



# Flora of South Australia

5th Edition | Edited by Jürgen Kellermann

## INTRODUCTION: HOW TO USE THIS FLORA<sup>1</sup>

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The *Flora of South Australia* provides information on all vascular plants native to or naturalised in the State. Most species are illustrated with line-drawings or photographs. There are also details on their distribution and ecology; identification keys are provided at all levels of classification.

### Previous editions

The first edition of the *Flora* was written by John McConnell Black and published in four parts between 1922 and 1929. Most of the revised second edition (1943–52) was also prepared by him, but the fourth part was completed by Enid L. Robertson. In 1965 Hansjörg Eichler, published a supplement to the *Flora*, which largely updated the nomenclature and distribution of the species of the 2<sup>nd</sup> edition. A third edition was initiated by John P. Jessop, but only the first part dealing with monocotyledons was published in 1978. A revised, multi-authored fourth edition of the *Flora of South Australia* was prepared to commemorate the sesquicentenary of European settlement of South Australia and published in 1986 with John P. Jessop & Hellmut R. Toelken as editors. All of these publications were part of the handbook series of the Flora and Fauna of South Australia Handbooks Committee and published by the Government Printer (Zeidler 2002).

Since 1998 there has been an online version of the South Australian (vascular) flora ([www.flora.sa.gov.au](http://www.flora.sa.gov.au)). Known as the *Electronic Flora of South Australia* or *eFloraSA*, it provides access to up-to-date information from the *Census of South Australian Plants, Algae and Fungi* database, to species fact sheets, mapping capabilities based on herbarium specimens and to some identification tools. Species fact-sheets use the text and illustrations from the 4<sup>th</sup> edition of the *Flora* (Jessop & Toelken 1986) combined with updated regional distribution data from the *Census* and distribution maps generated directly from the State Herbarium specimen database. Information for *Acacia* fact-sheets is largely taken from *Acacias of South Australia* (Whibley & Symon 1992). Since 2010 *eFloraSA* has also provided fact-sheets on algae (created from Womersley 1984–2003).

### The new edition

The 5<sup>th</sup> edition of the *Flora of South Australia* is currently being prepared by over 60 contributors from all over Australia. It is published in PDF form on the web-site of the South Australian *Department of Environment and Natural Resources* with one PDF file per family or larger group. This makes it possible to release treatments as they become available, and to easily up-date and amend them as necessary. Each treatment will receive its own ISBN.

Up-dated or revised treatments will be treated as separate documents and given a different version number and ISBN; superseded flora treatments will continue to be available for reference purposes. The version number of a *Flora* PDF and its publication date is indicated in the ‘how to cite’ information on the bottom of the first page of a chapter.

<sup>1</sup> This work can be cited as: Kellermann, J. (2011). Introduction: How to use this flora (version 1). In: Kellermann, J. (ed.), *Flora of South Australia* (ed. 5), 5 pp. (State Herbarium of South Australia: Adelaide), [www.flora.sa.gov.au/ed5](http://www.flora.sa.gov.au/ed5)

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Changes between versions are indicated in ‘Notes’ to families or genera.

In some instances only part of a plant family is ready, especially if there is more than one author involved in preparing the treatment. This is indicated by the addition of ‘partly’ behind a family name. For example, *Fabaceae (Leguminosae) (partly) (version 1)* includes only three tribes of legumes; when more tribes are available, these will be added and then issued as a new version of the family treatment.

In the near future, information from the new edition will also be used to update species fact-sheets on the *eFloraSA* information system and visitors to the site will be able to access fact sheets generated from both, the 4<sup>th</sup> and the 5<sup>th</sup> edition.

### Family classification

The sequence of families used in this *Flora* follows closely the one adopted by the *Australian Plant Census* ([www.anbg.gov.au/chab/apc](http://www.anbg.gov.au/chab/apc)), which in turn is based on that of the Angiosperm Phylogeny Group (APGIII 2009) and *Mabberley’s Plant Book* (Mabberley 2008). It differs from previous editions of the *Flora*, which were mainly based on the classification system of Engler & Gilg (1919).

