Agricultural Science* 37, 25–31.

Millington, A.J. (1982). *Cashews — Australia's potential for a major tropical tree crop*. *Tree Crops: The Third Component*. Proceedings of the First Australian Conference on Tree and Nut Crops. pp. 43–8. Cornucopia Press, Perth, Western Australia.

Wait, A.J. & Jamieson, G.I. (1985). *Prospects for a cashew industry in Queensland*. *Queensland Agricultural Journal* 111, 315–6.

Wait, A.J. & Jamieson, G.I. (1986). *The cashew: its botany and cultivation*. *Queensland Agricultural Journal* 112, 253–7.

Economics

Cann, B., Baker, I. & Kuppelweiser, W. (1987). *An economic assessment of cashew production in the Northern Territory Top End*. Department of Industries and Development, Australia, Technical Bulletin No. 110. 30p.

Hinton, A. (1998). *Cashew production in North Queensland: estimating profitability in the Mareeba-Dimbulah Irrigation Area*. Technical Bulletin No. Q198039, Department of Primary Industries, Brisbane.

Oliver, M, Ngo, H. & Kuppelwieser, W. (1992). *Cashew production in the Northern Territory Top End: an economic evaluation*. Northern Territory Department of Primary Industry and Fisheries Technical Bulletin No. 198. Department of Primary Industry and Fisheries, Darwin. 25p.

Fertilisers

Beena Bhaskar, Salam, M.A. & Wahid, P.A. (1995). *Nutrient offtake in cashew*. *The Cashew* **9**, 9–16.

Richards, N.K. (1992). *Cashew tree nutrition related to biomass accumulation, nutrient composition and nutrient cycling in sandy red earths of Northern Territory, Australia*. *Scientia Horticulturae* **52**, 125–42.

Richards, N.K. (1993). *Cashew tree yield, growth and macronutrient status, as influenced by fertiliser applications*. Department of Primary Industry and Fisheries Technical Bulletin No. 202. 1–16p. Department of Primary Industry and Fisheries, Darwin.

Richards, N.K. (1993). *Cashew response to water and nutrients in a sandy red earth soil of the Northern Territory*. Department of Primary Industry and Fisheries Technical Bulletin No. 202. 17–38p. Department of Primary Industry and Fisheries, Darwin.

Subramanian, S., Harris, C.V., Manivannan, K. & Thangavelu, S. (1995). *Studies on method of fertiliser application in cashew*. *South Indian Horticulture* **43**, 38–9.

Floral biology; flowering, pollination, fruit set and nut drop

Freitas, B.M. & Paxton, R.J. (1996). *The role of wind and insects in cashew (Anacardium occidentale) pollination in north-east Brazil*. *Journal of Agricultural Science* **126**, 319–26.

Heard, T.A., Vithanage, V., & Chacko, E.K. (1990). *Pollination biology of cashew in the Northern Territory of Australia*. *Australian Journal of Agricultural Research* **41**, 1101–14.

Wunnachit, W., Jenner, C.F., & Sedgley, M. (1992). *Floral and extrafloral nectar production in Anacardium occidentale L. (Anacardiaceae): an andromonoecious species*. *International Journal of Plant Sciences* **153**, 413–20.

Wunnachit, W., Jenner, C., & Sedgley, M. (1992). *Pollen vigour and composition in relation to andromonoecy in cashew (Anacardium occidentale L.: Anacardiaceae)*. *Sexual Plant Reproduction* **5**, 264–9.

Wunnachit, W. & Sedgley, M. (1992). *Floral structure and phenology of cashew in relation to yield*. *Journal of Horticultural Science* **67**, 769–77.

Wunnachit, W., Pattison, S.J., Giles, L., Millington, A.J. & Sedgley, M. (1992). *Pollen tube growth and genotype compatibility in cashew in relation to yield*. *Journal of Horticultural Science* **67**, 67–75.

Foliar analysis, foliar symptoms

Kumar, P.H., Rakiappan, P., Nair, B.P., Mohan, E. & Nagabhushanam, S. (1985). *Effect of season, position and age of leaf on the major nutrient composition of cashew*. In 'International Cashew Symposium — Research and Development, Cochin, Kerala, India, 12–15 March 1979'. pp. 293–4.

Kumar, P.H. & Sreedharan, R. (1987). *Determination of critical concentrations of nitrogen and phosphorus in cashew leaf*. Indian Cashew Journal **18**, 22–3.

