Vegetation of Girraween National Park

Flora and Vegetation Communities

Edited by Craig Robbins and Vanessa Ryan

Edition 1.0.1, July 2011

Foreword by Paul Grimshaw

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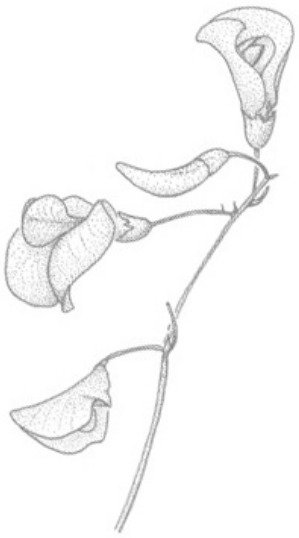

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Revision history

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Contents

Tables

Figures

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Foreword

From 1973 to 1982 I was the Overseer-in-charge of Girraween National Park. It was an exciting and memorable period of my National Parks career. It was a period involving a steep learning curve – a time when I became much more botanically aware. This was mainly due to discovering and subsequently identifying the unique and diverse flora that revealed itself to me as I explored the various nooks and crannies amongst the granite monoliths, rock pavements and hidden valleys, which are well-known features of Girraween. During my years of happy obsession with the Girraween National Park flora, I collected and pressed specimens, took photographs of nearly every shrub, tree, or wildflower I found, persuaded botanists to assist me with identifying difficult specimens, prepared plant-lists, and finally badgered management hierarchy to publish lists and booklets on the flora and fauna of this special region. While I was Overseer-in-charge at Girraween National Park I was given unstinting assistance by Bill Goebel, who showed me some of those secret places and the unique and interesting flora species found in them. Bill had acquired this knowledge during his many years of wandering throughout the study area, photographically documenting the many local species wherever he found them. I also had a fantastic mentor in Queensland Government botanist and ecologist Bill McDonald, who had a family connection with the Granite Belt area and a soft spot for Girraween National Park. He spent much of his time during his many official and unofficial visits to Girraween encouraging and nurturing my botanical interests. He also expanded my knowledge of the Girraween flora immensely during our productive field trips to various parts of the park.

The study area, which is now Girraween National Park, has been a strong focus of botanical interest dating back to 1827, when the renowned explorer and botanist Alan Cunningham traversed the Bald Rock Creek valley collecting botanical specimens. Since this time a succession of botanists, local and visiting naturalists, and National Park staff, all of whom had an interest in native Australian flora, have all contributed to the knowledge of the Girraween National Park flora by collecting and recording plant species to add to this most impressive species list.

In the past a number of plant species lists and flora booklets have been produced or published, concerning the flora of Girraween National Park and surrounding areas. Due to recent taxonomic revision of many plant genera and species, and the recent rationalisation of plant species occurring on previous Girraween National Park lists, this current updated and scientifically based flora list is essential and long overdue. Unlike earlier Girraween plant species checklists, this checklist also includes mosses, fungi and algae.

This is the most complete flora checklist and vegetation description of Girraween to date. However as time progresses I am sure there will be a need to make additions to the flora check list as further species come to light. Therefore I encourage everyone who has a deep-seated interest in the local flora to continue searching for those hidden gems in this botanical wonderland named Girraween “The Place of Flowers”.

Paul Grimshaw
Ecologist

Introduction

For a location whose name means “place of flowers”, it seems particularly appropriate that an up-to-date reference of the plants and plant communities which occur there should be available. The editors recognise that many people and groups have long studied the area’s diverse range of plants and their associated communities and made their own lists and publications. Indeed, one of the editors (Vanessa) maintains a list of the known flora on her Girraween National Park website (http://www.rymich.com/girraween/).

Vanessa’s original list, as presented on the website, was developed based on available data and contributions by a number of people and groups (see acknowledgments). A review of this list began in May 2011, initially to update species names to match those used in the Census of the Queensland Flora 2010. The scope of the review gradually expanded to include examining each individual species and adding references to support their inclusion. Species without any reference were deleted from the list. It is recognised that some of the species deleted may likely occur within the National Park, however without any references to support their presence it was decided to remove them to keep the list as accurate as possible.

The flora presented within this document is the result at the end of the review (June 2011). The list of species will continue to evolve as new information comes to hand.

Request from the editors

In the interests of encouraging the sharing of information and the expansion of knowledge, this document and associated data have been released using a relatively liberal license (page 55). Based on the license, derivative works are permissible. However, the editors **would greatly appreciate notification of any additions, corrections or alterations** in the hope that a central repository of known information regarding the flora of Girraween NP can be maintained.

Additions to the flora list should be accompanied by a reference, or at the very least an identified photo of the species being added. For people with the required permits, it would be beneficial that voucher specimens be collected and submitted to the Queensland Herbarium for those species without a current specimen at the Queensland Herbarium (species without source **‘a’** specified in the flora species list).

The license does not permit commercial use of this work. If you are interested in using this work commercially please contact the editors.

Acknowledgments

Many groups and organisations have contributed to the collective knowledge of known plant species within Girraween NP and this publication would not have been possible without their contributions, input and passion towards the Park and the flora of Australia. We would like to thank, in particular, the following people and organisations for their valuable contributions towards increasing the knowledge of the Park's flora, reviewing draft revisions of this list, or contributing by providing expert knowledge and guidance.

- **Queensland Herbarium** staff, associates and contributors
- **Mike Mathieson** (Queensland Herbarium) for his expert input regarding Orchidaceae, providing constructive feedback and a number of corrections
- **Tony Bean** (Queensland Herbarium) for reviewing a draft of the current list and providing names or clarification for some of the more obscure taxa present within the list
- **Bill McDonald** (Queensland Herbarium) for reviewing a draft of the current list and providing names or clarification for some of the more obscure taxa present within the list
- **Paul Grimshaw** (Principal Ecologist, BAAM Pty Ltd) for writing the foreword, providing feedback and making many suggestions for improvement
- **Jolene McLellan** (Girraween Public Contact Ranger, DERM Queensland Parks and Wildlife) for her support, guidance and sharing her expert local knowledge
- **Megan Thomas** (Queensland Herbarium, Plant Identification and Advisory Services) for advice, clarification of unknown plant names and support
- **Glenn Leiper** for his assistance with identifying some of Girraween's species from photographs, as well as providing a great many of those photographs
- **David James** (ANOS Kabi Group) for sharing his knowledge of orchids and helping to identify park species, as well as providing photographs of those species
- **Michael Jefferies** and **Nanette Jurd** for their support and donation of photographs to Vanessa's website which have helped confirm the existence of certain species within Girraween
- **Warwick Willmott** for reviewing the brief background on Girraween's geology and providing additional information
- **Tein McDonald** for commenting on an early draft of the booklet and providing feedback, encouragement and suggestions

Although not necessarily participating directly towards this current list and publication, there are a number of important contributors who all added significantly towards the understanding and knowledge of Girraween National Park's flora. Without their effort, this current project would not have been possible and we gratefully acknowledge each of them below.

Stanley Blake, Frederick Bailey, Cyril White, Lindsay Smith, Mary Clemens, Ellen Goebel, Bill Goebel, Hock Goebel, Max Gray, Les Pedley, John Williams, David Hockings, Jean Harslett, G. Ward, Ken Shea, C. W. Frazier, Ernest Constable, Ian Telford, Tom Ryan, Greg Roberts, Philip Sharpe, David Jones, Peter Young, Ralph Crane, David Halford, Paul Forster, George Batianoff, Colleen Gravatt, John Hunter, Peter Clarke and Kym Sparshott.

If anyone has been omitted from these acknowledgements, it was unintentional and we sincerely apologise.

Girraween National Park

Girraween National Park is located on the border of Queensland and New South Wales, about halfway between Stanthorpe and Tenterfield. It is situated at the northern end of the New England Tablelands and covers 11,800 hectares, with an average elevation of 900 metres above sea level.

Girraween's history as a National Park began in 1930 when the Queensland Department of Forestry began acquiring vacant Crown Land in the Wyberba Valley. A Stanthorpe medical practitioner, Dr Spencer Roberts, had successfully lobbied the government to create a national park to protect the habitat of the local superb lyrebird and common wombat populations. This first protected area was Bald Rock Creek National Park. More vacant Crown Land was acquired in 1932 and this became Castle Rock National Park. Collectively, both parks were locally known as Wyberba National Park. Some time later, in 1966, the privately owned orchard which lay between the two parks was purchased by the Queensland Government. The two parks became one – Girraween National Park.

The name "Girraween" was selected from the results of a competition held to name the newly allocated National Park. While the name chosen is not of local origin, "Girraween" was chosen as the park's name because, in the dialect of certain indigenous peoples, the word means "place of flowers". The Park was, and is, well known for its spectacular wildflower displays and the name was deemed particularly suitable.

At the time the park received its modern name, it covered an area of 1,600 hectares. Since the 1970's, Girraween NP has been extended to include the upper catchment areas of Bald Rock and Racecourse Creeks, the ecologically critical areas of South Bald, Middle and West Bald Rocks, the higher rainfall forests to the east and south, and the swampy wetlands of Racecourse Creek and Paling Yard Creek catchments. Much more farmland was also purchased and by 1980 the park extended to over 11,300 hectares. In 1987, Girraween National Park was expanded by a further 500 hectares to link with the adjacent Bald Rock National Park in New South Wales. Today, Girraween covers over 11,800 hectares and, together with Bald Rock National Park, the two sister parks create more than 20,600 hectares of protected area.

Girraween National Park's geology, soils, climate, and fire have a significant influence on the Park's flora and associated vegetation communities. These influences are discussed briefly below.

Geology

Explorer and botanist Allan Cunningham first visited the area in June 1827. His diary entry for the 26th of June 1827 states:

> *"Large detached masses of granite of every shape towering above each other, and in many instances standing in almost tottering positions, constituted a barrier before us; beyond these a deep ravine formed a curve from E. to S.W., which was itself bounded by a rocky ridge at least 250 feet high."*

Girraween National Park and its associated flora and vegetation communities are influenced by the underlying geology, in this case granite, and its associated soils. The Stanthorpe Granite was intruded as a molten mass deep below the surface about 240 million years ago in the early Triassic period, where it cooled and crystallised slowly to a coarse-grained rock. Since then erosion has removed the overlying rocks and exposed the granite mass. Where this has been closely fractured, erosion has created valleys, but where less fractured, great domes and slabs of bare rock have remained. Granite breaks down (decomposes), by environmental and chemical processes, into coarse sandy soils that provide limited fertility and water holding capacity (Wilmott 2004, pp. 49, 51). Fine clays resulting from the decomposition of the feldspar in the granite tend to wash away easily, leaving only the more coarse quartz grains. The depth of soils is shallow except in riparian areas where the components of decomposed granite can accumulate. Plant nutrients such as calcium, magnesium and iron are limited due to the lack of these minerals in the parent rocks (Wilmott 2004). This underlying geology and associated soils influence the plant species and vegetation communities that populate the area.

Climate

During summer, days are a warm 28-32°C, with nights averaging 15-18°C. Winters are usually dry and cold with overnight temperature falling to an average minimum of -4°C and sunny days reaching 15-22°C. Most years in winter there are heavy frosts, sleet and even light snowfalls. Heavy snow falls have been recorded. Officially recorded temperature extremes vary from -16°C to 40°C. Most rain falls between November and March with an average annual rainfall of 850 mm per year; the eastern areas of the park receive the highest rainfall totals (McDonald, *et. al* 1995). This gradient of rainfall, between the western and eastern areas of the park, and in addition to the geological and topography of the park mentioned briefly above, influences the vegetation communities and individual species that occupy various sections of the park (McDonald, *et. al* 1995).

