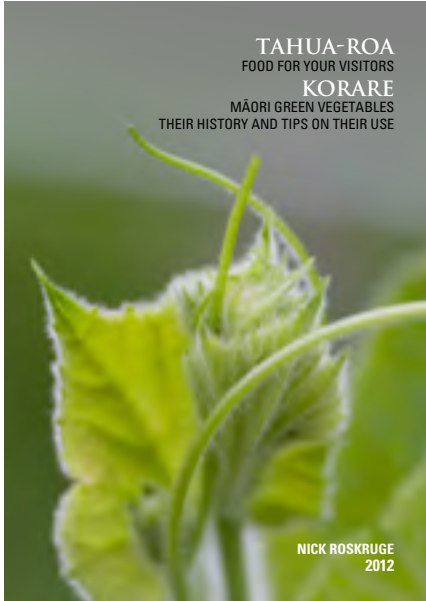


# Book Reviews

## **Tahua-roa: Food for your visitors. Korare: Māori green vegetables, their history and tips on their use**

By Nick Roskruge  
Published by the Institute of Natural Resources, Massey University, New Zealand, 2012  
Paperback, colour photos, 114 pages, 145 × 210 mm (A5)  
ISBN 978-0-473-20736-6  
\$NZ45.00  
Reviewed by Sue Scheele



This attractive publication is a valuable addition to several niche markets – books for cooks, gardeners, and those interested in Māori and natural history. The content draws on the author's expertise in soil science and horticulture, combined with his cultural understanding of Te Ao Marama, the traditional Māori view of the natural world. This is the second book in a series aligned to Māori foods which introduces over 30 korare (Māori green vegetables) sourced from freshwater or coastal areas, the forest or bush, as weeds in crops, or as crops.

To date, the best popular reference on Māori food plants has been Andrew Crowe's *Field guide to the native edible plants of New Zealand*<sup>1</sup>, a classic still in print after 30 years. Nick Roskruge's volume focuses on green vegetables (or edible herbs, in Crowe's parlance) and provides similar information to Crowe on botanical status and use. This volume's distinctiveness and usefulness comes from Roskruge's

recording of whakapapa (genealogies) and whakataukī (proverbs), his detailing of traditional Māori horticultural and cooking practices, provision of information on pests and diseases which affect plant growth and usability, plus a few pages of modern recipes. Māori nomenclature is used throughout, but botanical names are included too, so that it is clear to readers which plant species is being discussed.

The text is clearly laid out, with lovely photos of the plants, and the use of coloured boxes for interesting stories and extra facts that don't fit under the main headings. This includes information on similar looking species that might be confused with the edible plant (e.g., "fool's watercress", p. 40), and advice to conserve rather than eat once common species that are now endangered, such as Cook's scurvy grass (pp. 72–73).

There are some minor quibbles. While interesting, the introductory sections on Māori horticulture would have profited from further editing to clear up some awkward sentence structures and tense changes. I question whether aruhe (fernroot) was really a "primary cultivated food" in the horticultural sense (p. 3). Fernroot was a dependable and crucial source of carbohydrate, but I think it fits best into the "managed natural populations" referred to in the next sentence. Roskruge acknowledges the mātauranga Māori (traditional knowledge) of elders that provided such a valuable resource for the book, but I would have liked to have seen sources given for some of the other information, such as the tables on nutritional values (perhaps the author's research?). References are given for quoted comments, but a short bibliography would have been useful too.

For several of the vegetables, Roskruge states that the nutritional value is unknown. This begs for additional research, so that future editions of this interesting and valuable book will be even more informative.

## **Ngā pōrearea me ngā matemate o ngā māra taewa. Pests and diseases of taewa (Māori potato) crops**

By Nick Roskruge, Aleise Puketapu and Turi McFarlane  
Published by the Institute of Natural Resources, Massey University, New Zealand, 2010  
Spiral bound, colour photos, 72 pages, 150 × 210 mm  
ISBN 978-0-473-17613-6  
\$NZ35.00  
Reviewed by Sue Scheele



Once a regular part of the 'quarter-acre' lifestyle, 'growing your own' vegetables is enjoying a renaissance as a popular pastime. Many folk are looking outside the common and mainstream vegetable species, to varieties that provide both a different taste and an interesting story. In restaurants as well as the modern garden, the old Māori potato varieties admirably fulfil this role.

In the introduction to this useful publication, Nick Roskruge skillfully threads his way through the various beliefs and accounts of how potatoes came to be introduced to New Zealand. Accompanying this is an interesting account of traditional crop management approaches used by Māori.

Roskruge and his co-authors then provide essential information on identifying and managing the pests and various diseases that affect potatoes. There is detailed scientific information on symptoms and

<sup>1</sup> Available since the 1980s by various publishers – Collins (1981); Hodders (1990); Godwit (1997); Penguin (2004).

transmission factors accompanied by cultural management practices. Pests include *Bactericera cockerelli*, the potato/tomato psyllid first found in New Zealand in 2006, and still spreading throughout the country. It may raise an eyebrow amongst conservationists, but it is refreshing and honest to see pūkeko – so-called “black rabbits”, listed among the annoying pests! The authors are gentle in their suggested control measures, which include mounding of the potato plants and discouraging pūkeko nesting sites.

