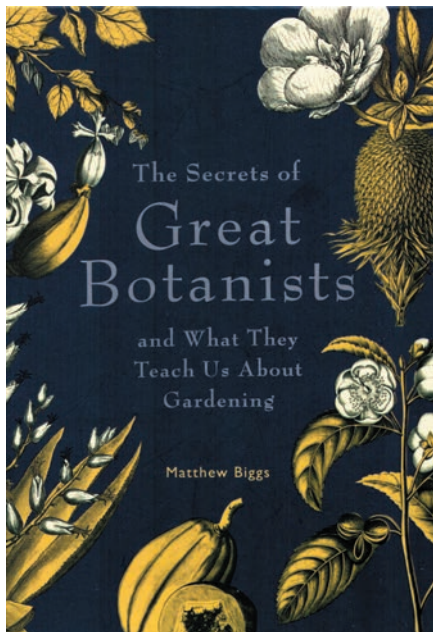


Book Reviews

The secrets of great botanists and what they teach us about gardening

By Matthew Biggs

Published by Exisle Publishing, Dunedin, New Zealand, October 2019
Hardback, colour illustrations, 224 pages, 230 x 170 mm
ISBN 978-1-925820-25-6
\$NZ34.99
Reviewed by Murray Dawson



Botanists have been, and continue to be, the trailblazers who discover, collect, and describe plant species from around the world, unlocking their conservation values and horticultural properties. Plant species we grow in our gardens today trace their origins back to their botanical discovery in the wild.

This attractive and informative book profiles 36 botanists, plant collectors and gardening pioneers of the past and present, including their life stories, botanical voyages and discoveries, and horticultural legacies.

Following a short introduction, profiles of botanists are presented in chronological order, from ancient times (Pedanius Dioscorides, c. AD 40-90, an herbalist in the Roman Army and the 'Father of Pharmacology') to the present day (Patrick Blanc, born 1953, a French horticulturist and a modern innovator of vertical gardens). Within this range are profiles of iconic botanists familiar

to most of us: Carl Linnaeus, Swedish botanist and inventor of the Linnaean binomial system of classification, Gregor Mendel, the Austrian monk who through his sweet-pea breeding became known as the 'Father of Modern Genetics', and an abundance of great English explorers, including Joseph Banks (James Cook's botanist on *The Endeavour*), William Colenso (a missionary to New Zealand, who combined preaching with botany), Joseph Dalton Hooker (botanist, plant hunter, artist), and Francis Kingdon-Ward (an intrepid plant collector). All profiles provide an interesting read, to remind us of the achievements of the most famous, and to learn more about those who may be less familiar.

Following each botanists' biography are pages that reinforce the horticultural connection: 'Inspiration for gardeners' are sections that shift focus to a selection of cultivated plants associated with each botanist. There are many interesting stories and plant snippets to uncover here. For example, we learn that: the genus *Fuchsia* was named to commemorate Leonhart Fuchs of Bavaria, more than 100 years after his death; William Dampier was the first Englishman to collect Australian plants, including *Swainsona formosa* (Sturt's desert pea); 26 New Zealand plants have been named to honour William Colenso, including *Olearia colensoi* and *Veronica colensoi*.

This book is lavishly illustrated with depictions of each botanist, carefully selected photographs of plants, and period botanical watercolours.

The secrets of great botanists concludes with a useful bibliography, index and acknowledgments.