Fire

In addition to the underlying geology and soils, fire plays an important role in the species present and the vegetation communities they collectively form. Fire frequency in particular appears to influence the presence and abundance of individual plant species (Watson & Wardell-Johnson 2004) within a vegetation community.

Many of the park's vegetation communities have evolved to depend on fire to maintain their structure and species composition and the absence of fire could threaten the existence of these vegetation communities (QPWS 2010). As a management tool, Queensland Parks and Wildlife Services use controlled burns to maintain vegetation structure and composition (QPWS 2010).

Shrublands, heaths and associated communities that occur on isolated granite outcrops are the most sensitive to fire (QPWS 2010). Because the granite outcrops provide some measure of refuge from fire it is believed that the communities occupying these areas have evolved without fire and are, therefore, not as adapted to cope with fire when it does occur (QPWS 2010). The Regional Ecosystem Description Database (REDD 2009b) identifies some issues (or potential issues) related to fire regimes for particular Regional Ecosystems present within the park. These issues are presented in the table below (see page 11 for Regional Ecosystem descriptions).

Table 1 Potential issues related to fire and vegetation[1]

RE	Fire related issues
13.12.3	A fire-"shy" ecosystem, although also somewhat fire dependent
13.12.6	Contains a host of threatened species, the life cycles of some are yet to be determined

[1] Source: Regional Ecosystem Description Database Version 2009b

Queensland Regional Ecosystems

Considering Girraween's granite-dominated landscape it is not surprising that all of the Regional Ecosystems mapped as occurring within the park are those occurring on *Land Zone* 12 (hills and lowlands on granitic rocks) and *Land Zone* 3 (alluvium). Of the ten mapped Regional Ecosystems, seven are Land Zone 12 and three are *Land Zone* 3. Regional Ecosystem (RE) 13.12.3 is significant as it occurs only within Girraween NP (REDD 2009b) and its dominant species (*Eucalyptus scoparia*) is a vulnerable plant. Only two of the ten mapped Regional Ecosystems (RE 13.12.2 and 13.13.5) have a Biodiversity Status of '*no concern at present*'.

Table 2 Regional Ecosystems of Girraween National Park[2]

RE	Short Description	Biodiversity Status	VMA Class	Comments and habitat values
13.12.1	*Eucalyptus campanulata* open forest on igneous rocks	OC	LC	Habitat for rare and threatened flora species including *Grevillea scortechinii, Hibbertia elata, Caladenia atroclavia, Pultenaea stuartina, Persoonia daphnoides, Phebalium ambiens, P. amabilis* and *Huperzia varia.*
13.12.2	*Eucalyptus andrewsii, E. youmanii* woodland on igneous rocks	NC	LC	Habitat for rare and threatened flora species including *Acacia pubifolia, A. latisepala, A. brunioides subsp. granitica, A. ruppii, Eucalyptus magnificata, Grevillea scortechinii, Hibbertia elata, Pultenaea stuartina, Conospermum burgessiorum, Tylophora woollsii, Boronia amabilis, B. granitica, B. repanda, Rulingia hermanniifolia, Phebalium whitei, Olearia gravis, Bertya glandulosa, Cryptandra lanosiflora, Macrozamia viridis* and *Hakea macrorrhyncha*.
13.12.3	*Eucalyptus scoparia* woodland on igneous rocks	OC	OC	*Eucalyptus scoparia* is a vulnerable species. A rare ecosystem, wholly contained within Girraween National Park.
13.12.5	*Eucalyptus youmanii* on igneous rocks	NC	LC	Habitat for rare and threatened flora species including *Homoranthus montanus, Acacia pubifolia, Astrotricha roddii* and *Eriostemon myoporoides subsp. conduplicata.* Restricted to drier parts of bioregion.

[2] Source: Regional Ecosystem Description Database Version 2009b

RE	Short Description	Biodiversity Status	VMA Class	Comments and habitat values
13.12.6	Shrubland on igneous rocks	OC	OC	Habitat for rare and threatened flora species including *Boronia granitica, B. repanda, B. amabilis, Callitris monticola, Homoranthus papillatus, Phebalium whitei, P. rotundifolium* and *Thelionema grande.*
13.12.8	*Eucalyptus melliodora* and/or *E. moluccana/ E. microcarpa* and/or *E. conica* woodland on igneous rocks	E	E	West of the granitic subregions. Cleared for agriculture and horticulture.
13.12.9	*Eucalyptus blakelyi* and/or *E. caliginosa* woodland to open forest on igneous rocks	E	E	Habitat for rare and threatened flora species including *Eucalyptus magnificata, Macrozamia viridis, Pterostylis woollsii, Grevillea scortechinii* and *Acacia ruppii*. Differs from 13.3.1 in land zone and secondary species. Cleared for agriculture and horticulture.
13.3.1	*Eucalyptus blakelyi* woodland on alluvial plains	E	E	Cleared for agriculture and horticulture.
13.3.2	*Eucalyptus nova-anglica* open forest on alluvial plains	E	E	Habitat for rare and threatened flora species including *Persoonia daphnoides*. Only known Queensland population of *Grevillea juniperina*.
13.3.6	Sedgeland on igneous rocks	E	OC	Cleared for agriculture and horticulture. Subject to invasion by blackberry.

Biodiversity Status = as documented by the Regional Ecosystem Description Database Version 2009b[3] (Queensland Herbarium 2009)

VMA Status = Vegetation Management Act, Queensland 1999

E = Endangered; **OC** = Of Concern; **NC** = No Concern at present; **LC** = Least Concern

[3] See http://www.derm.qld.gov.au/wildlife-ecosystems/biodiversity/regional_ecosystems/introduction_and_status/index.html for the definition of *Biodiversity Status*

Girraween National Park encompasses some areas that are not considered remnant vegetation. These are areas that before amalgamation with the park were used for farming or orchards. These non-remnant areas are being managed or rehabilitated using a combination of Assisted Natural Regeneration (with weed control and fire being the primary interventions) or revegetation using local provenance plants raised in a nursery (QPWS 2010).

Management strategies and objectives that aim to preserve the Park's unique vegetation communities and flora, and mitigate identified threatening processes are detailed within the *Girraween National Park Management Plan 2010* (QPWS 2010).

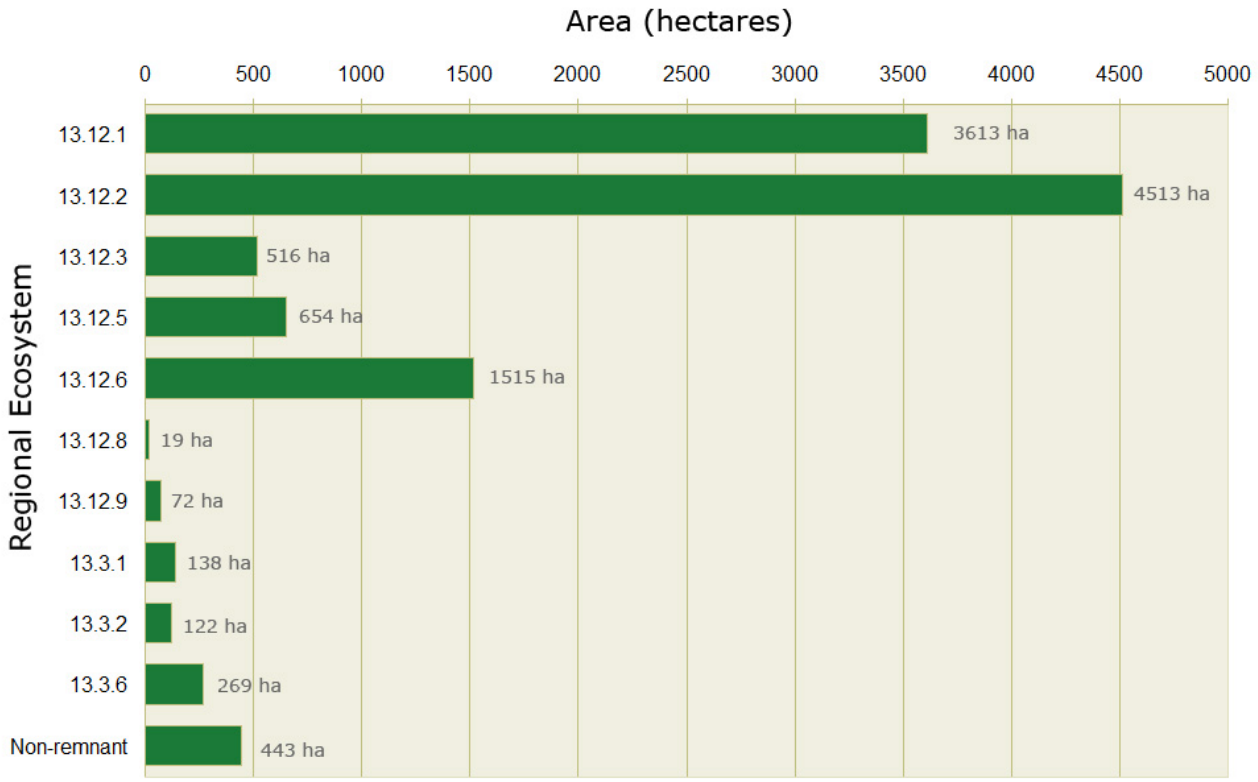


Figure 1 Composition of the Park's Remnant Regional Ecosystems and non-remnant vegetation

It is important that the goals and scale of Regional Ecosystem mapping are kept in mind when interpreting the graph above. Queensland Regional Ecosystems are a *landscape scale* mapping and classification framework. For most areas of Queensland, the Regional Ecosystem mapping and classification is at a scale of 1:100,000[4] (Neldner, *et al*. 2005) and this limits the amount of information that is represented. This is not a design fault of the mapping methodology as the framework was designed as a tool to work at the landscape scale. At finer scales, the differences between vegetation communities are more complex and diverse than the regional ecosystem framework provides.

[4] Some areas of Queensland are mapped at a scale of 1:50,000

Flora

Botanical Names

The names of all native (to Queensland) species have been updated to match with Census of the Queensland Flora 2010. Similarly, family names are those used within the Census. For exotic species, plant names have been updated to match with the Census if the plant was included; *i.e*. those species considered naturalised or near naturalised by the Queensland Herbarium. For species without an entry in the Census, plant names reflect those used by (in order of preference given): a) The Australian Plant Name Index (APNI 2011); b) the Flora of New South Wales online (PlantNET 2011); c) or the International Plant Name Index (IPNI 2011).