As in Roskrige's later book, *Tahu-Roa Korare*, the photographs are lovely and the layout easy to follow. There is an excellent glossary of scientific and Māori terms used. Both of these books would provide a handsome and useful gift for the gardeners in your family.

**Both titles available from  
Touchwood Books**

### The western tradition of botanical illustration

Four books reviewed by Ross Ferguson

### The golden age of flowers: Botanical illustration in the age of discovery 1600–1800

By Celia Fisher  
Published by The British Library,  
London, UK, 2011  
Hardback, colour illustrations,  
144 pages, 215 × 241 mm  
ISBN 978-0-7123-5820-0  
\$NZ50.99

### Flora mirabilis: How plants have shaped world knowledge, health, wealth, and beauty

By Catherine Herbert Howell  
Published by National Geographic  
Society, Washington D.C., USA, 2009  
Hardback, colour and monochrome  
illustrations, 256 pages, 195 × 247 mm  
ISBN 978-1-4262-0509-5  
\$NZ90.00

### Botanical riches: Stories of botanical exploration

By Richard Aitken  
Published by Lund Humphries,  
Aldershot, England, UK, 2008  
(Hardback edition published 2006)  
Paperback, colour and monochrome  
illustrations, 243 pages, 235 × 320 mm  
ISBN 978-1-84822-010-2  
\$NZ68.99

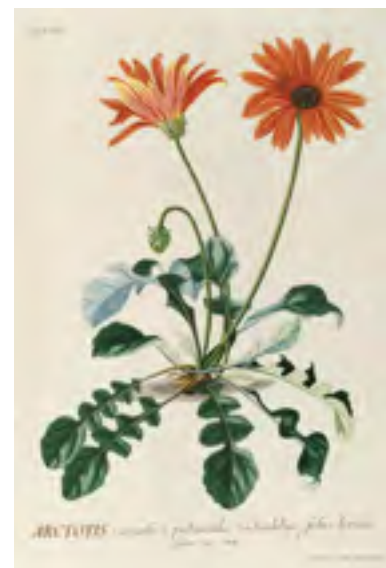
### The golden age of botanical art

By Martyn Rix  
Published by Andre Deutsch, London,  
UK in association with Kew Royal  
Botanic Gardens, UK, 2012  
Hardback, colour and monochrome  
illustrations, 256 pages, 250 × 290 mm  
ISBN 978-0-233-00364-1  
\$NZ69.99

In recent years there have been numerous books using botanical illustrations originally published between about 1500 and the end of the 19th century. This attests to the continuing popularity of such botanical illustrations, even if today they are usually judged simply on aesthetic grounds as botanical art and often are not appreciated for their scientific value. We tend to forget that when such botanical illustrations were produced the aim was to aid the unequivocal identification of a plant, to demonstrate the features that distinguished it from closely related plants (Nickelsen, 2006a). Preparation of a useful illustration required a good knowledge of botany and plant structure and, in time, of the principles of Linnaean classification. Thus the *Botanical drawing-book* (1788) by the notable botanical artist James Sowerby started not with the drawing techniques used but with an account of the Linnaean system describing in some detail the individual parts of the flower (Nickelsen, 2006a).

Botanical illustrations were intended to be much more than just pretty pictures. Artists had to be technically competent but they had also to understand the plants, to know what features were important and that should, if necessary, be emphasised, to choose, if possible, a plant that was typical of the species. The dual requirements, scientific and artistic, were well summarised by Blunt when he wrote, “The greatest flower artists have been those who have found beauty in truth; who have understood plants scientifically, but who have yet seen and described them with the eye and the hand of the artist” (Blunt and Stearn, 1994). Georg Ehret (Fig. 1) and the Bauer brothers, of the 18th century, were amongst the most successful in meeting these requirements. It must be admitted, however, that an element of one-upmanship could creep in. *The temple of flora* (at the end of the 18th century), part of Robert Thornton's *New illustration of the sexual system of Carolus von Linnaeus*, was much more sumptuous than required simply to demonstrate the Linnaean system. It was clearly intended as the

most splendid florilegium ever and although the images are splendid in a Romantic style, they are less impressive or useful botanically.

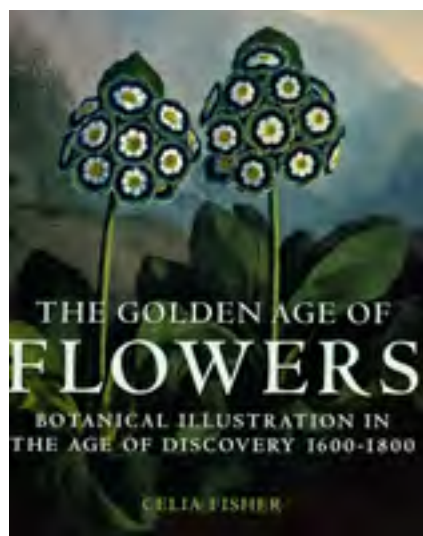


**Fig. 1** An elegant rendition of a familiar plant. *Arctotis*, a hand-coloured engraving from a watercolour by G.D. Ehret, Plate XCIII in Dr Christoph Trew's *Plantae selectae* ... published in Germany between 1750 and 1773.