A list of all families recognised in this *Flora* is printed in the inside cover pages with families already published highlighted in bold. The up-take of this new system by the State Herbarium of South Australia is still in progress and the S.A. *Census* database still uses the old classification of families. The *Australian Plant Census* web-site presents comparison tables of the old and new systems on family and genus level. A good overview of all families can be found in Heywood *et al.* (2007) and Stevens (2001–), although these authors accept a slightly different family classification.

### Flora treatments

Each account of a taxon first lists its currently accepted name, basionym (if applicable), synonyms and misapplied names (*auct. non*) with author and publication details. The synonymy is restricted to names and publications that relate to its occurrence in S.A. The etymology of generic names is given.

This is followed by a concise description of the taxon. Species descriptions are not always confined to South Australian material, but might have been prepared from specimens from the whole area of distribution of a taxon. For an explanation of botanical terms, please see the glossary (Jessop *et al.* 2011). Common names are indicated after the description and are taken from Jessop & Toelken (1986) or other literature consulted by the authors. Information on the distribution of a plant is followed, where available, by notes on ecology, biology, taxonomy, cultivation, conservation status, uses, etc.

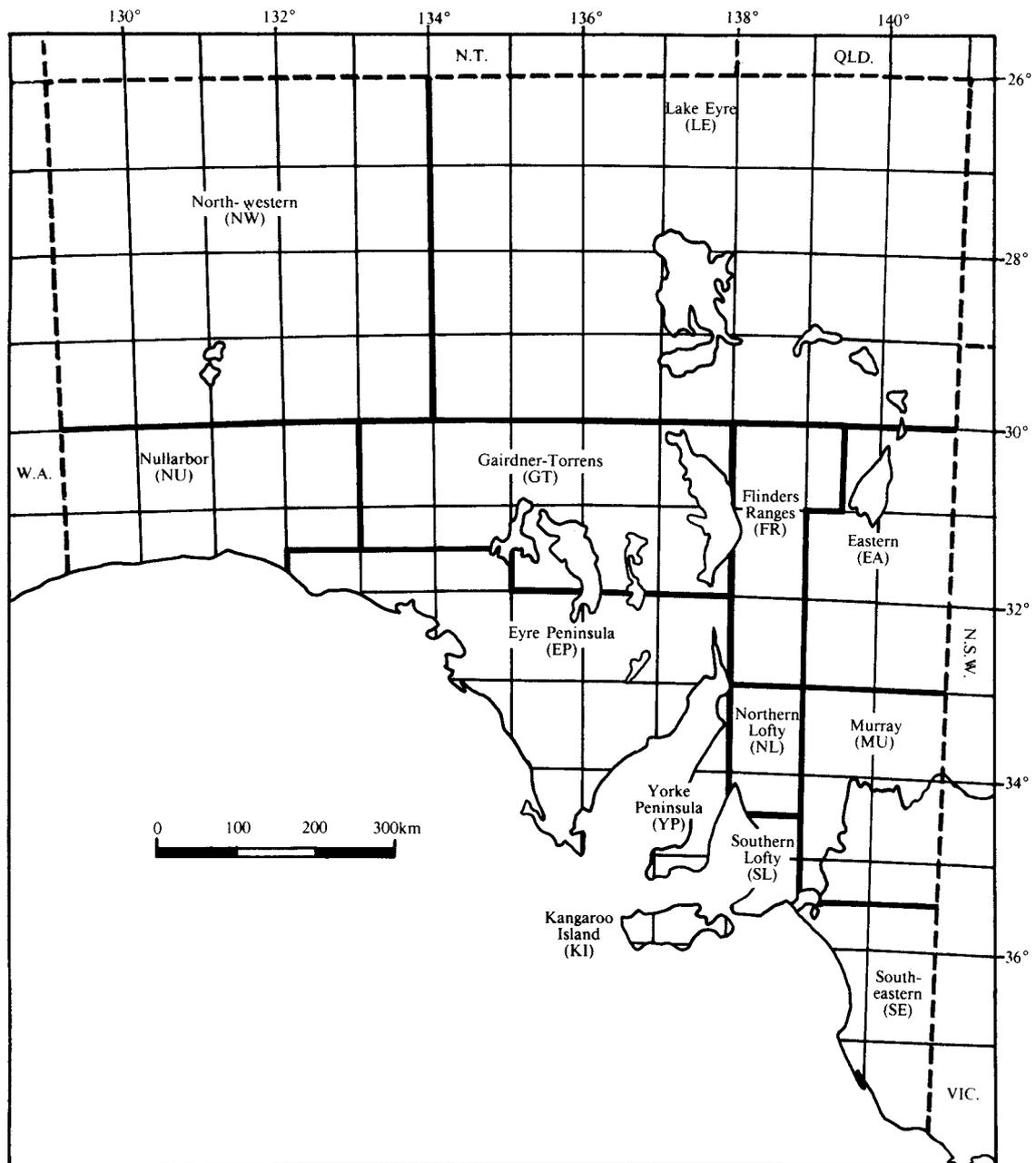
References to illustrations in other published works are provided, and most taxa are illustrated with line-drawings or photographs. Line-drawings are referred to as ‘Figures’; photographs are arranged at the end of treatments and referred to as ‘Plates’. If the preparation of new line-drawings or the acquisition of suitable photographs takes longer than anticipated, a first version of a treatment without illustrations might be published.