Plant Groups

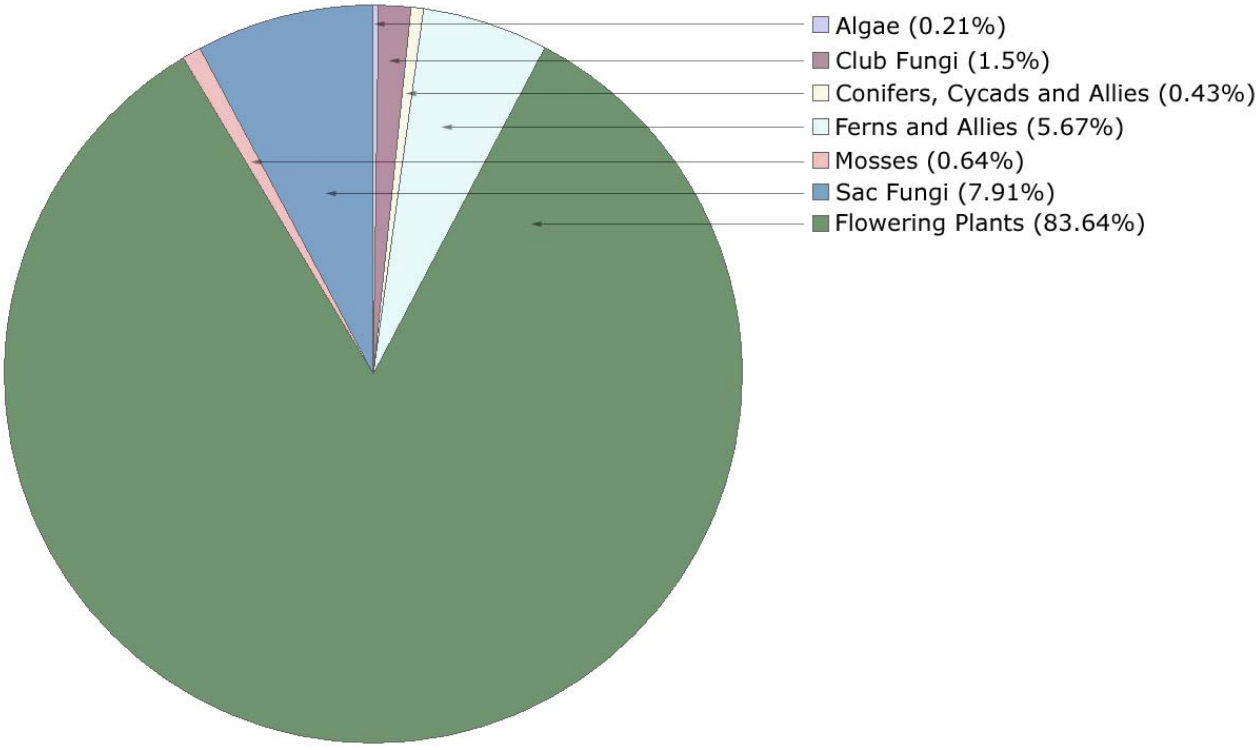


Figure 2 Major plant groups

Species Richness

The flora of Girraween National Park is exceptionally rich in species, as can be seen by the compiled list of known species occurring within the Park. Despite the already exceptional richness of species, the number of catalogued species is likely to increase as research continues.

Threatened Species

In addition to the endangered and threatened vegetation communities (Regional Ecosystems) that Girraween National Park protects, many threatened plant species also occur within the park boundaries.

The status of individual species listed below as Endangered, Vulnerable and Near Threatened are as defined by the *Queensland Nature Conservation Act 1992*.

Table 3 Status of Species (Percentage)

Status	Number of species	Percentage (%) of overall list
Endangered	7	0.7
Vulnerable	12	1.3
Near Threatened	22	2.4

Method for compiling the species list

Note: The method presented below was iterative, re-reviewing the list and taxon names as work progressed. For each additional source consulted, taxon names were updated to those listed by the Queensland Herbarium in 2010 (Bostock and Holland 2010). Updating these names often resulted in duplicates occurring within the developing list and duplicates were, therefore, deleted.

Within this section, ‘source’ refers to the documentation, data source or reliable sighting of the species being considered. Sources that supported the inclusion of a species were documented and are presented within the final list. ‘Census’ refers to Census of the Queensland Flora 2010 (Bostock and Holland 2010).

As a basis, the species list as presented on http://www.rymich.com/girraween/ in May 2011 was used. The name of each species in that list was updated to match the nomenclature adopted by Census of the Queensland Flora 2010 where possible. Once the list was updated a new extract from Wildlife Online

was generated for Girraween NP (May 2011) and this was cross-referenced with the updated list. At this point, no species were deleted from the original list; cross-referencing with the latest Wildlife Online extract was used to add species not already present in the list. Fungi were removed from the list as these were treated separately from the other plant groups. Once these actions were undertaken the list was referred to as the "base list" and all further work concentrated on species within that list.

The entire family Orchidaceae was deleted from the base list and replaced with the species supplied by Mathieson's list of Orchidaceae for the park.

Using the base list, each species was assigned a confidence score to aid in narrowing down species that required further checking. Because the intent of the scores was to provide a basis for species requiring further research, the scores were relatively arbitrary and based on the subjective reliability of the source, the number of sightings from less reliable sources and other criteria. The presence score for each species ranged from 0 to 1, 0 meaning unconfident, 0.5 meaning somewhat confident and 1 meaning highly confident. Species with a Queensland Herbarium specimen or those identified in Mathieson's list for Orchidaceae were immediately assigned a score of 1. Species with a corresponding Queensland Herbarium specimen record from the rectangle encompassing the park, but not within the park bounds, were assigned a score of 0.95. Photos taken from within the park boundaries and identified or confirmed by an expert were assigned a score of 0.75 if not present in either of the preceding sources. At this point, approximately 70% of the species in the base list had a score of 0.75 or higher and attention turned to the remaining 30% (which at this point had a score of 0). Approximately 18% of the remaining 30% with a score of 0 (*i.e.* 14% of the entire list) were introduced species.

Concentrating on the remaining 30% of the species in the base list that still had had a score of 0, the list was presented to various experts with intimate knowledge of the flora of Girraween, seeking either identified photos that were taken in the park of the species or other reliable information. If information was available, the species were assigned a score of between 0.6 and 0.7.

Species listed within the booklet *Plant Life of Girraween National Park* (QPWS 1999) were then cross-referenced with the developing list. Species listed within the booklet but not yet assigned a score were given a score of 0.65.

The Wildlife Online extract (DERM, March 2011) was at this point consulted once again. If a species had not yet been assigned a score, a combination of the *Number of Sightings* and *Number of Specimens* fields were used to score the species. The *Number of Specimens* field was first considered, as that field in the Wildlife Online results includes specimens stored by various herbaria and sources other than the Queensland Herbarium (Lim, D.; DERM Environmental Information Systems Unit; pers. comm. 2011). Species with a number of specimens greater than one, in the Wildlife Online extract, were assigned a score of between 0.7 and 0.8 (sliding scale based on the number of specimens recorded in the *Number of Specimens* field).

For species still without a score higher than 0, the *Number of Sightings* field from the Wildlife Online extract was considered. If the number of sightings was less than 2, the record was ignored. If the number of sightings was 2 or more and the species being considered had a score of 0, then a score between 0.4 and 0.6 was assigned, based on the number of sightings.

At this point, all of the species with a score less than 0.4 were deleted from the list unless substantiation for the species inclusion could be found (each deleted species was assessed individually to

determine if it should be incorporated back into the list). The majority of these remaining species were exotic. If substantiation could be found (for example, an identified photograph that was taken from within the park) then the species was flagged as having other evidence of its occurrence and a score of 0.6 and 0.7 was manually assigned, based on the perceived reliability of the source.

Fungi, based on a Wildlife Online extract obtained June 2011 (DERM, June 2011), were added back to the list.

The list was then cross-referenced once again with the Census of the Queensland Flora 2010. Species without an entry in the Census were researched individually. All of the species, at this point, without an entry in the Census were either introduced species that the Queensland Herbarium did not consider naturalised or near naturalised, or species whose current name/classification could not be determined (but were referred to in the reference material). These “unidentifiable” species were submitted to the Queensland Herbarium for review or determination of their current name and names within the list were updated, or the species deleted, upon their advice.

Symbols and definitions

Threatened status (Queensland Nature Conservation Act 1992)

X = Presumed Extinct

E = Endangered

V = Vulnerable

N = Near Threatened

(Least Concern species have no symbol).

***** = Exotic species

Source (indicates which sources substantiated inclusion within the list)

a Queensland Herbarium Specimen (HERBRECS)

a(-) Queensland Herbarium Specimen close to the park but not within the park boundaries (buffer search)

b Mathieson, M. (Biodiversity and Ecosystem Sciences, Qld Herbarium)

c WildNet Record (DERM 2011) with either more than 1 Sighting OR 1 or more Specimen Records

d Plant Life of Girraween National Park; Booklet; State of Queensland, Queensland Parks and Wildlife Service; November 1999

e Has identified photo

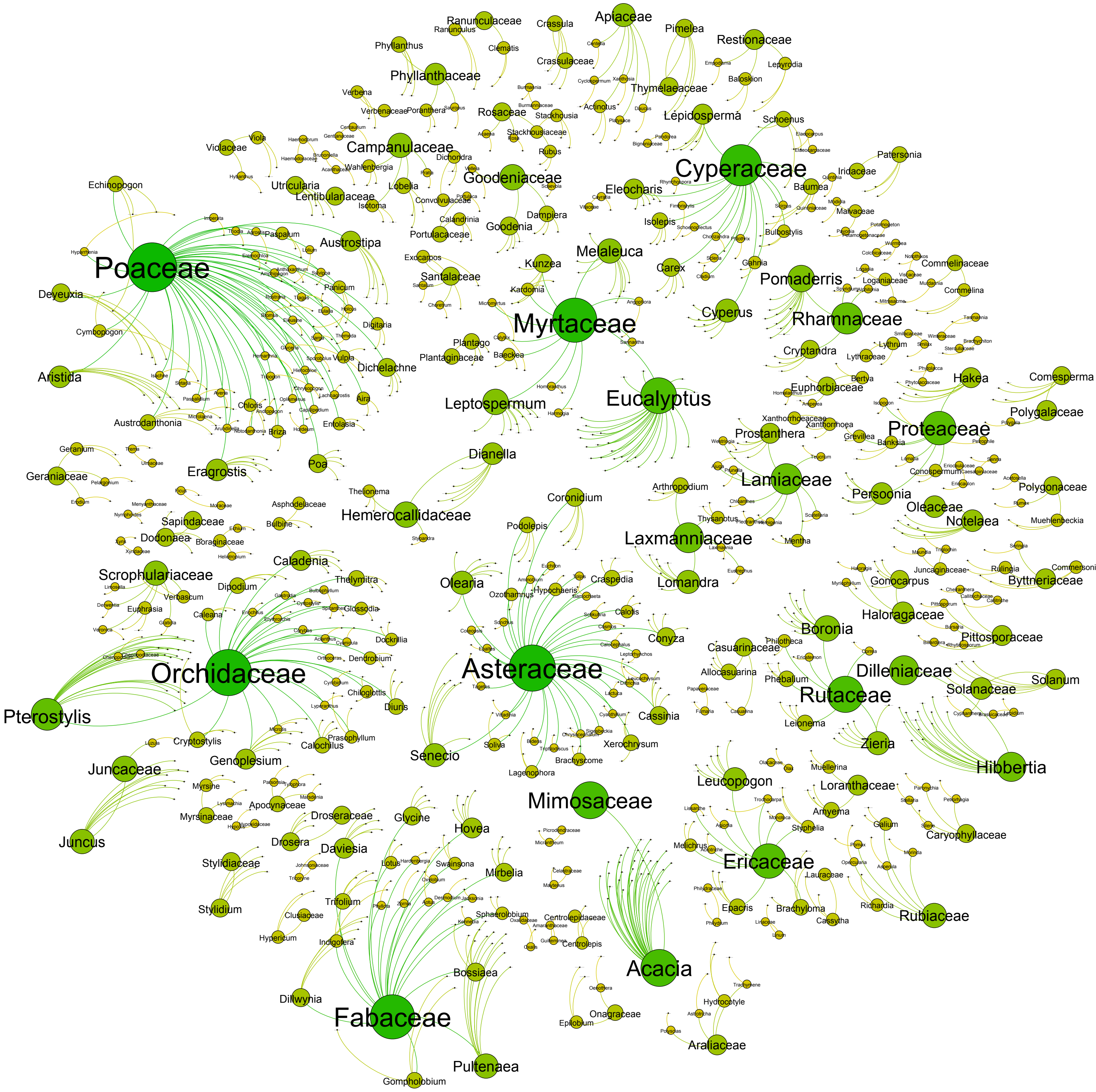
f Local knowledge and/or input from expert

Notes

- Source 'b': This source was given precendence over HERBRECS data (source ‘a’)
- Sources 'e' and 'f': The absence of either of these flags does not imply that there is no identified photo or expert input, only that these were not used as the primary source for inclusion within the list

For the graphs on pages 19 and 39:

The size of each circle, and their associated labels, depict the number of children a particular taxon has. For example, if the taxon represents a family the size of the circle and label represents the number of genera and the number of species that belong to that family. All sizes are logarithmically scaled. The spatial position of individual taxa has no significance other than that child taxa tend to be closer to their parent.