Today, the work of botanical illustrators is usually reproduced photographically. In earlier times, the finished product was the result of a team effort. A plate in Fuchs' *Primi de historia stirpium* (1545) (The history of growing plants) shows the production team responsible for the illustrations: Albrecht Meyer who drew the plants, Heinrich Füllmaurer who transferred the drawing onto the wooden block, adapting the image where necessary, and Rudolf Speckle who carved the block. The plate of these three at work is reproduced on page 17 of *Flora mirabilis*. Later, woodblocks were replaced by copper etchings or engravings and here too, the artist's intentions might be modified by the etcher or engraver. The modifications that might occur are illustrated by Desmond (1987: pp. 34, 35), who shows as an example the original drawing of *Passiflora caerulea* by James Sowerby and the engraving as it finally appeared in *The botanical magazine* of Curtis (1778, vol. 1, plate 28). A further complication was the colouring of the printed plates, often by large teams of colourists. The colours should match those of the original drawing, they should be consistent from copy to copy and the considerable costs had to be constrained (Nickelsen, 2006b). Considering the number of different people involved, ensuring that the finished illustration was both beautiful and an accurate likeness of the plant,



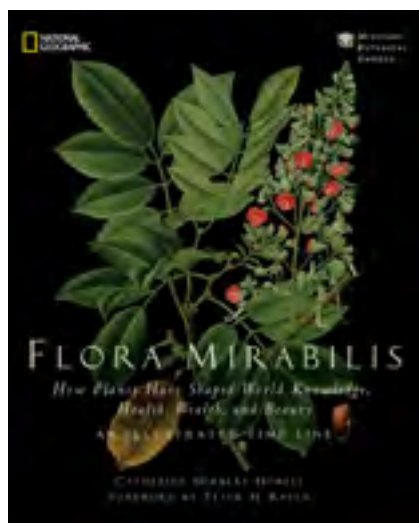
with the diagnostic features clearly shown, was a daunting task. Our respect for the botanical illustrations of the past is greatly increased when we realise what was required in their preparation.



Celia Fisher's *The golden age of flowers* is the ideal coffee table book, a book for browsing or casual reading. A hundred different genera are illustrated using images almost all originally published in Europe between the beginning of the 17th century and the first decades of the 19th century. The few exceptions are paintings prepared by unknown but proficient Chinese and Indian artists. The accompanying texts are undemanding and the relatively brief introduction is an account of plant exploration and the introduction of plants into the gardens of Europe. I would have liked more details of the artists and engravers responsible for the plates used and more information on the publications in which they originally appeared. Instead, readers wanting such information have to go to texts such as Sitwell and Blunt's *Great flower books* (1990) or Blunt and Stearn's *The art of botanical illustration* (1994).

*The golden age of flowers* has many beautiful illustrations but I was somewhat disappointed that many of the images have been cropped; I prefer to see the full plates as originally conceived. More disturbing, in some cases such as the illustrations of *Fuchsia* and *Passiflora*, details are so enlarged that even the texture of the original paper becomes obvious. The results can be rather gross, unsubtle and unpleasantly mechanical, certainly not what the engraver intended. Each plate is conveniently accompanied by bibliographic details but the dating, especially of plates from *The botanical magazine* could have been

more precise. These, however, are relatively minor imperfections that do not detract too much: this is simply a book to enjoy, enabling us to marvel at the skills necessary to produce such unforgettable images.



*Flora mirabilis* – described as “a wonderful book about flowers” – uses illustrations to help tell a story. As indicated by the subtitle, the aim was to describe “how plants have shaped world knowledge, health, wealth, and beauty”. Unfortunately, too much has been attempted and I found the result somewhat incoherent. The main text on the history of our understanding of plants and of their exploitation is interrupted by numerous short essays on individual crop plants, the illustrations do not always happily complement the text, and there are numerous marginal notes or quotes in several different fonts or colours. This is a pity, because much of the information is intriguing and the individual parts of the text well written, even if not in great depth. There is a wider diversity of images than in *The golden age of flowers* including those of fruit and of important crop plants, not just flowers. They also come from a greater time span than that covered by Celia Fisher, although many of those from publications late in the 19th century lack the appeal of those produced earlier. The larger images are the more successful; others have been so reduced that they lack impact. For example, the original plate of an *Oncidium* in Bateman's *The Orchidaceae of Mexico and Guatemala* (1837–1843) is more than 50 cm in height; here it is reduced to a mere 9 cm; plates from the monochrome edition (1900–1905) of the Banks copper engravings are likewise so reduced that they have become insignificant.

*Flora mirabilis* is beautifully produced – the endpapers are particularly

pleasing. I did note a small number of production difficulties: a missing plate, a plate misascribed, gaps in the index, a plant, according to Sandra Knapp of the Natural History Museum, London, incorrectly identified. The list of illustrations is at the back of the volume, which is not overly convenient, but the list is generally comprehensive.