Latis, T. & Chibiliti, G. (1988). *Foliar diagnosis of nutrient deficiencies in cashew: a study conducted in the Western Province of Zambia*. Rivista Di Agricoltura Subtropicale e Tropicale **82**, 677–89.

Lefebvre, A. (1973). *Little leaf abnormality of the cashew nut tree*. Fruits D'Outre Mer **28**, 631–6.

Ohler, J.G. (1979). *Nutrition*. Communication, Department of Agricultural Research of the Royal Tropical Institute, Amsterdam, 147–56.

Subbaiah, C.C., Manikandan, P. & Joshi, Y. (1986). *Yellow leaf spot of cashew: a case of molybdenum deficiency*. Plant and Soil **94**, 35–42.

Irrigation, fertigation

Richards, N.K. (1993). *Cashew response to water and nutrients in a sandy red earth soil of the Northern Territory*. Department of Primary Industry and Fisheries Technical Bulletin No. 202. 17–38p. Department of Primary Industry and Fisheries, Darwin.

Schaper, H. & Chacko, E.K. (1992). *Diurnal variations in gas exchange and water relations of cashew leaves (Anacardium occidentale L.)*. Gartenbauwissenschaft **57**, 88–92.

Schaper, H., Chacko, E.K., & Blaikie, S.J. (1996). *Effect of irrigation on leaf gas exchange and yield of cashew in North Australia*. Australian Journal of Experimental Agriculture **36** 861–8

Mycorrhiza

Haugen, L.M., & Smith, S.E. (1992). *The effect of high temperature and fallow period on infection of mungbean and cashew roots by the vesicular-arbuscular mycorrhizal fungus Glomus intraradices*. Plant and Soil **145**, 71–80.

Haugen, L.M., & Smith, S.E. (1993). *The effect of inoculation of cashew with NutriLink on vesicular arbuscular mycorrhizal infection and plant growth*. Australian Journal of Agricultural Research **44**, 1211–20.

Pests (insect and animal), diseases

Cohn, E. & Duncan, L.W. (1990). *Nematode parasites of subtropical and tropical fruit trees*. In 'Plant Parasitic Nematodes in Subtropical and Tropical Agriculture.' 347–362p. CAB International, Wallingford, UK.

Hood, S. (1997). *Role of parasites and predators in cashew pest control. Development of an IPM program*. Ph D Thesis. The University of Queensland, Brisbane, Queensland.

Houston, W. & Malipatil, M. (1991). *Bioecology of cashew insects*. Rural Industries Research & Development Corporation, Canberra.

McCoy, M. (1992). *Assessment and management of flying fox damage in cashew*. Rural Industries Research & Development Corporation Research Paper Series, Canberra.

Peng, R.K., Christian, K. & Gibb, K. (1995). *The effect of the green ant, Oecophylla smaragdina (Hymenoptera: Formicidae) on insect pests of cashew trees in Australia*. Bulletin of Entomological Research **85**, 279–84.

Peng, R.K., Christian, K. & Gibb, K. (1997). *Distribution of the green ant, Oecophylla smaragdina (F) (Hymenoptera: Formicidae) in relation to native vegetation and the insect pests in cashew plantations in Australia*. International Journal of Pest Management **43**, 203–11.

Peng, R.K., Christian, K. & Gibb, K. (1997). *Control threshold analysis for the tea mosquito bug, Helopeltis perniciosa (Hemiptera: Miridae), and preliminary results concerning the efficiency of control by the green ant, Oecophylla smaragdina (Hymenoptera: Formicidae), in Northern Australia*. International Journal of Pest Management **43**, 233–7.

Plantation management

Richards, N.K. (1993). *Evolving cashew orchard systems for the Northern Territory*. Department of Primary Industry and Fisheries Technical Bulletin No. 202. 39–49p. Department of Primary Industry and Fisheries, Darwin.

Salam, M.A. (1997). *Cashew plantation — establishment and management*. The Cashew **11**, 13–32.

van Eijnatten, C.L.M. & Abubaker, A.S. (1983). *New cultivation techniques for cashew (Anacardium occidentale L.)*. Netherlands Journal of Agricultural Science **31**, 13–25.

Plant breeding, varieties

Chacko, E.K. (1997). *Evaluating cashew hybrids in Northern Australia*. Rural Industries Research & Development Corporation Research Paper Series No. 97/56, Canberra. 43p.

Nawale, R.N. & Salvi, M.J. (1990). *The inheritance of certain F1 characters in F1 hybrid progenies of cashew nut*. *The Cashew* 4, 11–4.

