

INTRODUCTION

Scope of the bibliography

This bibliography lists publications and other resources for the identification of plants growing wild in Australia, whether native (indigenous) or naturalised (non-Australian or 'exotic' in origin, now established outside cultivation). Horticultural (garden) plants are covered only incidentally.

This bibliography is intended to be of most use to those who are not professional botanists. For this reason, it lists mainly **books, booklets, and electronic resources** that have been released in the mainstream retail trade or free on-line. With a very few exceptions, it does **not** list the many authoritative and technical botanical monographs and journal articles that are the first point of publication of most of our botanical knowledge, and from which most of the more popular books are ultimately derived. Such journals are more difficult for the public to access – but you may still need to do so (see Disclaimer above). The easiest point of access for the more technical journal literature in hardcopy is usually the library at your State/Territory herbarium or botanic garden, or university libraries. For digitised material a specialist search engine (e.g. Google Scholar) or one of the scientific indexing services is recommended.

This bibliography provides guidance as to what resources exist for what regions or plant groups, a general indication of currency, and assessments of authority and comprehensiveness.

Feedback

We have undoubtedly missed good regional, local or specialised publications – we would like to hear about them for future editions. Please contact email anpc@anpc.asn.au and start your subject line with 'ID Bib'. We are aware that very few social media plant identification resources are included here – we would like to include these *if* they are demonstrably stable and have a history of providing authoritative identifications or referrals.

Note to authors and publishers

Please be aware that the ANPC bulletin *Australasian Plant Conservation* is a good avenue for publicising new publications to the botanical and conservation communities. Please consider providing a review copy of new works or editions (see <https://www.anpc.asn.au/apc/>)

Organisation and content of the bibliography

The categories used are self-evident from the Contents list above. Not all plant groups have dedicated works outside the scientific literature - for such groups, and indeed for some of those for which there *are* sections here, the best available identification tools may not be group-specific publications, but others listed under FLORAS AND GENERAL FIELD GUIDES.

Entries in each category are alphabetical by first author. Some publications by local authorities or enthusiast societies do not have a designated author, in which case publisher is listed as author.

For each work (book, CD-ROM/USB, or website), we give:

- Title
- Author/s
- Date of publication
- Publisher
- Number of pages
- ISBN number. For pre-2007 publications, the ISBN is in the ten-digit format that applied at the time of publication; the corresponding ISBN numbers in the newer 13-digit system have mostly only been captured for post-2007 material.
- Website URL (if available in digitised form)
- Then follow a few lines describing the content and standard of the publication.

Availability of listed works

Many listed publications are no longer in print, but we include them because many out-of-print titles are still in active use and circulation, may still be useful, or editions because individuals and libraries may want to assess their older books against newer options before making the investment – new books are expensive! Only latest are shown for most titles, but in some cases earlier editions may still be of use, although obsolete to some degree.

Some out-of-print works may be found in specialist libraries only, but others have a long career on the household bookshelf or through second-hand bookshops, and may remain popular for decades. New, very local field guides (some of them excellent for the limited areas covered) are being produced every year, and may only be available locally or from private publishers.

If your local bookshop cannot obtain a publication, we suggest you contact the shop, visitor centre, or library at the Botanic Garden or Herbarium in your nearest capital city. These institutions, along with regional botanic gardens and regional offices of conservation and primary industries agencies, will also often have a public reference library containing some of these books.

Why are so many works included?

Plant enthusiasts often have preferred and much-loved books for identification, but these may be increasingly out-of-date, or include only a small proportion of the species that occur in the area they cover. We have nevertheless thought it best to try for a fairly comprehensive list that allows some comparison of content and relevance, rather than to cull by date, size, or other criteria.

Older books should be used with caution, as many scientific names and much other information will be obsolete. Botanical knowledge of Australian plants has advanced greatly in the last thirty years, largely as a result of the *Flora of Australia* project, a continuing national cooperative effort of scientific research and publication, aimed at documenting all the plant life of the continent. The *Flora of Australia* is coordinated by the Australian Biological Resources Study (see <http://www.environment.gov.au/science/abrs/publications>), and content is being progressively put on-line (<http://www.environment.gov.au/biodiversity/abrs/online-resources/flora/main/>) The *Flora*, and other State and Territory research programs, have resulted in recent years in the recognition of very many new genera, species and subspecies, with names and descriptions that do not appear in older publications.

This national scientific effort has led to not only many more technical papers, but also a faster flow-through of information from specialist journals to the more accessible Floras, handbooks and field-guides. Even so, for fully authoritative identification and up-to-date information in many plant groups it is often still necessary to supplement books with a careful examination of recent scientific journal papers, or to refer specimens to an expert.

“Recommended” works

Within each category, some works are flagged as RECOMMENDED. For the sake of brevity we have used this single tag, rather than a hierarchy of ratings, but the ‘recommended’ rating should be interpreted against the taxonomic and geographic scope of the work, its date, and the evaluation comments provided.