Such problems are not that serious. I was more disturbed by the narrow focus of the book. Brief mention is made of the use of plants around the world or by earlier civilisations but the main text deals with the botanical exploration and exploitation by first Europe (largely England at that) and then by the United States of America. The overall attitudes are reminiscent of those common 50 or 100 years ago: the “age of discovery”, “the age of exploration” (titles of two chapters) are really accounts of Europeans becoming more aware of the rest of the world. The “known” world is obviously that known to Europeans. There is no indication, for example, that the Chinese had a long history of horticulture, and that the early importers of plants from China relied very heavily on buying plants from nurseries around Canton (Guangzhou).



Richard Aitken in *Botanical riches* criticises such an approach: “For those who still view the world with Euro-centric blinkers, the appreciation of plants by Indigenous peoples around the globe often comes filtered through lenses of ignorance and arrogance”. He does describe agriculture and the use of plants in the Middle East, ancient India, the Roman Empire, in pre-Columbian America and in China. The bulk of his text nevertheless deals with the familiar story of the discovery and exploitation of the world's plants

by Europeans or those of European descent. It may be a familiar story but it is well told, in considerably greater detail than in *Flora mirabilis* and more comprehensively. I found the chapter on the botanical exploration of Australia particularly interesting and he reminds us that botanical exploration is still ongoing with an account of the discovery of the Wollemi pine (*Wollemi nobilis*). Two great strengths of his book are the list of illustrations, very clearly presented and even noting when only a detail is shown, and the eight pages devoted to notes on sources and a select bibliography. These indicate just how widely he has read and, also, how skillfully he has blended together all the information he presents.

Richard Aitken has used mainly the resources of the State Library of Victoria, Australia, for his illustrations. This clearly has an enviable collection. The larger format of *Botanical riches* increases the impact of the illustrations. I was particularly impressed by that of *Rafflesia arnoldii* (the corpse flower) "which perfectly captures the flower's putrid fascination", and a most marvellous *Banksia* from Sydenham Edwards' *Botanical register*. Aitken includes not only images from the "golden age" of flower illustration but also earlier images and those from the 19th century. My main reservation is that many have been given a disconcertingly rich cream background.



The Royal Botanic Gardens at Kew and the Natural History Museum, London have a wealth of paintings and drawings as well as botanical publications and these have been most successfully exploited by Martyn Rix in *The golden age of botanical art*. Many such works have not previously been published and it is possible to see directly what the artist intended without the

modifications introduced by engravers or colourists. I was particularly impressed by the remarkable collage of *Bombax ceiba* by Mrs Delany, a late eighteenth century painting by Margaret Meen of some of the first dahlias introduced to Britain, and a wonderful watercolour by Nodder after Parkinson of *Phormium tenax*. In addition, Dr Rix uses illustrations from many publications and generally they are extraordinarily satisfying. In some cases, the published version is accompanied by the preliminary sketches. My only reservation is that in some plates, plants are portrayed against a dark cream background whereas other plants from the same work have been manipulated to appear on the stark white background of the printed page. I prefer to see the entire image unmodified as originally presented.

The material covered is actually broader than the title might suggest, from the earliest herbals though to the modern day with special mention being made of the Shirley Sherwood Gallery of Botanical Art at Kew. The main focus is the seventeenth, eighteenth and nineteenth centuries with a strong emphasis on plant exploration primarily from Britain. Thus some of the expected continental works such as Christoph Trew's *Hortus nitidissimus* and *Plantae selectae*, Johann Weinmann's *Phytanthoza iconographia* and Volkamer's *Nürnbergische Hesperides* are not mentioned. To compensate, many of the great works of the last century are described as is the work of some of the most eminent of the current generation of botanical artists.

I do have doubts about the accuracy of at least some of the text. Three examples will suffice:

- on page 38, Dr Rix repeats the oft-quoted story that the original copper plates for Besler's *Hortus eystettensis* were melted down in 1817 whereas more than ten years ago, most of the plates were rediscovered in storage at the Albertina, Vienna.
- on page 92, the coloured printing of the Banks engravings published as the *Banks' florilegium* was by Alecto, not the Royal College of Art.
- on page 99, there is what is purportedly a portrait of Sir Joseph Banks but this is instead the Per Krafft portrait of Linnaeus.

I also found the captions to the illustrations frustratingly lacking in detail. Usually, the adjoining text had to be consulted to get the date

of publication but useful information such as plate number was not given. No date or volume number was given for two plates from *Gartenflora*, a periodical described as being published from over 70 years from 1852 to 1922. Some illustrations remain anonymous such as the Sturt's Desert pea on page 89 (and I question whether the image should be rotated 90°) and the pitcher plant, *Cephalotus dampieri*, on page 92.

Which book to buy? Each has many strengths and few weaknesses. *The golden age of flowers* is perhaps the most beautiful. *Botanical riches* is the most comprehensive account of plant exploration but could have made more of the great period of plant exploration in China and of the movement of so many important crops from the Americas to the rest of the world. *Flora mirabilis* compensates by its consideration of economic botany. *The golden age of botanical art* has many previously unpublished illustrations from the Kew archives. There is surprisingly little overlap in the images used by the different authors. The simple solution is to buy all four: they are not that expensive and I doubt any reader will be disappointed. I certainly was not, but if I were forced to choose, then *Botanical riches* would be my choice.