Poaceae
Myrtaceae
Cyperaceae
Orchidaceae
Asteraceae
Fabaceae
Eucalyptus
Proteaceae
Rutaceae
Ericaceae
Acacia
Mimosaceae
Rhamnaceae
Lamiaceae
Dilleniaceae
Laxmanniaceae
Goodeniaceae
Campanulaceae
Phyllanthaceae
Apiaceae
Restionaceae
Thymelaeaceae
Lepidosperma
Pimelea
Crassula
Crassulaceae
Ranunculaceae
Ranunculus
Clematis
Phyllanthus
Verbena
Verbenaceae
Poranthera
Rosaceae
Stackhousia
Stackhousiaceae
Actinotus
Schoenus
Baloskion
Lepyrodia
Violaceae
Viola
Echinopogon
Utricularia
Lentibulariaceae
Wahlenbergia
Lobelia
Dichondra
Isotoma
Convolvulaceae
Goodenia
Dampiera
Calandrinia
Portulacaceae
Eleocharis
Patersonia
Iridaceae
Baumea
Malvaceae
Isolepis
Bulbostylis
Carex
Gahnia
Cyperus
Pomaderris
Commelinaceae
Commelina
Loganiaceae
Cryptandra
Lythrum
Lythraceae
Austrostipa
Paspalum
Panicum
Digitaria
Dichelachne
Deyeuxia
Cymbopogon
Aristida
Vulpia
Chloris
Briza
Aira
Entolasia
Austrodanthonia
Eragrostis
Poa
Melaleuca
Kunzea
Kardomia
Exocarpos
Santalaceae
Plantago
Plantaginaceae
Baeckea
Leptospermum
Euphorbiaceae
Bertya
Hakea
Comesperma
Polygalaceae
Xanthorrhoeaceae
Xanthorrhoea
Prostanthera
Grevillea
Banksia
Persoonia
Conospermum
Polygonaceae
Oleaceae
Notelaea
Muehlenbeckia
Geranium
Geraniaceae
Dianella
Thelionema
Hemerocallidaceae
Asphodelaceae
Bulbine
Sapindaceae
Dodonaea
Boraginaceae
Coronidium
Arthropodium
Thysanotus
Mentha
Podolepis
Lomandra
Scrophulariaceae
Caladenia
Thelymitra
Dipodium
Verbascum
Euphrasia
Caleana
Glossodia
Olearia
Ozothamnus
Hypochaeris
Craspedia
Calotis
Conyza
Juncaginaceae
Gonocarpus
Byttneriaceae
Haloragaceae
Boronia
Casuarinaceae
Pittosporaceae
Allocasuarina
Phebalium
Solanaceae
Solanum
Dockrillia
Dendrobium
Pterostylis
Chiloglottis
Diuris
Leionema
Zieria
Cassinia
Hibbertia
Cryptostylis
Prasophyllum
Calochilus
Juncaceae
Genoplesium
Senecio
Solivа
Xerochrysum
Brachyscome
Lagenophora
Leucopogon
Loranthaceae
Myrsine
Apocynaceae
Myrsinaceae
Droseraceae
Glycine
Hovea
Amyema
Styphelia
Galium
Juncus
Drosera
Daviesia
Caryophyllaceae
Melichrus
Stylidiaceae
Lotus
Swainsona
Mirbelia
Lauraceae
Stylidium
Trifolium
Epacris
Brachyloma
Cassytha
Richardia
Rubiaceae
Clusiaceae
Sphaerolobium
Centrolepidaceae
Centrolepis
Hypericum
Indigofera
Bossiaea
Dillwynia
Hydrocotyle
Onagraceae
Epilobium
Araliaceae
Pultenaea
Gompholobium

FLOWERING PLANTS

ACANTHACEAE

Brunoniella australis
Source: c

AMARANTHACEAE

* Guilleminea densa
Source: a

APIACEAE

Actinotus gibbonsii
Source: a, c, d
Actinotus helianthi
Source: a, c, d
Centella asiatica
Source: c, d
* Cyclospermum leptophyllum
Source: a
Daucus glochidiatus
Source: a, c
Platysace ericoides
Source: a, d
Xanthosia pilosa
Source: a, d

APOCYNACEAE

Marsdenia rostrata
Source: c, d
Parsonsia straminea
Source: a, c
E Tylophora woollsii
Source: a, c, d

ARALIACEAE

Astrotricha longifolia
Source: a, c, d
Hydrocotyle peduncularis
Source: d
Hydrocotyle tripartita
Source: d
Polyscias sambucifolia
Source: a, c, d
Trachymene incisa subsp. incisa
Source: a, c, d

ASPHODELACEAE

Bulbine bulbosa
Source: a, d
Bulbine semibarbata
Source: d

ASTERACEAE

Ammobium alatum
Source: a(-)
* Bidens pilosa
Source: a, c, d
Brachyscome microcarpa
Source: a, c, d
Brachyscome stuartii
Source: a, c, d
Calocephalus citreus
Source: d
Calotis cuneifolia
Source: c, d
Calotis dentex
Source: d
Cassinia copensis
Source: a, c
Cassinia quinquefaria
Source: d
Cassinia uncata
Source: a, c, d
Cassinia wyberbensis
Source: a, c
Chrysocephalum apiculatum
Source: a, d
* Conyza bonariensis
Source: c, d
* Conyza canadensis var. pusilla
Source: c, d
* Conyza primulifolia
Source: a, c
* Conyza sumatrensis
Source: a, c

* Coreopsis lanceolata
Source: a, d

Coronidium boormanii
Source: c, d, f

Coronidium oxylepis subsp. Lanatum
Source: a, c

Coronidium rupicola
Source: d

Coronidium scorpioides
Source: a, d

* Cosmos bipinnatus
Source: d

Craspedia canens
Source: a(-)

Craspedia sp. (Girraween NP S.T.Blake 23643)
Source: a

Craspedia uniflora
Source: d

Cyanthillium cinereum
Source: c

* Dittrichia graveolens
Source: c, d

Epaltes australis
Source: a

Euchiton sphaericus
Source: a, c, d

* Gamochaeta pensylvanica
Source: a, c

* Hypochaeris glabra
Source: d

* Hypochaeris radicata
Source: a, d

* Lactuca serriola forma serriola
Source: a, c

Lagenophora gracilis
Source: a, c

Lagenophora stipitata
Source: e, f

Leptorhynchos squamatus subsp. squamatus
Source: a, d

Leucochrysum albicans var. albicans
Source: d

Olearia canescens
Source: c, d

Olearia elliptica subsp. elliptica
Source: c, d

Olearia glandulosa
Source: a, d

N Olearia gravis
Source: a, c, d

Olearia microphylla
Source: a, c, d

Olearia oppositifolia
Source: d

Olearia ramosissima
Source: a, d

Ozothamnus diosmifolius
Source: c, d, e, f

Ozothamnus obcordatus
Source: a, c, d

Podolepis arachnoidea
Source: a, c, d

Podolepis jaceoides
Source: c, d

Podolepis neglecta
Source: a, c, d

* Schkuhria pinnata
Source: a

Senecio amygdalifolius
Source: a, c

Senecio diaschides
Source: a, c

Senecio interpositus
Source: a, c

Senecio minimus
Source: c

Senecio pinnatifolius
Source: a, d

Senecio prenanthoides
Source: a

Senecio quadridentatus
Source: c, d

Sigesbeckia orientalis
Source: c

* Soliva anthemifolia
Source: a, c

* Soliva sessilis
Source: e, f

* Sonchus asper
Source: a, c

* Tagetes minuta
Source: a, c, d

* Tolpis barbata
Source: a, c

Triptilodiscus pygmaeus
Source: d

Vittadinia muelleri
Source: c, d
Xerochrysum bracteatum
Source: c, d
Xerochrysum subundulatum
Source: c
Xerochrysum viscosum
Source: c, d

BIGNONIACEAE

Pandorea pandorana
Source: d, e, f

BORAGINACEAE

* Echium plantagineum
Source: a
* Heliotropium amplexicaule
Source: a, c, e, f

BRASSICACEAE

* Lepidium bonariense
Source: a, c

BURMANNIACEAE

Burmannia disticha
Source: a, c, d

BYTTNERIACEAE

Commersonia amystia
Source: a, c
Commersonia breviseta
Source: a
Rulingia dasyphylla
Source: a, c
Rulingia hermanniifolia
Source: c, d, e
Seringia hillii
Source: a, c, d

CAESALPINIACEAE

Senna barronfieldii
Source: a, d

CALLITRICHACEAE

* Callitriche stagnalis
Source: c

CAMPANULACEAE

Isotoma anethifolia
Source: a, c, d
Isotoma fluviatilis subsp. borealis
Source: a, d
Lobelia andrewsii
Source: a, c, d
Lobelia gibbosa
Source: d, e, f
Lobelia purpurascens
Source: c, d, e, f
Pratia pedunculata
Source: c, d
Wahlenbergia graniticola
Source: d
Wahlenbergia stricta
Source: d

CARYOPHYLLACEAE

* Paronychia brasiliana
Source: a, d
* Petrorhagia nanteuilii
Source: c, d
* Silene gallica
Source: c, d
* Stellaria media
Source: a

CASUARINACEAE

Allocasuarina littoralis
Source: a, c, d
N Allocasuarina rupicola
Source: a, c, d
Allocasuarina torulosa
Source: d
Casuarina cunninghamiana
Source: c, d

CELASTRACEAE

Maytenus silvestris
Source: d

CENTROLEPIDACEAE

Centrolepis fascicularis
Source: d

Centrolepis strigosa
Source: d

CHENOPODIACEAE

Chenopodium carinatum
Source: c

CLUSIACEAE

Hypericum gramineum
Source: a, c, d
Hypericum japonicum
Source: c, d

COLCHICACEAE

Wurmbea biglandulosa subsp. biglandulosa
Source: a, c, d

COMMELINACEAE

Commelina cyanea
Source: d
* Commelina diffusa
Source: a(-)
Murdannia graminea
Source: c, d, e, f

CONVOLVULACEAE

Dichondra repens
Source: d
Dichondra sp. (Inglewood J.M.Dalby 86/93)
Source: a, c

CRASSULACEAE

Crassula colorata var. acuminata
Source: d
Crassula sieberiana subsp. sieberiana
Source: a, d
Crassula tetramera
Source: a