For example, for FLORAS, a ‘recommended’ tag will mean that the work is authoritative and/or comprehensive, and should be used as a benchmark for all really serious identification work (subject to its date of publication!). Floras contain technical language but are still usable by a lay person prepared to learn terminology for the group of interest.

For GENERAL FIELD GUIDES and BOOKS ON MAJOR PLANT GROUPS, a ‘recommended’ tag is applied based a combination of authoritativeness, comprehensiveness, breadth of geographic or taxonomic area covered, reliability and ease of use, excellence of illustration, or simply that it is the best available for a poorly documented group or area.

Lack of a ‘recommended’ tag against any work does not necessarily mean that the work is not a good one for its defined scope. With a few exceptions, we have not assigned ‘recommended’ status to small-region handbooks and works of purely local scope, however good.

Different users will have their own criteria for deciding which book is best for them – extensive images, plain-English versus technical terminology, availability of identification keys, relevant geographic scope, or size and robustness of a book for use in the field.

Where a user needs to identify and name plants for reasons that may carry implications of legal or professional liability (e.g. contract surveys for development proposals, threatened plant surveys, and other risk-related work), the literature listed in this guide should *not* be regarded as exhaustive. Recourse to both recent specialist journals and expert guidance is advised.

PLANT IDENTIFICATION - WHERE TO START

The notes following each entry in this bibliography are intended to give guidance as to how comprehensive, current and authoritative each one is. In general, more recent resources are more reliable. Most reliable and comprehensive of all are the national, State and regional works called *Floras*. If recently published, these will be the most scientifically up to date, and other types of handbooks tend to draw their information from these Floras (or from the research publications on which the Flora treatments are based). Floras do have technical terms in their text, especially for tricky groups like orchids, grasses, daisies, fungi, etc. These terms are usually well-explained, and often illustrated, in a glossary or in the text. Floras always contain *keys* to species (a key is a series of yes/no questions about the features of a plant or plant specimen, that helps you to identify the species you have by progressively eliminating others). Keys, if up to date, are a very reliable way to identify plants, but the technical language can put people off.

An alternative approach is offered by many *field handbooks*, which emphasise illustrations of plants, often grouped by flower-colour, life form, or habitat type, and with only supplementary text. The user can browse the photographs and compare them with the specimen to be identified. These handbooks tend to be less than comprehensive, and less reliable as a definitive resource for identification, although some are very good.

If you are uncertain where to start, or how to use an identification key, an excellent introduction to identification techniques is:

•**Clarke I & Lee H (2003) Name that flower: the identification of flowering plants. 2nd ed.** Melbourne University Press, Carlton, Vic. 299 pp. ISBN 052285060X.

This provides an easy introduction to understanding the parts of the plant and the necessary terminology. It is not for identification to species, but is an excellent "how to" book, and for many Australian native plants may allow identification to family or genus level.

•**Clarke I (2015) Name those Grasses. Identifying Grasses, sedges and Rushes.** Royal Botanic Gardens, Melbourne, Vic. 536 pp. ISBN 9780980407648.

A 'how to identify' guide for these groups, rather than a comprehensive species guide, although 206 species are covered as examples, many of them common. As with Clark & Lee's (2003) general Name that Flower, this is a fabulous primer for improving your identification skills – in this case in three large groups that are often found intimidating. Illustrated throughout with excellent and well-labelled line drawings that help to decrypt the most difficult characters.

For field use in understanding plant parts (morphology) for beginners, a handy resource is:

•**Mager S & Burrows G [undated, c. 2010?] Botanical Field Guide (5th edition).** Aracariaguides Publications (<http://www.aracariaguides.com> is non-operational at April 2019) ; postal: Aracaria Biodynamic Farm, PO Box 480 Mullumbimby NSW 2482; \$15.00 rrp in 2015). ISBN lacking.

This A4 8-leaf laminated foldout guide is tough enough for field use, and very clearly explains some 400 terms of plant morphology via about 280 colour images.

Also handy for learning about plant morphology are the following resources:

Charles Sturt University Virtual Herbarium <http://www.csu.edu.au/herbarium/>

(ELECTRONIC RESOURCES: ON-LINE – some interactivity):

- *The Virtual Floral Formula*: a ‘floral formula’ is a concise, coded way of characterising the arrangement of flower parts. It is occasionally provided in identification literature and in more detailed texts on genera and families; perhaps its main use for plant-spotters is to enable rapid recording of the floral arrangement in the field or during the ID process when cross-checking literature. This website provides definitions, examples and an on-line tutorial in how to determine and use floral formulae.
- *Australian Plant Family recognition*: this provides a summary of useful diagnostic characters for a dozen or so of the main Australian plant families, plus tutorials and interactive tests.
- *Gynoecium – a guide to flora structure*: “Aspects of the sepals, petals and androecium (stamens) are usually relatively straightforward but interpreting the structure of the gynoecium often causes problems. This guide aims to reduce these problems by illustrating various aspects of the gynoecium”, such as ovary position and carpel structure, via definitions and a pictorial glossary.
- *Floral symmetry*: an illustrated glossary of terms to help you identify presence and type of symmetry (a common character in family keys).
- *Leaves – a guide to leaf structure*: an illustrated glossary covering leaf arrangement, insertion, and (in overly simplified form) leaf division.