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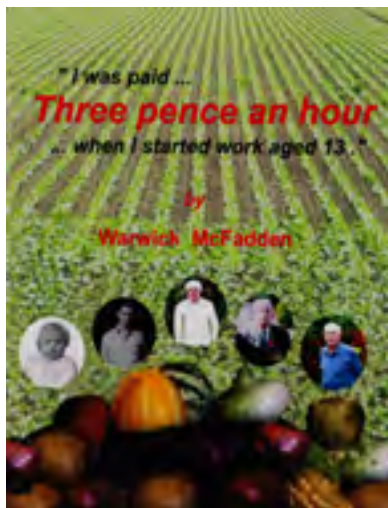
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**Note: Many botanical images have now been digitised and are readily available online. The website [www.botanicus.org](http://www.botanicus.org) from the Missouri Botanical Garden Library makes it possible to view a wonderful resource of more than 5000 botanical volumes. An even more convenient website, [www.plantillustrations.org](http://www.plantillustrations.org), can be used to find illustrations of specific plants.**

**“I was paid ... Three pence an hour ... when I started work aged 13.”**

By Warwick McFadden  
Published by W. McFadden,  
Christchurch, New Zealand, 2008  
Paperback, colour and B&W  
photographs, 129 pages,  
250 × 190 mm  
ISBN 978-0-473-13831-8  
Reviewed by Murray Dawson



Author and publisher Warwick McFadden states plainly on the inside cover, “This is a story of me, my family, and my working life as a commercial grower.”

This then is an autobiography, a personal narrative of World War II, a history of the McFadden family, and a history of their vegetable and fruit trade and other endeavours in Christchurch, New Zealand.

As his book recounts, Warwick McFadden was born in 1920 and had modest beginnings being raised in the Great Depression years of the 1930s. Warwick and his younger brother, Laurence McFadden, formed a partnership in March 1939 that has endured throughout their lives; one that is based on an ethic of hard work and taking life’s opportunities.

They began sharecropping using horse and hand – tractors and mechanisation were to come later. McFadden Bros Ltd became market gardeners in Belfast, to the north of Christchurch. Over the decades they

grew many vegetables – brassicas, carrots, celery, cucumbers, lettuces, onions, parsnips, peas, potatoes, pumpkins, tomatoes, as well as bedding plants, and later they established an apple orchard.

Their partnership was soon interrupted by World War II, when Warwick was called to duty in February 1942. He began in the army as a driver and within a year was posted in the Pacific in communications. Following his return from the war, the two McFadden brothers bought a block of land on the main North Road and opened a shop on site in 1949.

Like their crops, their business thrived in the 1950s and 1960s and they bought further blocks of land, took on staff, and had other ventures. From the 1990s to the present day, the family trust has been subdividing some of this land into residential developments.

There is an interesting discussion of the growing techniques used then compared to now and continued by his son, Geoff, at Southbridge. It is also sobering to read that there is less opportunity for smaller growers today as the current market demands large-scale production.

A nice collection of photographs appear throughout, B&W for the early years followed by colour; these complement the text and add interest.

Warwick was made a Fellow of the RNZIH in 1967, and gained a NDH (vegetable) in 1974; these certificates and other documents are included in the appendices.

Warwick McFadden is now 92 years of age, and his book begins with a preface “...a life fully occupied” and ends in “To you, the Reader, I hope you have enjoyed the story of my life. I am happy in my retirement to work in my garden, and ... I am happy to go on until it is time to leave you.”

I did indeed enjoy reading his personal account, modestly and sincerely told. Accounts of New Zealand horticulturists are rare, and their stories are important. Growing food for the populations within one’s own borders is a noble venture and it is a real credit to Warwick McFadden, with more than a year’s support from his friend Stan Fitchett, that this life-time of experience has been written.

**Book available from the author.**

## **The cultivation of New Zealand trees and shrubs**

By Lawrie Metcalf  
Published by Raupo (Penguin Books),  
2011  
Paperback, colour photos, 408 pages,  
180 × 258 mm  
ISBN 978-0-143-56561-1  
\$NZ55.00  
Reviewed by Murray Dawson



It has been more than 10 years since the last edition of this iconic reference, an enduring classic that began with the first edition in 1972.

I welcome each new version with open arms and wholeheartedly recommend these books which began my own fascination in horticulture and native plants more than three decades ago. As the header on the new cover page says, it really is “Your essential reference” to native trees and shrubs and the cultivars derived from them.

The title of the new book *The cultivation of New Zealand trees and shrubs* is a return to a name of some earlier editions (1972, 1975, 1987, 1991); the 2000 edition was entitled *New Zealand trees and shrubs: a comprehensive guide to cultivation and identification*.

The publisher has changed from Reed to Raupo, an imprint of the Penguin Group. From the Cataloguing in Publishing (CIP) page, the publisher and author do regard this as a new work, first published 2011, even though it is clearly derived from the original book first published in 1972.