The edition reviewed here is published in New Zealand and Australia, and there is also a Royal Horticultural Society (RHS) UK version. Author Matthew Biggs was trained at the Royal Botanic Gardens, Kew, and is well known as a presenter in gardening circles. Exisle Publishing has produced another of his titles, *Lessons from great gardeners: Forty gardening icons and what they teach us*, which profiles some of the world's great gardeners, including

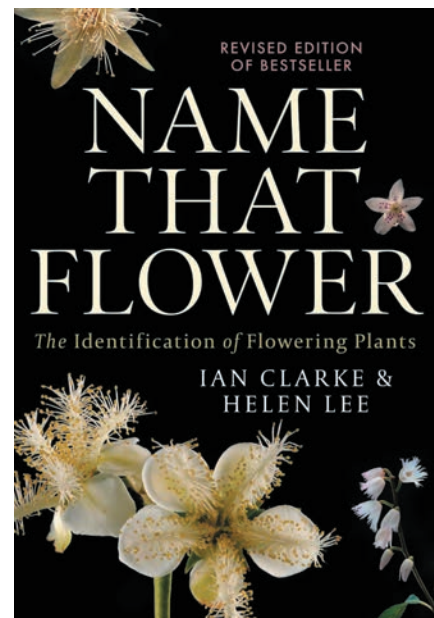
New Zealand's Bev McConnell. The style and presentation of *The secrets of great botanists* is reminiscent of Lorraine Harrison's *Latin for gardeners: Over 3,000 plant names explained and explored*¹, and the three books mentioned above would sit well together as companion titles on the bookshelf.

The secrets of great botanists fully succeeds in its aims to teach readers about the observations, ideas, secrets and discoveries of these ground-breaking botanists. Their influence on gardening and the wider world provides inspiration and practical guidance for budding gardeners of all levels and inspires readers to try these plants and gardening tips at home.

Name that flower: The identification of flowering plants

By Ian Clarke and Helen Lee

Published by Melbourne University Press, October 2019
Paperback, colour illustrations and line drawings, 374 pages, 148 x 208 mm
\$NZ48.00
ISBN 978-0-522876-04-8
(ebook: ISBN 978-0-522876-05-5)
Reviewed by Murray Dawson



This inspirational book, and the floral botany captured within its pages, is a timeless work.

The first edition was published more than 30 years ago, in 1987, and followed by numerous reprints.

¹ Reviewed in the *New Zealand Garden Journal*, 2013, Vol. 16, No. 1, p. 36.

The second edition was in 2001 (again with reprints), and this third edition was published in October 2019. For digital natives, the last two editions are also available as ebooks.

This book provides clear and concise information for understanding the fascinating fields of floral anatomy and morphology, and their application for identifying flowering plants from around the world, both cultivated and in the wild.

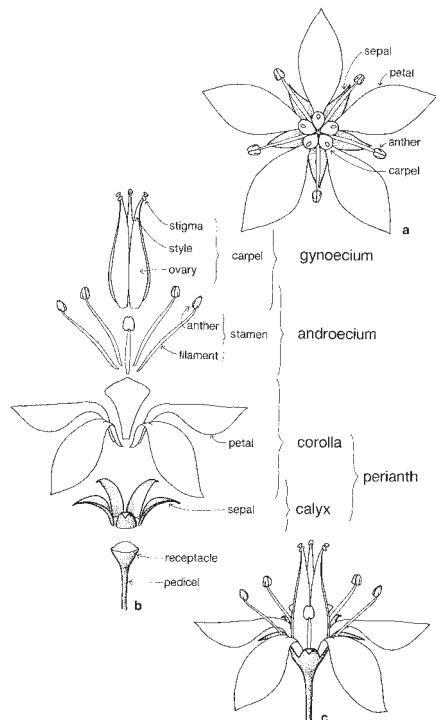


Figure 1 of *Name that flower*, with clear line drawings to show the floral structure of a basic flower.

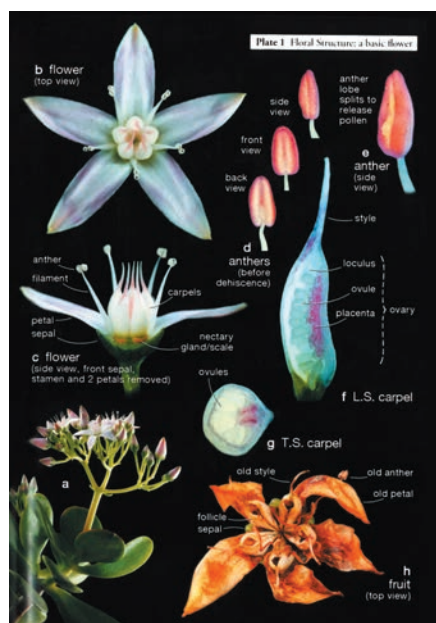


Plate 1 of *Name that flower*, beautifully illustrating the floral structure of a basic flower.