### Abbreviations

Abbreviations of botanical authors, books and journals can be found in the *International Plant Name Index* database ([www.ipni.org](http://www.ipni.org)) and are based on Brummitt & Powell (1992), *TL-2* and *TL-2/S* (Stafleu & Cowan 1976–1988; Stafleu & Mennenga 1992–2000), and *BPH/S* (Bridson 1991).

When citing illustrations found in recent standard floras, for the sake of brevity the authors are omitted and they have been abbreviated as follows:

- *Fl. Kimberley Reg.* — Wheeler *et al.* (1992)
- *Fl. Perth Reg.* — Marchant *et al.* (1987)
- *Fl. S.W. (W. Austral.)* — Wheeler *et al.* (2002)
- *Fl. Darwin Reg.* — Dunlop (1995), Short & Cowie (2011)
- *Fl. Centr. Austral.* — Jessop (1981)
- *Fl. S. Austral.* — Jessop & Toelken (1986)
- *Fl. S.E. Qld* — Stanley & Ross (1983–1989)
- *Fl. N.S.W.* — Harden (1990–1993), Harden (2000)
- *Pl. W. N.S.W.* — Cunningham *et al.* (1981)
- *Fl. Victoria* — Foreman & Walsh (1993), Walsh & Entwisle (1994–1999)
- *Stud. Fl. Tas.* — Curtis (1956–1994), Curtis & Morris (1975).



**Fig. 1.** Botanical regions of South Australia: **NW**, North-western; **LE**, Lake Eyre; **NU**, Nullarbor; **GT**, Gairdner-Torrens; **FR**, Flinders Ranges; **EA**, Eastern; **EP**, Eyre Peninsula; **YP**, Yorke Peninsula; **NL**, Northern Lofty; **SL**, Southern Lofty; **MU**, Murray; **KI**, Kangaroo Island; **SE**, South Eastern. Map reproduced from the endpapers of *Flora of South Australia* (1986).

Compass directions are usually abbreviated to N (North, northern), S (South, southern), E (East, eastern) and W (West, western).

### Plant distribution

Distributions of species and infraspecific taxa are indicated using the 13 botanical regions of South Australia. (Fig. 1). These are very broad regions largely based on latitude and longitude and have been used by the State Herbarium for many years as a convenient way to sort specimens; they do not correspond with natural biogeographic regions (*Interim Biogeographic Regionalisation of Australia*, IBRA 6.1, 2004).

### Naturalised taxa

Naturalised taxa are plants that have been introduced to an area from overseas, from other states in Australia or from other areas within S.A., and have now become established, i.e. they are propagating without human interference.

An asterisk (\*) in front of a name indicates that the taxon is naturalised in S.A. Asterisks are also placed before each of the S.A. botanical regions or Australian States in which the plant is naturalised.

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