Comparing the 2000 edition alongside this new 2011 work shows that they are of the same physical dimensions (180 × 258 mm) and share the same page length (408 pp.).

The cover image changes over the years, following major revisions rather than reprints. For 2011, the cover

chosen is of *Hebe macrocarpa* var. *latisejala* (= *Veronica macrocarpa*) which works well from a colour balance and design perspective, even though the specimen photographed appears a bit scrappy.

Although I do miss the line drawings and pest and disease photos of old, it is good to see the colour illustration sections more evenly spread throughout rather than as a central block. Many of the same images have been used in this edition but they have been allowed more space and are less harshly cropped. Images new to this edition are also included. To his credit, author Lawrie Metcalf takes all of his own photographs and they succeed in illustrating the great diversity of leaf and flower form among our native trees and shrubs. I think that it is fair to say that a few original photos are starting to look dated compared to the results now possible from modern digital photography.

I see that Parts 1 and 2 are transposed from the earlier editions. This is a good decision as the main content – descriptions and notes of the genera, species and cultivars now appear first, followed by a much shorter Part 2 which covers tips for selection of plants for particular purposes and then pest and disease symptoms and control.

A lot of painstaking work has gone into rewriting the text of this book and the plant selections included have been carefully revisited. Some older cultivars that are no longer widely grown are omitted (except where they have particular historic interest), and some of the newly available cultivars have been added. It must have been very difficult for the author to retain the same number of pages as the previous edition given that the number of native cultivars always increases – and so too should a comprehensive and authoritative reference to them. Unavoidably, there have been some compromises to achieve this, such as the omission of some cultivar descriptions that appeared in earlier editions. I would have preferred an expanded edition with more pages but perhaps the publishers said “no” to any such proposition. In line with modern practice, it would also have been good to see Māori macrons added to vernacular plant names where appropriate.

A critical check of the *Leptospermum* and *Metrosideros* cultivar entries (Myrtaceae family), for which I have recently published in *The New Zealand Garden Journal*, found little to fault.

However, the correct spelling of a *Leptospermum scoparium* cultivar is *L.* ‘Helene Strybing’ (named to commemorate the Strybing Arboretum’s benefactor) and not *L.* ‘Helen Strybing’. This was pointed out to me by Lawrie Metcalf himself some years ago, and stated in Dawson (2010), but the incorrect cultivar spelling managed to slip into Metcalf’s book. Also, I don’t think that *L.* ‘Martinii’ should be considered “another member of the Incanum group” (p. 204). Like *L.* ‘Helene Strybing’, it is a triploid hybrid between the tetraploid *L.* ‘Keatleyi’ and a diploid cultivar. In the case of *L.* ‘Martinii’, the other parent is likely to be *L.* ‘Nicollsii’, a red flowered mutant from Metcalf’s “Scoparium group” – making the cultivar a hybrid between the two groups.

For *Metrosideros*, there is dispute that in some coastal areas “true pōhutukawa has had its genes diluted with those of *M. kermadecensis*.” My understanding is that this is more of a potential concern rather than an established fact (Graeme Platt, pers. comm.).

Metcalf could have mentioned that more than 30 named cultivars of *M. excelsa* have been documented (Dawson et al., 2010a) and that there are a significant number of *M. umbellata* selections, although of limited availability (Dawson et al., 2010b). To be fair, Lawrie Metcalf may not have had time or space to incorporate this recent information.

The publicity material on the back cover states “information on some 600 native species...”. Accuracy may have been forsaken for simplicity as I think that “species” here means the rank of species and below – subspecies, varieties and the numerous cultivars.

These are minor quibbles and vastly outweighed by the strengths of *The cultivation of New Zealand trees and shrubs*. This book, along with its two out-of-print companions, *The cultivation of New Zealand plants* (Metcalf, 1993) and *The cultivation of New Zealand grasses* (Metcalf, 2008), indisputably remain the most authoritative and “must have” references on New Zealand native cultivars.

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**Available from Touchwood Books and Manaaki Whenua Press.**

#### **An illustrated guide to common grasses, sedges and rushes of New Zealand**

By Paul Champion, Trevor James, Ian Popay and Kerry Ford  
Published by the New Zealand Plant Protection Society, Christchurch, 2012  
Paperback, colour photos, 208 pages, 170 × 244 mm  
ISBN 978-0-473-21660-3  
\$NZ60.00  
Reviewed by Murray Dawson



This new identification guide covers grasses (of the Poaceae family, also known as the Gramineae), sedges (Cyperaceae), and rushes (Juncaceae), both native and introduced, that are commonly found in ornamental plantings, pastures, lawns, crops, roadsides and coastal habitats of New Zealand.



Of all the vascular plant groups, true grasses and grass-like plants are probably the most off-putting (but not necessarily difficult) to identify because many look superficially similar. The *Flora of New Zealand* series (e.g., Allan, 1961) is comprehensive, but because these 'botanical bibles' are written by and for experts they are of necessity laden with terminology that can be confusing to casual users. *An illustrated guide to common grasses, sedges and rushes of New Zealand* translates the information of these technical floras and does an admirable job teaching us that there are good characters available to distinguish these plants.