CYPERACEAE

Baumea articulata
Source: d
Baumea planifolia
Source: d
Baumea rubiginosa
Source: a, c, d
Bulbostylis barbata
Source: c, d
Bulbostylis densa
Source: d
Carex appressa
Source: d
Carex gaudichaudiana
Source: a, d
Carex inversa
Source: c, d
Carex lobolepis
Source: d
Chorizandra cymbaria
Source: a, d
Cladium procerum
Source: c, d
* Cyperus eragrostis
Source: a, c
Cyperus flaccidus
Source: c, d
* Cyperus flavescens
Source: c, d
Cyperus gracilis
Source: c, d
* Cyperus sesquiflorus
Source: a
Cyperus sphaeroideus
Source: c, d
Cyperus squarrosus
Source: a, c, d
Eleocharis acuta
Source: c, d
Eleocharis atricha
Source: d
Eleocharis cylindrostachys
Source: d
Eleocharis dietrichiana
Source: d
Eleocharis sphacelata
Source: c, d
Fimbristylis dichotoma
Source: a, c, d
Gahnia aspera
Source: c, d
Gahnia sieberiana
Source: a, c, d
Isolepis fluitans
Source: c, d

Isolepis hookeriana
Source: c, d
Isolepis inundata
Source: a, d
Lepidosperma gunnii
Source: a(-)
Lepidosperma laterale
Source: a, d
Lepidosperma laterale var. laterale
Source: c
Lepidosperma limicola
Source: a, c, d
Lepidosperma tuberculatum var. grande
Source: a, c, d
Ptilothrix deusta
Source: a, c, d
Rhynchospora brownii
Source: c, d
Schoenoplectus validus
Source: d
Schoenus apogon var. apogon
Source: a, d
Schoenus maschalinus
Source: c, d
Schoenus melanostachys
Source: c, d
Scirpus polystachyus
Source: a, c, d
Scleria mackaviensis
Source: d

DILLENIACEAE

Hibbertia acicularis
Source: d
Hibbertia aspera
Source: d
Hibbertia cistifolia
Source: c
Hibbertia cistoidea
Source: a, c, d
N Hibbertia elata
Source: a, d
Hibbertia linearis var. obtusifolia
Source: c, d
Hibbertia riparia
Source: c, d
Hibbertia scandens
Source: c, d
Hibbertia sericea
Source: c, d
Hibbertia sp. (Girraween NP D.Halford+ Q1611)
Source: a, c
Hibbertia stricta
Source: a, c
Hibbertia stricta var. stricta
Source: a, c, d
Hibbertia tenuifolia
Source: a

DROSERACEAE

Drosera binata
Source: a, d
Drosera burmanni
Source: a, c, d
Drosera peltata
Source: a, c, d
Drosera spatulata
Source: d, e, f

ELAEOCARPACEAE

Elaeocarpus reticulatus
Source: a, c, d

ERICACEAE

Acrotriche aggregata
Source: c, d
N Agiortia cicatricata
Source: c
Brachyloma daphnoides
Source: a, c
Brachyloma daphnoides subsp. daphnoides
Source: d, e, f
Brachyloma daphnoides subsp. Glabrum
Source: a
Epacris breviflora
Source: c, d
Epacris microphylla var. microphylla
Source: a, c, d
Epacris obtusifolia
Source: a, d
Leucopogon biflorus
Source: a, c, d

Leucopogon lanceolatus
Source: a, d
Leucopogon melaleucoides
Source: a, c, d
Leucopogon microphyllus
Source: a, c, d
Leucopogon microphyllus var. microphyllus
Source: a, c
Leucopogon muticus
Source: a, c, d
Leucopogon neoanglicus
Source: a, c, d
Lissanthe strigosa subsp. subulata
Source: a, c, d
Melichrus procumbens
Source: c, d
Melichrus urceolatus
Source: a, c, d
Monotoca scoparia
Source: a, c, d
Styphelia triflora
Source: a
Styphelia viridis subsp. Breviflora
Source: a, d
Trochocarpa laurina
Source: d

ERIOCAULACEAE

Eriocaulon scariosum
Source: c, d

EUPHORBIACEAE

Amperea xiphoclada var. xiphoclada
Source: a, d
V Bertya glandulosa
Source: a, c, d
E Bertya recurvata
Source: a, c
Homalanthus nutans
Source: c, d

FABACEAE

Aotus subglauca var. subglauca
Source: a, c, d
Bossiaea neoanglica
Source: a, c, d
Bossiaea obcordata
Source: d
Bossiaea rhombifolia subsp. Rhombifolia
Source: a, c, d
Bossiaea scortechinii
Source: a, c, d
Daviesia acicularis
Source: c, d
Daviesia elliptica
Source: d
Daviesia latifolia
Source: a, c, d
Daviesia umbellulata
Source: c, d
Daviesia wyattiana
Source: c, d
Desmodium rhytidophyllum
Source: c, d
Dillwynia phylicoides
Source: a, c, d
Dillwynia retorta
Source: d
Dillwynia sericea
Source: a, c, d
Dillwynia sieberi
Source: a, d
Glycine argyrea x G. clandestina
Source: c
Glycine clandestina
Source: c, d
Glycine tabacina
Source: c
Glycine tomentella
Source: c
Gompholobium aspalathoides
Source: a, c, d
Gompholobium latifolium
Source: a, c, d
Gompholobium uncinatum
Source: d, e, f
Hardenbergia violacea
Source: a, c, d
Hovea graniticola
Source: a, c
Hovea heterophylla
Source: a
Hovea linearis
Source: d

Hovea pedunculata
Source: a, c, d

Hovea planifolia
Source: d

Indigofera adesmiifolia
Source: a, c, d

Indigofera australis
Source: c, d

Jacksonia scoparia
Source: d

Kennedia rubicunda
Source: d

Lotus australis
Source: c, d

* Lotus corniculatus
Source: d

N Mirbelia confertiflora
Source: a, c, d

Mirbelia pungens
Source: a, c, d

Mirbelia rubiifolia
Source: a, c, d

Mirbelia speciosa subsp. speciosa
Source: a, d

Oxylobium arborescens
Source: a, c, d

Phyllota phylicoides
Source: a, d

Pultenaea daphnoides
Source: d

Pultenaea dentata
Source: a, c, d

Pultenaea flexilis
Source: a, d

Pultenaea foliolosa
Source: a, c, d

Pultenaea hartmannii
Source: a, c, d

Pultenaea paleacea
Source: a

N Pultenaea pycnocephala
Source: c, d

Pultenaea retusa
Source: d

Sphaerolobium minus
Source: a, c

Sphaerolobium vimineum
Source: d, e, f

Swainsona galegifolia
Source: a

Swainsona oroboides
Source: d

* Trifolium arvense
Source: c, d

* Trifolium repens
Source: c, d

* Trifolium repens var. repens
Source: a, c

Zornia dyctiocarpa
Source: d

GENTIANACEAE

* Centaurium erythraea
Source: c, d

GERANIACEAE

* Erodium cicutarium
Source: d

Geranium neglectum
Source: a, d

Geranium solanderi var. solanderi
Source: d

Pelargonium australe subsp. australe
Source: d, e, f

GOODENIACEAE

Dampiera ferruginea
Source: a

Dampiera purpurea
Source: a, d

Dampiera stricta
Source: a, c, d

Goodenia bellidifolia subsp. Argentea
Source: a, d

Goodenia glabra
Source: c, d

Goodenia hederacea subsp. hederacea
Source: a, c, d

Goodenia macbarronii
Source: a, d

Scaevola ramosissima
Source: a, c, d

Velleia paradoxa
Source: a, d

HAEMODORACEAE

Haemodorum planifolium
Source: a, d

HALORAGACEAE

Gonocarpus micranthus subsp. ramosissimus
Source: c, d
Gonocarpus oreophilus
Source: a, c, d
Gonocarpus tetragynus
Source: a, d
Gonocarpus teucrioides
Source: c, d
Haloragis heterophylla
Source: c, d
Myriophyllum crispatum
Source: a

HEMEROCALLIDACEAE

Dianella caerulea
Source: c
Dianella caerulea var. assera
Source: c, d
Dianella longifolia
Source: c, d
Dianella longifolia var. stenophylla
Source: d
Dianella revoluta
Source: c
Dianella revoluta var. revoluta
Source: a, d
Stypandra glauca
Source: a, c, d
Thelionema caespitosum
Source: d
N Thelionema grande
Source: a, d

HYPOXIDACEAE

Hypoxis hygrometrica var. villosisepala
Source: d

IRIDACEAE

Patersonia fragilis
Source: d
Patersonia glabrata
Source: a, c, d
Patersonia sericea var. sericea
Source: d

JOHNSONIACEAE

Tricoryne elatior
Source: c, d

JUNCACEAE

* Juncus articulatus
Source: d
* Juncus bufonius
Source: c, d
* Juncus cognatus
Source: a, c
Juncus continuus
Source: d
Juncus planifolius
Source: a, c, d
Juncus prismatocarpus
Source: d
Juncus subsecundus
Source: a(-)
Juncus vaginatus
Source: c
Luzula flaccida
Source: a

JUNCAGINACEAE

V Maundia triglochinoides
Source: d
Triglochin procerum
Source: a, c, d

LAMIACEAE

Ajuga australis
Source: d
Chloanthes parviflora
Source: a, d
Hemigenia cuneifolia
Source: a, c, d
Mentha diemenica
Source: c
* Mentha gracilis
Source: d

Plectranthus suaveolens
Source: a, c, d
Prostanthera lasianthos
Source: a, c, d
Prostanthera nivea
Source: d
Prostanthera phylicifolia
Source: a, c, d
Prostanthera saxicola
Source: a, c
Prostanthera saxicola var. major
Source: a, c, d
* Prunella vulgaris
Source: d
Scutellaria humilis
Source: d
Teucrium corymbosum
Source: a
N Westringia amabilis
Source: a, d

LAURACEAE

Cassytha filiformis
Source: c
Cassytha pubescens
Source: a, c, d, e, f

LAXMANNIACEAE

Arthropodium fimbriatum
Source: c, d
Arthropodium milleflorum
Source: d
Arthropodium minus
Source: d
Eustrephus latifolius
Source: c, d
Laxmannia compacta
Source: a, d
Lomandra confertifolia subsp. pallida
Source: c
Lomandra elongata
Source: c, d
Lomandra filiformis
Source: c
Lomandra filiformis subsp. filiformis
Source: c, d
Lomandra leucocephala subsp. leucocephala
Source: c, d
Lomandra longifolia
Source: c, d, e, f
Lomandra multiflora subsp. multiflora
Source: d, e, f
Thysanotus tuberosus
Source: d
Thysanotus tuberosus subsp. tuberosus
Source: a, c, e, f

LENTIBULARIACEAE

Utricularia biloba
Source: d
Utricularia dichotoma
Source: a, d
Utricularia gibba
Source: a
Utricularia uliginosa
Source: a, c

LINACEAE

Linum marginale
Source: a, c, d

LOGANIACEAE

Logania albiflora
Source: a, c, d
Mitrasacme paludosa
Source: a, c, d

LORANTHACEAE

Amyema cambagei
Source: c, d
Amyema miquelii
Source: c, d
Amyema pendula subsp. longifolia
Source: d
Muellerina bidwillii
Source: a, d
Muellerina eucalyptoides
Source: c, d