For more advanced use, an excellent and extensively illustrated glossary of key characters for all plant families occurring in Australia can be found on the interactive resource:

• **Thiele KR & Adams LG (2014) Families of flowering plants of Australia – an interactive identification guide. Second revised edition.** ABRIS Identification Series, CSIRO Publishing, Collingwood, Vic./Australian Biological Resources Study, Canberra. FLASH DRIVE, ISBNs: 9781486301997.

ELECTRONIC RESOURCE: INTERACTIVE

The first (2002) edition CD-ROM (ISBN 0643067213) is equally useful for this glossary aspect.

For very difficult identifications to family and genus level, especially where cultivated or newly naturalised plants are concerned, the following specialist work may be useful (ask your herbarium or university library if they have it):

• **Kubitzki K (general editor) (various dates from 1990) The families and genera of flowering plants.** Springer, Heidelberg.

This encyclopaedic work, global in scope and still in progress, includes a vast amount of information, including morphological descriptive data and identification keys to subfamilies and genera, along with phylogenetic, biological, and ecological information. While the older volumes are naturally dating, this remains the most comprehensive family-level survey of the plant Kingdom.

- Vol. 1 (eds KU Kramer & PS Green) (1990) Pteridophytes and Gymnosperms.
- Vol. II (eds K Kubitzki, JG Rohwer & V Bittrich) (1993) Flowering plants: Dicotyledons:

Magnoliid, Hamamelid and Caryophyllid families.

- Vol. III (ed K Kubitzki) (1998) Flowering plants: Monocotyledons: Liliaceae (except Orchidaceae).
- Vol IV (ed K Kubitzki) (1998) Flowering plants: Monocotyledons: Alismatanae and Commelinanae (except Gramineae).
- Vol V (ed K Kubitzki & C Bayer) (2003) Flowering plants: Dicotyledons: Malvales, Capparales and Non-betalain Caryophyllales.
- Vol VI (ed K Kubitzki) (2004) Flowering plants: Dicotyledons: Celastrales, Oxalidales, Rosales, Cornales, Ericales.
- Vol VII (ed. JW Kadereit) (2004) Flowering plants: Dicotyledons: Lamiales (except Acanthaceae including Avicenniaceae).
- Vol VIII (ed. JW Kadereit & C Jeffery) (2007) Flowering plants: Eudicots: Asterales.
- Vol IX (ed K Kubitzki) (2007) Flowering plants: Eudicots: Berberidopsidales, Buxales, Crossomatales, Fabales p.p., Geraniales, Gunnerales, Myrtales p.p., Proteales, Saxifragales, Vitales, Zygophyllales, Clusiaceae Alliance, Passifloraceae Alliance, Dilleniaceae, Huaceae, Picramniaceae, Sabiaceae.
- Vol X (ed K Kubitzki) (2011) Flowering plants: Eudicots: Sapindales, Cucurbitales, Myrtaceae.
- Vol XI (ed. K. Kubitzki) (2014) Flowering plants: Eudocots: Malpighiales. **ALSO AVAILABLE AS E-BOOK:** ISBN 9783642394171 eBook).
- Vol. XII (authors J. Kuijt & B Hansen) (2015) Flowering plants: Eudocots: Santalales, Balanophorales. **ALSO AVAILABLE AS E-BOOK:** ISBN 9783319092966 eBook).

Scientific names can be confusing at first sight, but their principles are easy to master. 'Plant nomenclature' - how the scientific naming system operates - is dealt with in very readable fashion in:

•**Spencer R, Cross R, Lumley P (2007) Plant Names - A Guide to Botanical Nomenclature. 3rd edition.** CSIRO Publishing. 176 pp. ISBN-10: 0643094407, ISBN-13: 9780643094406.

ELECTRONIC RESOURCE: e-book version: Also available as an e-book (ISBN-10: 9780643097162, ISBN-13:0643097163) -- see <http://www.publish.csiro.au/pid/5707.htm> for details.

This excellent book covers the naming of wild and domesticated plants, why plant names change, their pronunciation, and hints to help remember them. The final section provides a detailed guide to web sites and published resources useful to people using plant names. (This edition supersedes earlier ones of the same title by Lumley & Spencer, which remain useful).