Recent taxonomic and molecular research has resulted in changes to plant names since each flora was published. It is reassuring to see that botanical names in this guide are up-to-date and largely concordant with the treatments followed in the Landcare Research Ngā Tipu o Aotearoa – New Zealand Plants database (<http://nzflora.landcareresearch.co.nz>). Former names are usefully cross-referenced (e.g., *Androsachne* is the current genus for some species of *Elymus*, *Cenchrus* spp. was *Pennisetum* spp., *Danthonia decumbens* was *Sieglingia decumbens*, *Ficinia spiralis* was *Desmoschoenus spiralis*, *Machaerina* spp. was *Baumea* spp.).

This book follows the same full-colour and user-friendly format of its stable-mate, *An illustrated guide to common weeds of New Zealand*<sup>1</sup> (Popay et al., 2010), and fills a major gap in coverage of vascular plant groups. Three authors are the same on both titles, with the welcome addition of grass and sedge expert Kerry Ford of Landcare Research.

Illustrations throughout are outstanding and clearly show diagnostic characters defining the groups and species. This is thanks mainly to author Trevor James's excellent photography; other image contributors are acknowledged in the book.

The Introduction (p. vi) tells us that "New Zealand currently has at least 230 introduced grass species, 35 rushes and 41 sedges". On the following page (p. vii) there are useful comparison estimates of "191 native grass species, 39 rushes and 173 sedges", but a disparate closing sentence stating "In all but the sedges, introduced species outnumber native

species in these three very large groups". According to their figures only the introduced grass species outnumber the natives.

Other introductory sections include plant lists and discussion of pest plants (p. ix), a useful précis on how to tell the difference between grasses, sedges and rushes (starting from the rhyme "sedges have edges, rushes are round, grasses have nodes from their tips to the ground", p. x), other plants that are grass-like (p. xiv), and discussion of the habitats where grasses, sedges and rushes are to be found (p. xv).

The introductory material concludes with mention of useful books, including *What grass is that?* (Lambrechsten, 1992; a forerunner book now out of print and for which this new illustrated guide could be considered a replacement), acknowledgements, and an easy to follow and beautifully illustrated glossary of terms.

The main body of the book comprises plant descriptions for the sedges (pp. 2–37), rushes (pp. 38–55) and the largest group, the grasses (pp. 56–172). Prefacing each group (sedges, rushes and grasses) are well-written notes, illustrations, and keys nicely displayed as tables to aid identification. Like *An illustrated guide to common weeds of New Zealand*, this book has succinct descriptions for each species with a paragraph on key features (in bold), descriptive text on features appropriate to each group (e.g., flower stems, roots, rhizomes, leaves, flower heads, spikelets), notes on Distribution, habitat and comments, Derivation of botanical name and Related (and Similar) species. Comments include applicable Regional Pest Management Strategies.

This guide concludes with a useful appendix of books and websites (pp. 173–175) and an index of common and botanical names (pp. 176–182). It is inevitable that some of the website addresses in the book have already changed since publication. For example, due to a website restructure, the interactive plant identification keys hosted by Landcare Research are now to be found at [www.landcareresearch.co.nz/resources/identification/plants](http://www.landcareresearch.co.nz/resources/identification/plants).

Like the earlier title, *An illustrated guide to common weeds of New Zealand*, I highly recommend *An illustrated guide to common grasses,*

*sedges and rushes of New Zealand*. This book succeeds admirably in meeting the needs of a wide audience and being a user-friendly and practical guide.

## References

- Allan, H.H. (1961). *Flora of New Zealand*. Vol. I. Government Printer, Wellington.
- Lambrechsten, N.C. (1992). *What grass is that? New Zealand Department of Scientific and Industrial Research, Information Series No. 87*. Fourth edition. Government Printer, Wellington.
- Popay, I.; Champion, P.; James, T. (2010). *An illustrated guide to common weeds of New Zealand*. Third Edition. New Zealand Plant Protection Society, Christchurch.

**Available from Touchwood Books and Manaaki Whenua Press.**

## Field guide to New Zealand's native trees

By John Dawson & Rob Lucas  
Published by Craig Potton Publishing, October 2012

Paperback, colour photos, 436 pages, 210 × 148 mm

ISBN 978-1-877517-82-2

NZ\$49.99

Reviewed by Murray Dawson

What a great idea! Editor Sue Hallas has taken John Dawson and Rob Lucas's outstanding tome *New Zealand's native trees*<sup>2</sup>, and cunningly distilled the content down into field guide format.



The price has reduced to less than half of the original title (from \$120 to around \$50) which captures a wider market and is also just in time for the Christmas stocking.

<sup>1</sup> The latest edition was reviewed in the *New Zealand Garden Journal*, 2010, Vol. 13(1): 33–34.

<sup>2</sup> Reviewed in the *New Zealand Garden Journal*, 2011, Vol. 14(2): 21–23.

It's no lightweight read either. Although the physical dimensions are smaller it is still an impressive work in its own right with 436 pp. (compared with 576 pp. for *New Zealand's native trees*). Good images are essential for any field guide and a well-considered subset of Rob Lucas's excellent photographs has been retained.