LYTHRACEAE

Lythrum hyssopifolia
Source: a, c, d

Lythrum salicaria
Source: a, c, d

MALVACEAE

* Modiola caroliniana
Source: e, f

* Pavonia hastata
Source: c, d

MENYANTHACEAE

Nymphoides geminata
Source: a, c, d

MIMOSACEAE

Acacia adunca
Source: a, c, d

Acacia adunca x A. neriifolia
Source: a, c

Acacia betchei
Source: a, c, d

Acacia brunioides
Source: c

Acacia brunioides subsp. granitica
Source: a, c, d

Acacia conferta
Source: c

Acacia falciformis
Source: a, c, d

Acacia filicifolia
Source: a, c, d

Acacia fimbriata
Source: c, d

Acacia floribunda
Source: a, c, d

Acacia granitica
Source: a, c, d

Acacia hispidula
Source: a, c, d

Acacia implexa
Source: c, d

Acacia irrorata subsp. irrorata
Source: c, d

Acacia juncifolia
Source: d

N Acacia latisepala
Source: a, c, d

Acacia myrtifolia
Source: a, c, d

Acacia neriifolia
Source: a, c, d

Acacia penninervis
Source: c

Acacia penninervis var. penninervis
Source: d

Acacia pruinosa
Source: a, c, d

V Acacia pubifolia
Source: a, c, d

Acacia rubida
Source: a, c, d

V Acacia ruppii
Source: a, c, d

Acacia stricta
Source: a, c, d

Acacia ulicifolia
Source: a, c, d

Acacia venulosa
Source: a, c, d

Acacia viscidula
Source: a, c, d

MORACEAE

Ficus rubiginosa forma rubiginosa
Source: c, d

MYRSINACEAE

* Lysimachia arvensis
Source: a, d, e, f

Myrsine howittiana
Source: a, d

Myrsine variabilis
Source: c, d

MYRTACEAE

Angophora floribunda
Source: c, d

Baeckea omissa
Source: a, c

V Baeckea trapeza
Source: d

Calytrix tetragona
Source: a, c, d

Eucalyptus andrewsii
Source: a, c, d

Eucalyptus banksii
Source: c, d

Eucalyptus biturbinata
Source: c, d

Eucalyptus blakelyi
Source: a, d

Eucalyptus bridgesiana
Source: a, d

Eucalyptus caleyi subsp. caleyi
Source: a, d

Eucalyptus caliginosa
Source: a, c, d

Eucalyptus campanulata
Source: c, d

Eucalyptus camphora subsp. camphora
Source: a, c, d

N Eucalyptus codonocarpa
Source: a, d

Eucalyptus dalrympleana subsp. heptantha
Source: a, c, d

Eucalyptus dealbata
Source: c, d

Eucalyptus deanei
Source: a, c, d

Eucalyptus interstans
Source: a, c

Eucalyptus laevopinea
Source: d

Eucalyptus melliodora
Source: c, d

Eucalyptus microcarpa
Source: d

Eucalyptus nova-anglica
Source: a, c, d

Eucalyptus obliqua
Source: c, d

Eucalyptus prava
Source: a, c, d

Eucalyptus radiata subsp. sejuncta
Source: a, c, d

Eucalyptus saligna subsp. saligna
Source: c, d

V Eucalyptus scoparia
Source: a, c, d

Eucalyptus williamsiana
Source: a, c, d

Eucalyptus youmanii
Source: a, c, d

Harmogia densifolia
Source: a, d

V Homoranthus papillatus
Source: a, d

E Kardomia granitica
Source: a, c

E Kardomia silvestris
Source: a, c, d

Kunzea bracteolata
Source: a, d

Kunzea ericoides
Source: a, d

Kunzea obovata
Source: a, d

Kunzea opposita
Source: c

Leptospermum arachnoides
Source: a, c, d

Leptospermum brachyandrum
Source: a, c, d

Leptospermum brevipes
Source: d

Leptospermum gregarium
Source: a, d

Leptospermum microcarpum
Source: a, c, d

Leptospermum minutifolium
Source: a, d

Leptospermum novae-angliae
Source: a, d

Leptospermum polygalifolium
Source: a, c, d

Leptospermum trinervium
Source: a, c, d

Melaleuca alternifolia
Source: d

N Melaleuca flavovirens
Source: a, d

Melaleuca linearis var. linearis
Source: a, c, d

Melaleuca pallida
Source: a, c, d

Melaleuca paludicola
Source: a

Melaleuca pityoides
Source: a, d

Melaleuca thymifolia
Source: d

V Melaleuca williamsii subsp. fletcheri
Source: a, c

Micromyrtus sessilis
Source: a, d

Sannantha angusta
Source: a

OLACACEAE

Olax stricta
Source: a, c, d

OLEACEAE

Notelaea linearis
Source: a, d

Notelaea longifolia forma longifolia
Source: a, c

Notelaea microcarpa
Source: c

Notelaea microcarpa var. velutina
Source: c, d

Notelaea ovata
Source: c

Notelaea venosa
Source: a, c, d

ONAGRACEAE

Epilobium billardierianum subsp. cinereum
Source: d

Epilobium billardierianum subsp. hydrophilum
Source: d

* Oenothera stricta subsp. stricta
Source: c, d

ORCHIDACEAE

Acianthus exsertus
Source: a, b, c, d

Bulbophyllum elisae
Source: a, b, c, d

Caladenia flaccida
Source: b

Caladenia tentaculata
Source: b, d

E Caladenia atroclavia
Source: a, b, d

Caladenia carnea
Source: b, d

Caladenia fuscata
Source: a, b, c

Caleana major
Source: b, c, d

Caleana minor
Source: a, b, c, d

Calochilus campestris
Source: b, c, d

Calochilus gracillimus
Source: a, b, c, d

Calochilus robertsonii
Source: a, b, d

Chiloglottis formicifera
Source: b

Chiloglottis diphylla
Source: a, b

Cryptostylis erecta
Source: a, b, c, d

Cryptostylis leptochila
Source: a, b, c, d

Cryptostylis subulata
Source: a, b, c, d

Cyanicula caerulea
Source: b

Cymbidium caniliculatum
Source: b, d

Cyrtostylis reniformis
Source: a, b, c, d

Dendrobium kingianum
Source: b, d

Dendrobium speciosum
Source: b, c, d

Dipodium punctatum
Source: a, b, c

Dipodium roseum
Source: b

Dipodium variegatum
Source: a, b, c, d

Diuris abbreviata
Source: a, b, c, d

Diuris chrysantha
Source: a, b, c, d

Diuris punctata
Source: b, d

Dockrillia linguiformis
Source: a, b, c, d

Dockrillia pugioniformis
Source: a, b, c, d
Eriochilus cucullatus
Source: a, b, c, d
Erythrorchis cassythoides
Source: a, b, d
Gastrodia sesamoides
Source: a, b, c, d
Genoplesium archeri
Source: a, b, c, d
Genoplesium fimbriatum
Source: a, b, c, d
Genoplesium rufum
Source: b, c, d
Genoplesium sagittiferum
Source: a, b, c
N Genoplesium sigmoideum
Source: a, b, c
Glossodia major
Source: a, b, c, d
Glossodia minor
Source: a, b, c, d
Lyperanthus suaveolens
Source: a, b, c, d
Microtis parviflora
Source: a, b, c, d
Orthoceras strictum
Source: a, b, d
Prasophyllum odoratum
Source: b, d
Prasophyllum flavum
Source: a, b, c, d
Pterostylis bicolor
Source: a, b, d
Pterostylis curta
Source: a, b, c, d
Pterostylis daintreana
Source: a, b, c, d
Pterostylis fischii
Source: b, d
Pterostylis hamata
Source: b
Pterostylis longicurva
Source: b, d
Pterostylis mitchellii
Source: b, c, d
Pterostylis mutica
Source: b
Pterostylis nutans
Source: a, b, c, d
Pterostylis obtusa
Source: b, c, d
Pterostylis parviflora
Source: b, d
Pterostylis pedunculata
Source: a, b, c, d
Pterostylis revoluta
Source: a, b, c, d
Pterostylis rufa
Source: a, b, c, d
Pterostylis stenosepala
Source: b
Pterostylis vitrea
Source: b
N Pterostylis woollsii
Source: a, b, c, d
Spiranthes sinensis
Source: a, b, d
Thelymitra carnea
Source: b, c, d
Thelymitra ixioides
Source: a, b, d
Thelymitra pauciflora
Source: a, b, d

OXALIDACEAE

* Oxalis corniculata
Source: e, f

PAPAVERACEAE

* Fumaria muralis subsp. muralis
Source: a, c

PHILYDRACEAE

Philydrum lanuginosum
Source: d

PHYLLANTHACEAE

Phyllanthus gunnii
Source: d
Phyllanthus mitchellii
Source: a
Phyllanthus occidentalis
Source: a, c

Poranthera corymbosa
Source: c, d
Poranthera microphylla
Source: a, c, d
Sauropus hirtellus
Source: c, d

PHYTOLACCACEAE

* Phytolacca octandra
Source: a, c, d

PICRODENDRACEAE

Micrantheum hexandrum
Source: a, c, d

PITTOSPORACEAE

Billardiera scandens
Source: c, d
Bursaria spinosa subsp. spinosa
Source: d, e, f

Cheiranthera borealis
Source: a, d
Pittosporum undulatum
Source: c, d
Rhytidosporum diosmoides
Source: d

PLANTAGINACEAE

Plantago debilis
Source: d
Plantago hispida
Source: c, d
* Plantago lanceolata
Source: c, d

POACEAE

Agrostis bettyae
Source: a, c, d
* Aira caryophyllea subsp. caryophyllea
Source: d
* Aira cupaniana
Source: d
Amphipogon strictus
Source: d
* Andropogon virginicus
Source: d
* Anthoxanthum odoratum
Source: a, c, d
Aristida caput-medusae
Source: d
Aristida gracilipes
Source: c
Aristida jerichoensis var. subspinulifera
Source: a, c, d
Aristida muricata
Source: d
Aristida ramosa
Source: a, c, d
Aristida warburgii
Source: d
Arundinella nepalensis
Source: c, d
Austrodanthonia racemosa
Source: d
Austrodanthonia racemosa var. racemosa
Source: a
Austrodanthonia tenuior
Source: d
Austrostipa aristiglumis
Source: c
Austrostipa rudis subsp. nervosa
Source: a, c, d
Austrostipa rudis subsp. rudis
Source: a, c, d
Austrostipa scabra subsp. scabra
Source: d
Austrostipa setacea
Source: d
* Avena ludoviciana
Source: d
* Briza maxima
Source: c, d
* Briza minor
Source: a, c, d
* Bromus catharticus
Source: d
Capillipedium parviflorum
Source: d
Chloris truncata
Source: c, d
Chloris ventricosa
Source: d
Chrysopogon fallax
Source: c