The book introduces the reader to the arrangement of flowers on plants, reproduction, plant structure and function, and how species are grouped and named.

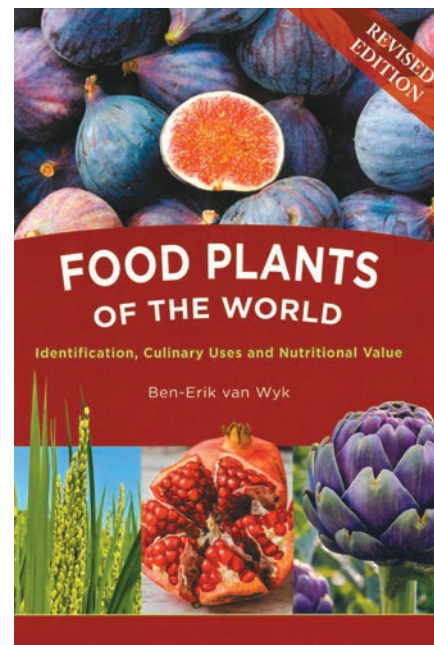
This edition is updated to align with current plant classifications supported by molecular DNA analyses. 46 families of flowering plants are arranged closely following the classification scheme of the Angiosperm Phylogeny Group. Methods for dissecting flowers and observing their structure for identification purposes are clearly described.

What really shines in this book are the illustrations. There are more than 130 detailed line drawings and 64 colour pages. The illustrations depict a selection of widely distributed garden plants and weeds, and species native in eastern and south-eastern Australia. The authors are professional botanists from Victoria: Helen Lee is an Honorary Research Fellow in the Botany Department, La Trobe University, and Ian Clarke is an Honorary Associate who for many years provided plant identification services at the National Herbarium of Victoria. However, this regional bias is not an issue because most species that they illustrate are also found in New Zealand and elsewhere.

Name that flower has been used extensively as a textbook for courses covering horticulture, botany, agriculture, environmental management, and landscape design, as well as botanical art. However, it transcends this use by students, and should also appeal to serious gardeners, horticulturists and botanists, professional and amateur.

Food plants of the world: Identification, culinary uses and nutritional value

By Ben-Erik van Wyk
Published by CSIRO Publishing, Australia, August 2019
Hardback, colour illustrations, 520 pages, 240 x 165 mm
ISBN 978-1-486311-66-8
\$NZ99.99
Reviewed by Murray Dawson



The first edition of this excellent book was published in 2005, in South Africa. This makes sense as author Ben-Erik van Wyk is a Professor of Botany at the University of Johannesburg, with research interests in systematic botany and plant utilisation. This recently revised edition is distributed by CSIRO Publishing for Australia and New Zealand, so it is fitting to review it here².

Plants and plant-derived products make up the bulk of what we eat and drink every day, and people often wonder where their favourite food or drink comes from. This scientifically accurate guide provides quick and informative answers.

Food plants of the world is a comprehensive overview of the plants that provide us with food, beverages, spices and flavours. It is written in easy-to-understand language but gives accurate scientific information on the plants and their uses. This expanded and revised edition of the book includes:

- Introductory chapters on cereals, pulses (legumes), nuts and seeds, fruits, vegetables, culinary herbs, sugar plants, beverages, spices and flavourings (pp. 12–36).
- Descriptions of more than 400 food and flavour plants and their close relatives, including origin, history, cultivation, harvesting, properties and culinary uses (pp. 37–437).

² CABI Publishing in the UK are also distributing a 2019 revised edition of this book, but this imprint is 50% more expensive for New Zealanders.