Processing, marketing, kernel standards

Simpson, J. *On-farm drying of nuts in shell*. (1993). Australian Macadamia Society News Bulletin.

Available from:

Australian Macadamia Society

Ph: (02) 6622 4933; Fax (02) 6622 4934

Simpson, J. *Storage of macadamia nuts in shell* (1988). Final report of HRDCP project MC607.

Available from:

Horticultural Research & Development Corporation

7 Merriwa Street

GORDON NSW 2072

Ph: (02) 9418 2200; Fax: (02) 9418 1352

e-mail: hrdc@hrdc.gov.au

IBPGR (1986). *Cashew descriptors*. International Board for Plant Genetic Resources, Rome.

ISO (1988). *Cashew kernels — Specifications*. ISO 6477: 1998 (E). International Organisation for Standardisation, Switzerland.

Russell, D.C. (1969). *Cashew nut processing*. Agricultural Services Bulletin No. 6. FAO, Rome.

These websites have information on kernel standards, up-to-date market prices and trends:

The Cashew Export Promotion Council of India

www.cashewindia.com

Amberwood Trading Ltd

www.cashewbroker.com

Farm World

www.Farmworld.com

Tree spacing, hedgerows

van Eijnatten, C.L.M. & Abubaker, A.S. (1983). *New cultivation techniques for cashew (Anacardium occidentale L.)*. *Netherlands Journal of Agricultural Science* 31, 13–25.



INDEX

Using the index—entries are listed as a section and page reference. For example, **dimethoate 4:16** means you can find the reference in Section 4 page 16. ‘**HG**’ refers to the Handy Guides in the front of the kit.

A

Acrocercops spp. 5:6
Agricultural and Veterinary Chemicals Code 4:15
AgriInfonet 6:7
Amblypelta lutescens 4:12, 5:8, 5:9
Amblypelta nitida 5:8, 5:9
ammonium nitrate 3:18, 4:18
Anacardium occidentale 4:2
analysis
 dried tissue 4:21
 postharvest soil 4:21
Anigraea ochrobasis 4:12, 5:6
anthracnose. *See* diseases
aphids. *See* pests
Aphis gossypii 5:7
apple
 ripening 5:7
Arachis pintoi 3:25

B

Bacillus thuringiensis (Bt) 4:16, HG1:1
bats. *See* pests
beetles. *See* pests
beneficial insects 4:15
books 6:10
booksellers 6:8

C

calcium HG2:1
 hydroxide 3:19, 4:21
canopy management
 seasonally bearing trees 4:10
 young trees 4:10
carbaryl HG1:1
cashew
 crop cycle 4:4
 floral biology 4:3
 growth patterns 4:13. *See also* HG2
 nutrient off-take 4:17
 shelling 2:5
 tree 4:2
Cashew Nut Shell Liquid (CNSL) 2:5

caterpillars. *See* pests
Ceroplastes rubens 5:5
climate. *See* farm
Colletotrichum gloeosporioides 5:2
consultants
 irrigation 6:3
 marketing 6:4
 processing 6:4
 project management 6:4
copper hydroxide HG1:1
copper sulphate 3:18, 3:19, 4:21
costs. *See* gross margin; profitability analysis
 capital 1:4, 2:6
 fixed 1:4
 production 1:4
 variable 1:4
crop cycle HG2:2
CSIRO 2:2
 Horticulture Unit, Darwin, NT 6:6
 Land and Water, Atherton, Qld 6:6

D

deappling. *See* harvesting
dimethoate 4:16, HG1:1
diseases HG1:1
 anthracnose 2:4, 3:17, 3:27, 5:2, HG1:1
 fruit rots 5:7
 management 3:27
dolomite 3:28
DPI
 AgriInfonet 6:7
 Farmfax 6:7
 library services 6:7
 Mareeba, Qld 6:6
 Queensland 2:2
DPIF
 Northern Territory 2:2, 6:6
drains
 contour 3:11
 main diversion 3:9
 surface 3:5
drippers. *See* irrigation