Cymbopogon obtectus
Source: c, d

Cymbopogon refractus
Source: c, d

Deyeuxia decipiens
Source: c, d

Deyeuxia gunniana
Source: c, d

Deyeuxia imbricata
Source: d

Deyeuxia parviseta
Source: a, c

Dichelachne inaequiglumis
Source: d

Dichelachne micrantha
Source: d

Dichelachne parva
Source: d

Dichelachne rara
Source: d

Digitaria breviglumis
Source: c, d

Digitaria ramularis
Source: a, c

Echinopogon caespitosus var. caespitosus
Source: a, c, d

Echinopogon intermedius
Source: c, d

Echinopogon ovatus
Source: c, d

* Eleusine tristachya
Source: c, d

Entolasia marginata
Source: d

Entolasia stricta
Source: a, c, d

Eragrostis brownii
Source: d

* Eragrostis curvula
Source: a, d

Eragrostis leptostachya
Source: c, d

* Eragrostis mexicana
Source: c, d

Eragrostis parviflora
Source: c, d

Eragrostis spartinoides
Source: a, d

Eremochloa bimaculata
Source: c, d

Eulalia aurea
Source: c, d

* Glyceria maxima
Source: d

Hemarthria uncinata
Source: c, d

Hierochloe rariflora
Source: c, d

* Holcus lanatus
Source: a

* Hordeum glaucum
Source: c, d

* Hyparrhenia hirta
Source: f

Imperata cylindrica
Source: a, c, d

Isachne globosa
Source: c, d

Lachnagrostis filiformis
Source: c, d

* Lolium perenne x L. rigidum
Source: c, d

Microlaena stipoides var. stipoides
Source: c, d

Notodanthonia longifolia
Source: a, c, d

Oplismenus imbecillis
Source: d

Panicum effusum
Source: c, d

Panicum obseptum
Source: d

Paspalidium gracile
Source: c, d

* Paspalum dilatatum
Source: c, d

Paspalum distichum
Source: c, d

* Poa annua
Source: c, d

Poa labillardierei var. labillardierei
Source: c, d

Poa sieberiana var. hirtella
Source: d

Poa sieberiana var. sieberiana
Source: a, c, d

* Rostraria cristata
Source: d
Sarga leiocladum
Source: c, d
* Setaria pumila
Source: d
Sporobolus elongatus
Source: c, d
Sylvipoa queenslandica
Source: d
Themeda triandra
Source: c, d, e, f
Tragus australianus
Source: c, d
Triodia mitchellii
Source: a, c, d
Tripogon loliiformis
Source: d
* Vulpia bromoides
Source: d
* Vulpia myuros
Source: d

POLYGALACEAE

Comesperma defoliatum
Source: d
Comesperma retusum
Source: a, c, d
Comesperma sphaerocarpum
Source: c, d
Comesperma sylvestre
Source: c, d
Polygala japonica
Source: c, d

POLYGONACEAE

* Acetosella vulgaris
Source: a, c, d
Muehlenbeckia costata
Source: c
Muehlenbeckia rhyticarya
Source: a, d
Rumex brownii
Source: a, c

PORTULACACEAE

Calandrinia eremaea
Source: a, c, d
Calandrinia pickeringii
Source: a, d
Portulaca bicolor
Source: d

POTAMOGETONACEAE

Potamogeton tricarinatus
Source: d

PROTEACEAE

Banksia integrifolia subsp. compar
Source: a, c, d
Banksia spinulosa var. neoanglica
Source: a, c, d
N Conospermum burgessiorum
Source: a, d
Conospermum taxifolium
Source: d
Grevillea juniperina subsp. allojohnsonii
Source: d
Grevillea viridiflava
Source: a, d
Hakea eriantha
Source: a, c, d
Hakea florulenta
Source: d
Hakea laevipes subsp. graniticola
Source: a, c, d
N Hakea macrorrhyncha
Source: a, c, d
Hakea microcarpa
Source: d
Isopogon petiolaris
Source: a, c, d
Lomatia silaifolia
Source: a, c, d
Persoonia cornifolia
Source: a, c, d
Persoonia cornifolia x P. tenuifolia
Source: c
N Persoonia daphnoides
Source: d

Persoonia falcata

Source: c

Persoonia sericea

Source: c, d

Persoonia tenuifolia

Source: a, c, d

Petrophile canescens

Source: a, d

QUINTINIACEAE

Quintinia sieberi

Source: a, d

RANUNCULACEAE

Clematis glycinoides

Source: a, d

Clematis microphylla

Source: d

Ranunculus inundatus

Source: d

Ranunculus lappaceus

Source: a, c, d

RESTIONACEAE

Baloskion fimbriatum

Source: a

Baloskion stenocoleum

Source: a, c, d

Empodisma minus

Source: c, d

Lepyrodia anarthria

Source: a, c, d

Lepyrodia leptocaulis

Source: a, c, d

RHAMNACEAE

Alphitonia excelsa

Source: c, d

Cryptandra amara

Source: a

Cryptandra amara var. amara

Source: a, c

Cryptandra amara var. floribunda

Source: a, d

N Cryptandra lanosiflora

Source: a, d

Pomaderris argyrophylla

Source: a, c, d

Pomaderris canescens

Source: a, c

Pomaderris graniticola

Source: a

Pomaderris lanigera

Source: a, c, d

Pomaderris lanigera var. (Mt Maroon L.S.Smith 12161)

Source: a(-)

Pomaderris ligustrina subsp. latifolia

Source: a(-)

Pomaderris nitidula

Source: d, e, f

Pomaderris prunifolia

Source: a, d

Pomaderris queenslandica

Source: d

Pomaderris vellea

Source: a, c

Spyridium scortechinii

Source: a, d

ROSACEAE

Acaena ovina

Source: d

* Rosa rubiginosa

Source: a, c, d

* Rubus anglocandicans

Source: a, c, d

Rubus parvifolius

Source: c, d

RUBIACEAE

Asperula conferta

Source: d

Galium gaudichaudii subsp. parviflorum

Source: c, d

Galium leptogonium

Source: c

Morinda jasminoides

Source: a, d

Opercularia hispida

Source: c, d

Pomax umbellata

Source: c, d

* Richardia brasiliensis
Source: e, f

* Richardia stellaris
Source: d

RUTACEAE

N Boronia amabilis
Source: a, c, d

Boronia anethifolia
Source: a, d

Boronia bipinnata
Source: c, d, e, f

E Boronia granitica
Source: a, c

Boronia inflexa subsp. grandiflora
Source: a

Boronia inflexa subsp. inflexa
Source: a, c

Boronia microphylla
Source: a, c, d

Boronia parviflora
Source: a, c

Boronia polygalifolia
Source: c, d

Correa reflexa var. reflexa
Source: a, d

Eriostemon australasius
Source: a, d

N Leionema ambiens
Source: a, d

Leionema ambiens x L. rotundifolium
Source: a, c

Leionema rotundifolium
Source: a, d

V Phebalium glandulosum subsp. eglandulosum
Source: a, d, f

Phebalium squamulosum subsp. squamulosum
Source: a, c, d, e, f

V Phebalium whitei
Source: a, d

Philotheca conduplicata
Source: a, d

Philotheca epilosa
Source: a, d

Zieria arborescens subsp. arborescens
Source: a, c

Zieria arborescens subsp. Glabrifolia
Source: a

Zieria aspalathoides subsp. aspalathoides
Source: a, d

Zieria compacta
Source: a, c, d

Zieria fraseri
Source: c

Zieria laevigata
Source: a, c, d

SANTALACEAE

Choretrum candollei
Source: a, c, d

Exocarpos cupressiformis
Source: a, c, d

Exocarpos strictus
Source: a, c, d

Santalum obtusifolium
Source: a, c, d

SAPINDACEAE

Dodonaea falcata
Source: a, c, d

V Dodonaea hirsuta
Source: a, d

Dodonaea triquetra
Source: a, c, d

Dodonaea viscosa subsp. spatulata
Source: c, d

SCROPHULARIACEAE

N Derwentia arenaria
Source: a, c, d

Euphrasia collina subsp. paludosa
Source: c, d

N Euphrasia orthocheila subsp. peraspera
Source: a, c, d

Gratiola peruviana
Source: d

Limosella australis
Source: c, d

* Verbascum thapsus subsp. thapsus
Source: a(-)

* Verbascum virgatum
Source: a, c

Veronica plebeia
Source: c, d

SMILACACEAE

Smilax australis
Source: d

SOLANACEAE

Cyphanthera albicans subsp. albicans
Source: a, c, d
Solanum amblymerum
Source: a, d
* Solanum chenopodioides
Source: a, c
Solanum cinereum
Source: c, d
Solanum ditrichum
Source: a
* Solanum nigrum subsp. nigrum
Source: d, f

STACKHOUSIACEAE

Stackhousia monogyna
Source: a, c, d
Stackhousia viminea
Source: a, c, d

STERCULIACEAE

Brachychiton populneus subsp. populneus
Source: d

STYLIDIACEAE

Stylidium debile
Source: d
Stylidium graminifolium
Source: a, c, d
Stylidium laricifolium
Source: a, c, d
Stylidium paniculatum
Source: a, c

THYMELAEACEAE

Pimelea linifolia
Source: a
Pimelea linifolia subsp. collina
Source: d
Pimelea linifolia subsp. linifolia
Source: a, c, d
Pimelea neoanglica
Source: a, d

ULMACEAE

Trema tomentosa var. aspera
Source: d

VERBENACEAE

* Verbena bonariensis
Source: c, d
Verbena gaudichaudii
Source: a, c

VIOLACEAE

Hybanthus monopetalus
Source: a, c, d
Viola betonicifolia subsp. betonicifolia
Source: a, c, d
Viola hederacea
Source: d