*Field guide to New Zealand's native trees* follows the same main sections as *New Zealand's native trees* – Introduction, Conifers, Tree Ferns, and Flowering Trees. Although many of the sentences are the same, or slightly modified, the text has been extensively rearranged and cut down from the source book. Sue Hallas should be congratulated for her nips and tucks – no easy editing task, but well executed.

Each main section has a brief introduction, starting with the questions “What is a conifer?”, “What is a tree fern?” and “What is a flowering plant?” before discussing features relevant to each group. Within each section, there is no introduction to genera before profiling the species, subspecies and varieties. Gone also is the essay style for each tree in *New Zealand's native trees*; this field guide instead has snappier subheadings within each profile. These subheadings include

Distribution and habitat, Size, Bark (for the true trees), Foliage and habit, Cones and seeds (for conifers), Sori (tree ferns), Flowers and fruits (flowering trees).

Also new to this field guide are “quick reference visual guide[s]” to several of the plant groups (p. 8) which is a better description than “visual key[s]” as they are called on the contents page. These are either diagnostic drawings or Photoshopped portions of photos with backgrounds removed (it is difficult to tell which) placed together for easy comparison.

Because *New Zealand's native trees* was used as a starting point, it is not surprising to find relatively few errors in the derived field guide. Peter Heenan's book review commenting on *Olearia angulata* being accepted at species rank (*New Zealand Garden Journal*, 2011, Vol. 14(2), p. 22) has not been picked up in the field guide. The headings “Coprosma” should be italicised (p. 128, 129) and “subsp.” should not be italicised (p. 351) in the guide. The first entry in the Index (p. 431) has inadvertently merged two species names as “*Ackama nubicola rosifolia*”. I would have also liked to see a few introductory sentences explaining the relationship of this book with its larger counterpart.

The publicity information on the back of each book suggests that the number of species have been reduced from “more than 320” in *New Zealand's native trees* to “more than 210 species” in the field guide. I assume that the difference is mostly due to excluding related shrub species from the guide. Also, the back outside cover of the guide claims that “all native trees” are covered. However, *Myrsine argentea*, a recently described tree included in *New Zealand's native trees*, is missing from the field guide.

Would I recommend this guide, even for those who may already have invested in its ‘big-daddy’ predecessor? Absolutely!

**Available from Touchwood Books and Manaaki Whenua Press.**

#### **Book review archive**

Our entire archive of book reviews (from the *Journal of the Royal New Zealand Institute of Horticulture* 1981, under its various names), together with book reviews from the *Weekend Gardener* magazine (from Issue 86, November 2001) are available on our website at [www.rnzih.org.nz](http://www.rnzih.org.nz).

## Notes for contributors to *The New Zealand Garden Journal*

- *The New Zealand Garden Journal* is a professional journal aimed at those with an in-depth interest in plants, and an enthusiasm for sharing ideas and knowledge of their origins, conservation, cultivation and use in gardens, parks and open spaces.
- The journal is published twice a year in June and December. Copy dates are 1 April and 1 October, respectively.
- Articles should be informative, accurate and well-founded. They are not treated to a formal refereeing process, but we encourage the more technical papers to be peer reviewed before submission. For more technical articles, we may seek independent advice and feedback.
- References should follow the convention adopted in recent issues.
- Articles can be up to 5000 words, preferably submitted electronically in Microsoft Word or RTF format, either on disk or as an email attachment.
- Articles will be returned to authors only if major editorial changes are required, or on request.
- Authors will not receive proofs for checking unless they specify this when submitting the article. Proofs are checked carefully by several people before printing.
- Photographs and/or illustrations should be included with captions written at the end of the article. Images must be copyright free and if not the authors work, be fully credited to the original photographer or source and full permissions obtained. Images should be supplied ideally as high definition electronic copies, or as good quality photographs and slides. All original photographs and slides will be returned.
- Authors will receive two complimentary copies of the relevant journal issue on publication. Additional copies will be available at cost.
- Online versions of the journal are uploaded on the Royal New Zealand Institute of Horticulture website at [www.rnzih.org.nz](http://www.rnzih.org.nz).



All green vegetables owe their colour to chlorophyll, a complex molecule present in certain plant cells. A magnesium atom is located in the centre of the molecule. When chlorophyll is in the presence of acidic molecules (compounds that easily share their hydrogen atom), the magnesium is dislodged and replaced by hydrogen atoms. Steam cooking vegetables in a covered steamer is an excellent way to preserve their nutritive value. As a general rule, the less water used, the more vitamins and minerals are preserved where we want them: in the vegetables! Other cooking methods that achieve this are stir-fries and covered steaming in the microwave using a small amount of water. Do the following ingredients or tips help preserve the colour of green vegetables? Salt. Tahua-roa; korare, Maori green vegetables: Their history and tips on their use. Palmerston North: Institute of Natural Resources, Massey University. Google Scholar. Schmidt, M. (1996). The commencement of pa construction in New Zealand prehistory. *Journal of the Polynesian Society*, 105(4), 441-451. Google Scholar. Shawcross, K. (1967). Fern-root, and the total scheme of 18th century Maori food production.