

# Identifying plants

## Finding the botanical name of a plant collected in the wild



**Plant identification is not easy**, even for the trained, and yet getting the right name for a plant can sometimes be crucial.

- How do you find out whether a plant in native bushland really belongs there or whether it is an introduced alien?
- How many native plants have been weeded out in mistake for introduced weeds?
- How many widespread introduced plants have been left to multiply in the mistaken belief that they are native — or even in the knowledge that they are introduced but since there are only one or two of them, there is no need for concern?

Overleaf are some suggested starting points for identifying native plants but it has to be stressed that the identification technique that *seems* easiest is often the least reliable and final identifications should be checked with an authority, particularly if the management of native vegetation is involved.

The State Herbarium of South Australia, located in Plant Biodiversity Centre (the old Tram Barn on Hackney Road), provides expert help in naming introduced and native South Australian plants.

Much of the comprehensive knowledge of our plants is locked away in *scientific publications* which are difficult to access and interpret. The State Herbarium has continued a tradition of publishing comprehensive summaries of this knowledge, producing the fourth edition of the *Flora of South Australia* in 1986; being associated with other handbooks to the *Orchids* (1990), *Acacia* (1992), *\*Larger fungi* (1997), *\*Marine Algae* (1984-2003), *Mosses* (1980) and *Lichens* (1979); and compiling a *\*Census of South Australian Vascular Plants* (2005).  
\*Only these works still in print.

The information in the flowering plant books is being captured for projection of species fact sheets on the *Electronic Flora* web site (see below).

Herbarium botanists contribute broadly to Australian taxonomic works including the *Flora of Australia* series produced by the Commonwealth Dept for Environment & Heritage (ABRS).

These technical publications and handbooks form the basis for other abridged and more user-friendly works on the plants of the state, some of which are listed overleaf as suggested starting points for identifying plants.

**"Erroneous names once given  
most pertinaciously adhere"**

Ronald Gunn to W.J.Hooker 1840s

### The Electronic Flora of South Australia

With an estimated 20 new native flowering plant species recognised in South Australia each year, and ten new naturalised introductions, there is obviously a need to continuously update the scientific information available to users. Much of the scientific output of the State Herbarium has begun to be projected on the internet on an *Electronic Flora of South Australia* site [www.flora.sa.gov.au](http://www.flora.sa.gov.au), enabling more immediate upgrading of information to users than has been possible using the present book form.

South Australia's node of the **Australia's Virtual Herbarium** is accessed through the *Electronic Flora*. It is a single point of access to data from 6 million specimens held in Australia's State and Commonwealth herbaria.

## Using the facilities at the Plant Biodiversity Centre

You can use the do-it-yourself **Eric Jackson Reference Herbarium**, which is open to the public from 9 am to 5 pm, Monday to Friday, and match your plant against named pressed and dried plants. Microscopes and books on the South Australian flora are available for consultation. If this is too difficult you may need to consult the staff.

You are more likely to get an answer if the material you bring to the Centre is as complete as possible. At the very least it should consist of a whole plant **or** a generous branch showing the leaf arrangement and it will preferably have either flowers or fruits, if not both. Both fresh and dried material can be identified. If you want assistance please make prior arrangements, particularly if you have more than a few specimens. A charge maybe levied in some circumstances.

To assist in making collections adequate for identification and useful also in research, the State Herbarium provides a brochure:

Collection and preservation of plant specimens.



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## Suggested resources for finding the names of native plants

- **The comprehensive, though technical, handbooks and scientific publications of the State Herbarium and other herbaria**  
See overleaf.

- **Easy to use plant identification books and field guides.**

These are becoming increasingly available for particular areas and rely predominantly on matching pictures. A word of warning however – these books are usually not comprehensive (not all species are included). While they can be useful for getting to the genus of a plant, the species is less likely to be correct, particularly where there is more than one species in the genus.

- for the Mt Lofty Ranges and nearby region:  
*Plants of the Adelaide Plains and Hills.* (1990) G.R.Dashorst & J.P.Jessop  
*Grass Identification Manual* (2001) J. Gibbs & R. Gibbs
- for Kangaroo Island:  
*Kangaroo Island's Native Plants* (1994) I. Holliday *et al.*
- for the Eyre Peninsula  
*Wildflowers of lower Eyre Peninsula* (1994) H. O'Connor *et al.*
- for the Flinders Ranges:  
*Wildflowers of the Southern Flinders Ranges: Plant Identikit* (1992) R. Pedlar  
*Wildflowers of the Northern Flinders Ranges: Plant Identikit* (1993) R. Pedlar
- for the outback region  
*Field Guide to the plants of Outback South Australia* (2003) F. Kutsche & B. Lay
- for South Australia and wider  
*Eucalypts of South Australia* (1997) D. Nicolle  
*A Field Companion to Australian Fungi* (2003) B. Fuhrer  
*Fungi Down Under* (2003) P. Grey & E. Grey
- **A successful format** which is being increasingly used elsewhere is by Ann Prescott in *It's Blue with Five Petals*. It relies predominantly on flower colour and shape and then matching against line drawings which show the major features of the plant. These guides are comprehensive for many flowering plants of the regions covered (most known native species and common weeds are included) but still a significant part of the flora, the grasses, rushes and reeds are not included. You do need flowering material to use these books.
  - Ann Prescott (1988). *It's Blue with Five Petals. Wildflowers of the Adelaide Region.*
  - Ann Prescott (1995). *It's Blue with Five Petals. Kangaroo Island Field Guide.*

- **Using your computer**

New interactive identification tools which are rich in illustrations and more user-friendly are becoming increasingly available. Several Australian products on CD-ROM are now available, with many others planned around the Australian herbaria. Some are available on the internet.

*On CD (all but last available from CSIRO Publishing)*

- Brooker *et al.* (2002). *EucLID. Eucalypts of Southern Australia (edn 2)*. (CSIRO Publishing).
- Thiele & Adams (2002). *The Families of Australian Flowering Plants (rev.edn)*. (CSIRO Publishing, ABRIS).
- Maslin *et al.* (2002). *Wattle: Acacias of Australia*. (ABRS; CALM, Perth).
- Sharp & Simon (2002). *AusGrass: Grasses of Australia*. (ABRS; EPA, Brisbane).
- FungiMap (2001). *Compendium of Fungimap Target Species* (Fungimap, Royal Botanic Gardens, Melbourne).

*On the Web*

- Your expanding Electronic Flora of South Australia site [www.flora.sa.gov.au](http://www.flora.sa.gov.au), including
  - Census
  - Plant distribution mapper
  - Flora fact sheets
  - Identification tools
  - Australia's Virtual Herbarium node
- The eFloraSA site and the background notes to the Australia's Virtual Herbarium [www.anbg.gov.au/chah/avh](http://www.anbg.gov.au/chah/avh) provide links to other useful sites, including.
  - sites of other Australian herbaria, which are variously advanced in projecting flora data and information
- **Your local Friends or Bush for Life group, the Australian Plants Society, the Field Naturalists Society Botany Club, etc.**

These groups often have people with an excellent knowledge of their local flora. Ideally they will also have a reference herbarium of pressed, dried native and introduced plants which have been checked against specimens at the State Herbarium.

**"Wherever we go in the wilderness,  
we find more than we seek."**

John Muir 1838-1914

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