- A dedicated chapter on nutrients, diet and health (pp. 438–449).
- A checklist of more than 900 of the most important and well-known food plants of the world, with reference to common names, family name, region of origin, nutritional value and plant parts used (pp. 450–484).
- More than 1,000 full-colour photographs, showing the plants, flowers and plant parts that are used.
- Interesting facts about the historical and contemporary uses of the various plant-derived products.

The above paragraphs are derived from text on the back cover of this book which provides an informative summation of the contents.

For easy reference, the plants profiled in the main section of this book are arranged alphabetically by genus and species name. Each profile occupies a full page, with photos above, and a set of sub-headings below: Description, Origin & History, Parts Used, Cultivation & Harvesting, Uses & Properties, Nutritional Value, and (optionally) Notes.

Food plants of the world is full of interesting information and it must have been a challenge to restrict each species profile to a single page. As a consequence, there is limited scope to dive into extensive details on cultivars, although estimates for the number of cultivars for each species would have been a useful addition.

Nutritional value of food plants is a strength of this book, and often neglected elsewhere. Brazil nuts (produced by the tree *Bertholletia excelsa*) are widely recognised as a good source of selenium, so it is surprising to notice that this is not mentioned in the profile for that species.

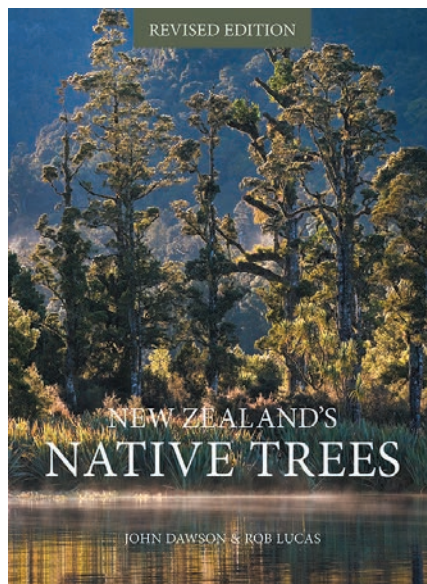
Included in this book are several food plants traditionally important to Māori, but with New Zealand details missing: bracken fern is listed under *Pteridium aquilinum*, but the species named *raraue* by Māori is actually the southern hemisphere *P. esculentum*; sweet potato (*Ipomoea batatas*) is not mentioned as a vital food plant cultivated by Māori and named by

them *kūmara*; and taro (*Colocasia esculenta*) is mentioned as being cultivated in the Pacific region but not New Zealand as a southern limit of cultivation. Because of the book's world focus, local ethnobotanical details such as these cannot be fully captured.

The diversity of plants used for food is a fascinating topic, and one that's vital to human survival and nutrition. *Food plants of the world* does a great job of concisely delivering this information.

New Zealand's native trees Revised edition

By John Dawson and Rob Lucas
Published by Potton & Burton,
October 2019
Hardback, 688 pages, 310 × 229 mm
\$NZ130.00
ISBN 978-0-947503-98-7
Reviewed by Murray Dawson



Peter Arthur AHRIH, founder of the former Touchwood Books, and Dr Peter Heenan, a botanist at Manaaki Whenua – Landcare Research, each provided insightful reviews of the first edition of this outstanding book³. Their reviews included much praise that is equally applicable to this new edition.

Peter Arthur wrote comments such as: “After 25 years of selling new and second-hand books about trees from around the world I cannot praise it more”, “this book is a must have for anyone interested in trees”, “the perfect book for identification, and learning about the botany, ecology and habitats of our various native trees, from the massive kauri, the third largest tree in the world, the showy

pōhutukawa and rātā, and cabbage tree to rare and endangered species found only on our offshore islands.”

Peter Heenan commented: “This book is a valuable addition to the library of anyone interested in our native trees, whether they are a gardener, student, amateur botanist, or with a stronger scientific background”, “very readable, highly informative and beautifully illustrated, and contains an absolute wealth of information on the native trees of New Zealand.”