- E**
- endosulfan HG1:1
 - phytoxicity 4:15
 - Enviroscan 3:22
 - equipment
 - suppliers 6:4
 - evaporation pan 3:29
- F**
- farm
 - climate 1:5
 - irrigation. *See* rrigaiton
 - size 2:6
 - slope 1:6
 - soil type 1:5
 - wind. *See* windbreaks
 - farm financial counselling 6:6
 - Farmfax 6:7
 - Farmoz 4:15
 - fenthion HG1:1
 - fertigation 2:3, 3:18, 4:20, 4:25, HG2:1
 - fertilisers 3:12, 3:17, 4:17. *See also* fertigation, foliar
 - sprays
 - application methods 4:19
 - application rates 3:28
 - application time 2:3, 3:27, 4:19
 - applying 3:12
 - foliar sprays 2:3, 3:18, 3:28
 - keeping records 2:3
 - micro-nutrients 3:18
 - soluble 3:19, 4:19
 - types 4:18
 - fertilising 2:2
 - after transplanting 3:18
 - bearing trees 3:27
 - juvenile trees 3:19
 - recommendations 3:18, 3:20, 3:29
 - firebreaks 3:5
 - flowers
 - hermaphrodite 2:4
 - flying foxes. *See* pests
 - foliar sprays 4:20, 4:21, HG2:1
 - forestry 6:6
 - fruit rots. *See* diseases
 - fruit spotting bug. *See* pests
- G**
- Geocoris australis* 4:15
 - Government technical services
 - CSIRO Horticulture, Darwin, NT 6:6
 - CSIRO Land and Water, Atherton, Qld 6:6
 - DPI, Mareeba, Qld 6:6
 - DPIF, NT 6:6
 - grafting 3:8
 - green vegetable bug. *See* pests
 - gross margin 4:5
 - grower associations 6:2
 - growth
 - abnormal 2:2
 - gypsum 3:19, 3:28
- H**
- harvesting 3:32
 - deappling postharvest 3:34
 - drying and storage 3:34
 - machinery 3:32
 - mechanical 1:2
 - postharvest cleaning 3:33
 - postharvest handling 3:33
 - preharvest clean-up 3:32
 - Helopeltis* spp. 5:2, 5:8, 5:9
- I**
- income 1:3
 - IPM 3:17, 4:13
 - Iridomyrmex sanguineus* 4:15
 - irrigation 1:6, 3:6, 3:10, 3:29, HG2:1
 - bearing trees 3:29
 - Enviroscan 4:24
 - Gopher 4:24
 - installation 3:12
 - juvenile trees 3:20
 - lifting lateral lines 3:21
 - micro-sprinklers 3:12, 3:20
 - neutron probe 4:24
 - rates 2:3
 - rates and timing 4:25
 - scheduling 4:24
 - Starlogger 4:24
 - systems 2:3, 4:25
 - T-tape trickle 3:13
 - tensiometers 4:24
 - trickle 3:13
 - water usage 4:23
- L**
- laboratories
 - soil, plant, tissue testing 6:4
 - labour 1:6
 - land
 - conservation 6:6
 - preparation 3:8, 3:10
 - leaf
 - analyses 3:18, 3:27, 3:28
 - leaf miner. *See* pests
 - leaf roller. *See* pests
 - leaves
 - burn 3:19
 - Leptoglossus australis*. 5:8
 - lime 3:19, 3:28
- M**
- machinery 1:5
 - magnesium oxide 3:19, 3:28
 - maldison HG1:1