These positive comments proved to be justified as the first edition went on to win the New Zealand Post Book of the Year and Illustrated Non-Fiction awards for 2012.

Sadly, the lead author, Prof John Dawson passed away 11th March 2019, and fittingly, the revised edition is dedicated to John's memory. Potton & Burton rightly note that although John Dawson published several books, this book is perhaps his greatest legacy.

So, what's new in this revised edition? Placed alongside each other, the revised edition is noticeably thicker – 112 additional pages to be exact. The number of images has also increased; from 2,300 in the first edition to a whopping 3,200 in the revised edition. The new images were taken by author-photographer Rob Lucas to increase the coverage of species that were under-represented in the first edition. Additional text incorporates botanical revisions that describe or reclassify new taxa (species, subspecies, and varieties) in the eight years since the book was first published in 2011.

Publishers' notes (page 9) provide a useful comparison of the changes of botanical names between editions (due to taxonomic updates), recently described species, and new taxa added to the revised edition. These changes include new species of *Kunzea* (kānuka), recognition of indigenous *Piper* (instead of *Macropiper*), and segregation of *Nothofagus* (New Zealand beech trees) to *Fuscospora* and *Lophozonia*.

The first edition of this book received wide acclaim, and the revised edition is even better. Needless to say, it is a highly recommended addition to your bookshelf.

³ *New Zealand Garden Journal*, 2011, Vol. 14, No. 2, pp. 21–23; reviews available at www.rnzih.org.nz/RNZIH_Journal/Pages_18-32_from_2011_Vol14_No2.pdf.

NEW ZEALAND'S NATIVE TREES REVISED EDITION

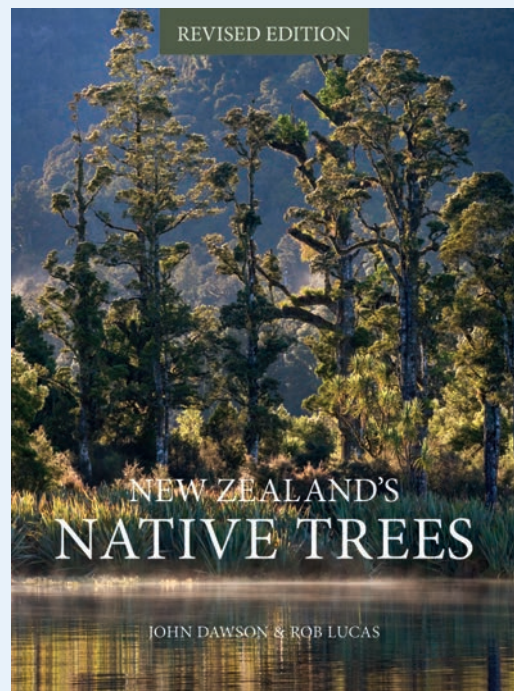
John Dawson & Rob Lucas

\$130.00

310 x 229 mm, 688 pp,
full colour throughout,
hardback with jacket

ISBN: 978 0 947503 98 7

Published: October 2019



A complete revision of the best-selling, award-winning landmark book on New Zealand's native trees.

New Zealand's Native Trees is a landmark book, the kind that is published only once in a generation. Winner of New Zealand Book of the Year in 2012, this book celebrates our unique and magnificent native forests, and describes and generously illustrates more than 320 species, subspecies and varieties. This edition has been completely brought up-to-date with a significant number of botanical revisions, as many new species have been described or reclassified in the years since the book was first published in 2011.

Invaluable as an identification guide, a reference, a resource for landscapers and gardeners, and an inspiration for a new generation of New Zealanders, this is an essential book for every home, school and library.

Author Information

DR JOHN DAWSON, 1928–2019, was Associate Professor of Botany at Victoria University. He has published a number of books, but this book is arguably his greatest legacy.

ROB LUCAS lectured at the Open Polytechnic in Lower Hutt until his retirement and has been photographing native plants for many years.