- mango shoot caterpillar. *See* pests
- marketing 1:7
- consultants. *See* consultants
 - kernel 3:36
 - kernel grades 3:36
 - nut-in-shell 3:35
 - returns received 3:35
 - value-added products 3:37
- markets
- processing. *See* processing
 - value of 1:2
- Mastotermes darwiniensis* 4:12
- mealy bug. *See* pests
- methadiathon 4:16
- methidathion HG1:1
- micro-nutrients 4:20
- micro-sprinklers. *See* irrigation
- Mirant HG1:1
- Mirant baits 3:8, 3:16, HG1:1
- Mirex baits 3:8, 3:16
- mono-ammonium phosphate (MAP) 3:18
- Monolepta australis* 4:12, 5:5
- mosquito bug. *See* pests
- muriate of potash 3:18
- ## N
- National Registration Authority HG1:1
- neutron probe 3:22
- Nezara viridula* 5:8
- nitrogen 3:18, 3:27, 3:28, HG2:1
- deficiency 5:3
- NPK fertiliser 3:19, 3:28
- nut set
- poor 2:4
- nutrition HG2:2
- nuts
- dropping 2:4
 - maturity time 2:5
 - poisonous (CNSL) 2:5
- ## O
- Oecophylla smaragdina* 4:15
- owl populations 3:16
- ## P
- passion vine bug. *See* pests
- Penicillaria jocosatrix* 4:12, 5:5
- pests HG1:1, HG2:1
- aphids 5:6, 5:7, HG1:1
 - bats 2:4
 - beetles 2:4
 - caterpillars 2:4, 3:16, 5:6
 - control HG1:1
 - flying foxes 3:5
 - fruit spotting bug 4:12, 5:8, 5:9, HG1:1
 - green vegetable bug 5:8, HG1:1
 - insecticide applications 4:15
 - integrated pest management. *See* IPM
 - leaf roller 4:12, 5:6, HG1:1
 - leafminer 5:6, HG1:1
 - management 3:26, 4:12
 - mango shoot caterpillar 4:16, 5:5, HG1:1
 - mealy bug 5:7, HG1:1
 - monitoring 3:17, 4:14
 - mosquito bug 4:12, 5:2, 5:8, 5:9, HG1:1
 - passion vine bug 5:8, HG1:1
 - pigs 2:4, 3:15
 - pink wax scale 5:5, HG1:1
 - rats 2:4, 3:15
 - red-banded thrips 4:12, 5:4, HG1:1
 - red-shouldered leaf beetle 4:12, 5:5, HG1:1
 - scales 5:6
 - sooty mould 5:6
 - termites 2:4, 4:12, 5:10, HG1:1
 - termites, control 3:8, 3:16, HG1:1
 - thresholds 4:16
- petroleum oil 4:16
- pH: preferred 3:4
- phosphorus 3:18, 3:28, HG2:1
- deficiency 5:3
- pigs. *See* pests
- pink wax scale. *See* pests
- pirimicarb 4:16
- plant
- suppliers 6:3
- plantation
- buildings 3:6, 3:9
 - climate 3:4
 - firebreaks. *See* firebreaks
 - irrigation layout. *See* irrigation
 - layout 3:4
 - roadways 3:6, 3:9
 - rows. *See* rows
 - site 3:3
 - size 1:2
 - slopes 3:5
 - soil 3:4
 - water 3:4
 - watercourses 3:6
 - windbreaks. *See* windbreaks
- pollination 4:4
- postharvest
- handling systems 1:2
- potassium 3:18, 3:28, HG2:1
- chloride 3:18
 - deficiency 5:4
- prices 1:3
- processing 6:5
- consultants. *See* consultants
- production
- areas 1:2, 2:5, 2:6
 - overseas systems 1:2
- profitability analysis 4:6
- propagating 3:8

propagation 2:2
pruning 3:23, 3:30

R

rats. *See* pests
red-banded thrips. *See* pests
red-shouldered leaf beetle. *See* pests
reports 6:10
rootstocks
 grafting 3:8
rows
 deep ripping 3:11
 direction and length 3:5
 marking 3:10

S

sand
 blasting 5:3
scales. *See* pests
seed
 and plant suppliers 6:3
Selenothrips rubrocinctus 4:12, 5:4
single or triple superphosphate 3:19, 3:28
sodium molybdate 3:18, 3:19
soil
 analyses 3:11, 3:18, 3:27, 3:28
 analysis HG2:1
 nutrient levels 3:11
Solubor 3:18, 3:19
sooty mould. *See* pests
spacing
 row and tree 3:7
spray
 damage 5:2, 5:9
sulphur 3:28

T

T-tape trickle. *See* irrigation
tensiometers 3:21, 3:29
 installing 3:21
 reading 3:21
termites. *See* pests

topworking 3:31
trace elements 3:28, HG2:1
trees
 bearing age 2:4
 ordering 3:8
 planting 3:13
 planting sites 3:12
 planting techniques 5:10
 staking 3:14
trichlorfon 4:16, HG1:1
trickle irrigation. *See* irrigation

U

urea 3:18

V

varieties 4:8
 9/14 2:2, 3:7
 breeding program 4:9
 Guntur 2:2, 3:7
 KAM 2 2:2, 3:7
 KAM 6 2:2, 3:7

W

water
 management HG2:2
 quality 3:4
 quantity 3:4
 resources 6:7
weeds
 control 3:24, 3:30, HG2:2
windbreaks 1:6, 3:5, 3:8, 3:9
 planting 3:9

Y

Yellow Pages 6:8
yields 1:2, 1:3

Z

zinc 3:18
 damage, with insecticide 5:9
 deficiency 5:4
 sulphate heptahydrate 3:18, 3:19, 4:21