VISCACEAE

Notothixos subaureus
Source: a, c, d

VITACEAE

Cayratia clematidea
Source: c, d

WINTERACEAE

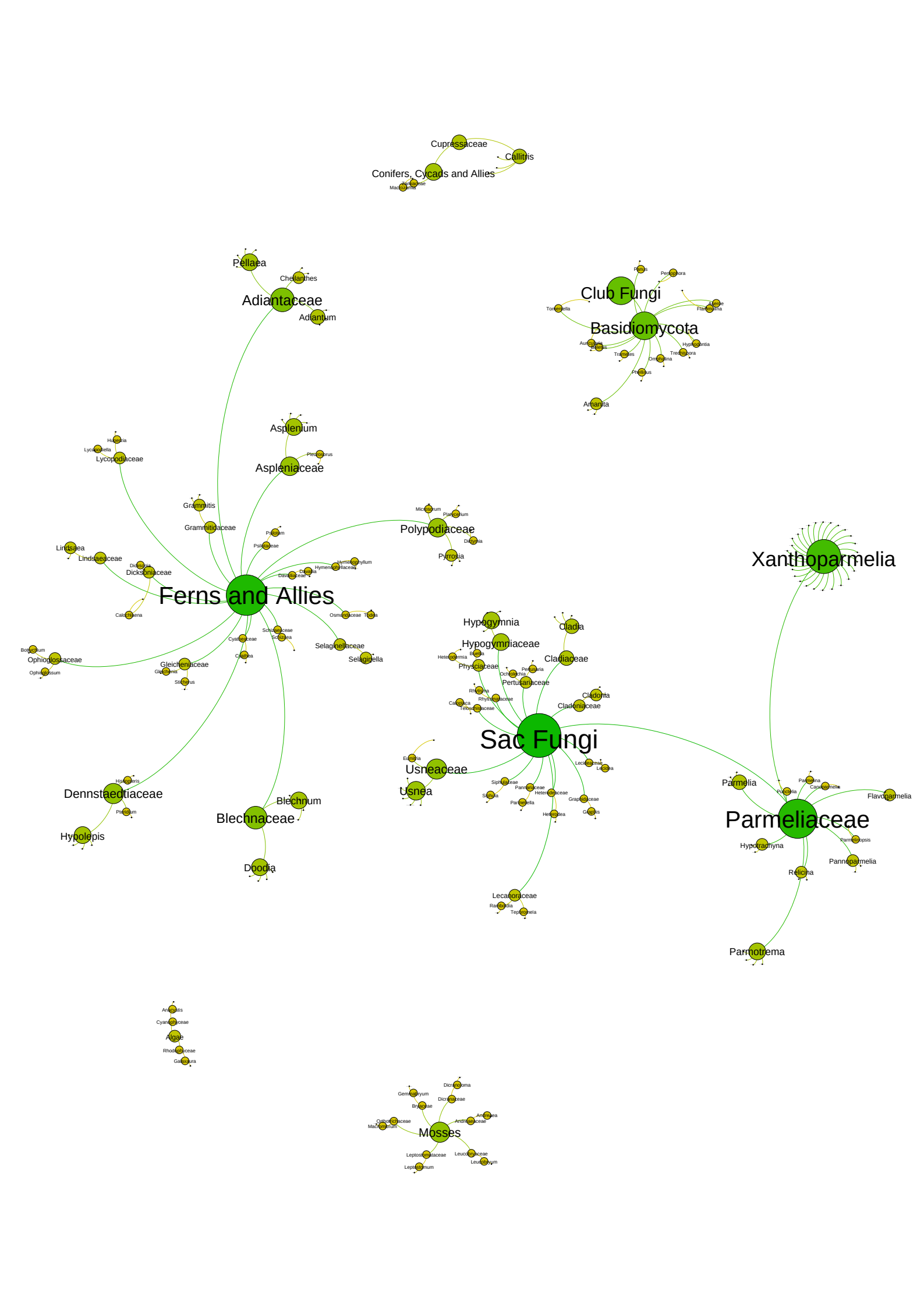
Tasmannia stipitata
Source: d

XANTHORRHOEACEAE

Xanthorrhoea johnsonii
Source: c, d, e, f
Xanthorrhoea latifolia
Source: d

XYRIDACEAE

Xyris complanata
Source: c


Cupressaceae
Callitris
Conifers, Cycads and Allies
Zamiaceae
Macrozamia
Pellaea
Cheilanthes
Adiantaceae
Adiantum
Club Fungi
Basidiomycota
Amanita
Asplenium
Pleurosorus
Aspleniaceae
Hupezia
Lycopodiella
Lycopodiaceae
Grammitis
Gramm itidaceae
Lindsaea
Lindsaeaceae
Dicksonia
Dicksoniaceae
Calochlaena
Ferns and Allies
Polypodiaceae
Microsorum
Platycerium
Pyrrosia
Davalliaceae
Hymenophyllaceae
Hymenophyllum
Osmundaceae
Todea
Schizaeaceae
Schizaea
Cyatheaceae
Cyathea
Selaginellaceae
Selaginella
Gleicheniaceae
Gleichenia
Sticherus
Botrychium
Ophioglossaceae
Ophioglossum
Dennstaedtiaceae
Histiopteris
Pteridium
Hypolepis
Blechnum
Blechnaceae
Doodia
Xanthoparmelia
Hypogymnia
Hypogymniaceae
Cladia
Cladoniaceae
Physciaceae
Heterodermia
Physcia
Pertusaria
Ochrolechia
Pertusariaceae
Rhizoplaca
Rhizocarpaceae
Cladonia
Caloplaca
Teloschistaceae
Sac Fungi
Usneaceae
Usnea
Eumitria
Sphaerophoraceae
Sphaerophorus
Parmeliaceae
Parmelia
Heterodermia
Graphidaceae
Graphis
Lecanoraceae
Rhizoplaca
Tephromela
Lecideaceae
Lecidea
Parmelia
Parmelina
Punctelia
Canoparmelia
Flavoparmelia
Parmeliaceae
Hypotrachyna
Parmeliopsis
Pannoparmelia
Relicina
Parmotrema
Anthoceros
Cyanophyceae
Algae
Rhodophyceae
Galdieria
Gemmabryum
Dicranaceae
Bryaceae
Orthotrichaceae
Macromitrium
Andreaeaceae
Andreaea
Mosses
Leptostomataceae
Leptostomum
Leucobryaceae
Leucobryum

CONIFERS, CYCADS AND ALLIES

CUPRESSACEAE

Callitris endlicheri
Source: a, c, d

N Callitris monticola
Source: a, c, d

Callitris rhomboidea
Source: a, c, d

ZAMIACEAE

E Macrozamia viridis
Source: a, c, d

FERNS AND ALLIES

ADIANTACEAE

Adiantum aethiopicum
Source: a, c, d

Adiantum hispidulum
Source: d

Adiantum hispidulum var. hispidulum
Source: a

Cheilanthes distans
Source: d

Cheilanthes sieberi
Source: d

Pellaea calidirupium
Source: a, c

Pellaea falcata
Source: d

Pellaea nana
Source: d

Pellaea paradoxa
Source: c, d

ASPLENIACEAE

Asplenium australasicum
Source: d

Asplenium flabellifolium
Source: a, c, d

Asplenium flaccidum subsp. flaccidum
Source: a, c, d

Asplenium polyodon
Source: a, c, d

Pleurosorus rutifolius
Source: a, c, d

BLECHNACEAE

Blechnum cartilagineum
Source: a, c, d

Blechnum minus
Source: d

Blechnum nudum
Source: a, c, d

Blechnum patersonii
Source: a, c, d

Doodia aspera
Source: a, c, d

Doodia australis
Source: d

Doodia caudata
Source: d

Doodia media
Source: a, c, d

CYATHEACEAE

Cyathea australis
Source: a, d

DAVALLIACEAE

Davallia pyxidata
Source: a, d

DENNSTAEDTIACEAE

Histiopteris incisa
Source: a, c, d

Hypolepis glandulifera
Source: a, c, d

Hypolepis muelleri

Source: a, c

Hypolepis muelleri x H. rugosula

Source: a

Hypolepis rugosula

Source: a, c

Pteridium esculentum

Source: d, e, f

DICKSONIACEAE

Calochlaena dubia

Source: c, d

Dicksonia antarctica

Source: a

GLEICHENIACEAE

Gleichenia dicarpa

Source: a, c, d

Sticherus flabellatus var. flabellatus

Source: a, d

GRAMMITIDACEAE

Grammitis billardierei

Source: a, d

Grammitis stenophylla

Source: a

HYMENOPHYLLACEAE

Hymenophyllum cupressiforme

Source: a, c, d

LINDSAEACEAE

Lindsaea linearis

Source: c, d

Lindsaea microphylla

Source: c, d

LYCOPODIACEAE

V Huperzia varia

Source: a, c, d

Lycopodiella lateralis

Source: a, c, d

OPHIOGLOSSACEAE

Botrychium australe

Source: c, d

Ophioglossum lusitanicum

Source: a, c, d

OSMUNDACEAE

Todea barbara

Source: c, d

POLYPODIACEAE

Dictymia brownii

Source: a, d

Microsorum scandens

Source: a, c, d

Platycerium bifurcatum

Source: c, d, e, f

Pyrrosia confluens

Source: c, d

Pyrrosia rupestris

Source: a, d

PSILOTACEAE

Psilotum nudum

Source: c, d

SCHIZAEACEAE

Schizaea bifida

Source: a, c, d

SELAGINELLACEAE

Selaginella sp.

Source: c

Selaginella uliginosa

Source: a, c, d

MOSSES

ANDREAEACEAE

Andreaea mutabilis
Source: a

BRYACEAE

Gemmabryum subapiculatum
Source: a

DICRANACEAE

Dicranoloma menziesii
Source: a

LEPTOSTOMATACEAE

Leptostomum erectum
Source: c

LEUCOBRYACEAE

Leucobryum sp.
Source: c

ORTHOTRICHACEAE

Macromitrium hemitrichodes
Source: a, c

CLUB FUNGI

BASIDIOMYCOTA

Amanita pallidofumosa
Source: c
Amanita sp.
Source: e, f
Aseroe rubra
Source: e, f
Auricularia auriculajudae
Source: c
Boletus magnificus
Source: e, f
Flammulina velutipes
Source: e, f
Hyphodontia australis
Source: c
Omphalina sp.
Source: e, f
Panus fasciatus
Source: e, f
Peniophora sp.
Source: c
Phellinus sp.
Source: e, f
Tomentella sp.
Source: c
Trametes versicolor
Source: e, f
Trechispora sp.
Source: c

SAC FUNGI

CLADIACEAE

Cladia aggregata
Source: c
Cladia corallaizon
Source: c
Cladia retipora
Source: c

CLADONIACEAE

Cladonia praetermissa var. praetermissa
Source: c
Cladonia sp.
Source: c

GRAPHIDACEAE

Graphis duplicata
Source: c

HETERODEACEAE

Heterodea muelleri
Source: c

HYPOGYMNIACEAE

Hypogymnia billardierei
Source: c
Hypogymnia subphysodes var. subphysodes
Source: c
Hypogymnia tubularis
Source: c
Hypogymnia turgidula
Source: c

LECANORACEAE

Ramboldia sanguinolenta
Source: c
Tephromela korundensis
Source: c

LECIDEACEAE

Lecidea sp.
Source: c

PANNARIACEAE

Parmeliella sp.
Source: c

PARMELIACEAE

Canoparmelia norpruinata
Source: c
Flavoparmelia haysomii
Source: c
Flavoparmelia rutidota
Source: c
Hypotrachyna immaculata
Source: c
Hypotrachyna osseoalba
Source: c
Pannoparmelia angustata
Source: c
Pannoparmelia wilsonii
Source: c
Parmelia erumpens
Source: c
Parmelia pseudotenuirima
Source: c
Parmelia signifera
Source: c
Parmelina pseudorelicina
Source: c
Parmelinopsis horrescens
Source: c
Parmotrema praesorediosum
Source: c
Parmotrema reticulatum
Source: c
Parmotrema subsumptum
Source: c
Parmotrema tinctorum
Source: c
Punctelia pseudocoralloidea
Source: c
Relicina limbata
Source: c
Relicina sydneyensis
Source: c
Xanthoparmelia adusta
Source: c
Xanthoparmelia amplexula
Source: c
Xanthoparmelia australasica
Source: c
Xanthoparmelia flavescentireagens
Source: c
Xanthoparmelia furcata
Source: c
Xanthoparmelia glabrans
Source: c
Xanthoparmelia isidiigera
Source: c
Xanthoparmelia metamorphosa
Source: c
Xanthoparmelia mexicana
Source: c
Xanthoparmelia mongaensis
Source: c
Xanthoparmelia mougeotina
Source: c
Xanthoparmelia murina
Source: c
Xanthoparmelia neoquintaria
Source: c
Xanthoparmelia neorimalis
Source: c
Xanthoparmelia neotinctina
Source: c

Xanthoparmelia notata
Source: c
Xanthoparmelia parviloba
Source: c
Xanthoparmelia pertinax
Source: c
Xanthoparmelia rogersii
Source: c
Xanthoparmelia rubrireagens
Source: c
Xanthoparmelia scotophylla
Source: c
Xanthoparmelia sp.
Source: c
Xanthoparmelia streimannii
Source: c
Xanthoparmelia subnuda
Source: c
Xanthoparmelia subspodochroa
Source: c
Xanthoparmelia substrigosa
Source: c
Xanthoparmelia tasmanica
Source: c

PERTUSARIACEAE

Ochrolechia africana
Source: c
Pertusaria sp.
Source: c

PHYSCIACEAE

Buellia demutans
Source: c
Heterodermia speciosa
Source: c

RHYTISMATACEAE

Rhytisma sp.
Source: e, f

SIPHULACEAE

Siphula coriacea
Source: c

TELOSCHISTACEAE

Caloplaca sp.
Source: c

USNEACEAE

Eumitria baileyi
Source: c
Usnea dasaea
Source: c
Usnea inermis
Source: c
Usnea molliuscula subsp. queenslandica
Source: c
Usnea scabrida subsp. elegans
Source: c
Usnea subeciliata
Source: c

ALGAE

CYANOPHYCEAE

Anacystis montana
Source: a, c

RHODOPHYCEAE

Galaxaura rugosa
Source: c

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Map: Locality and study area

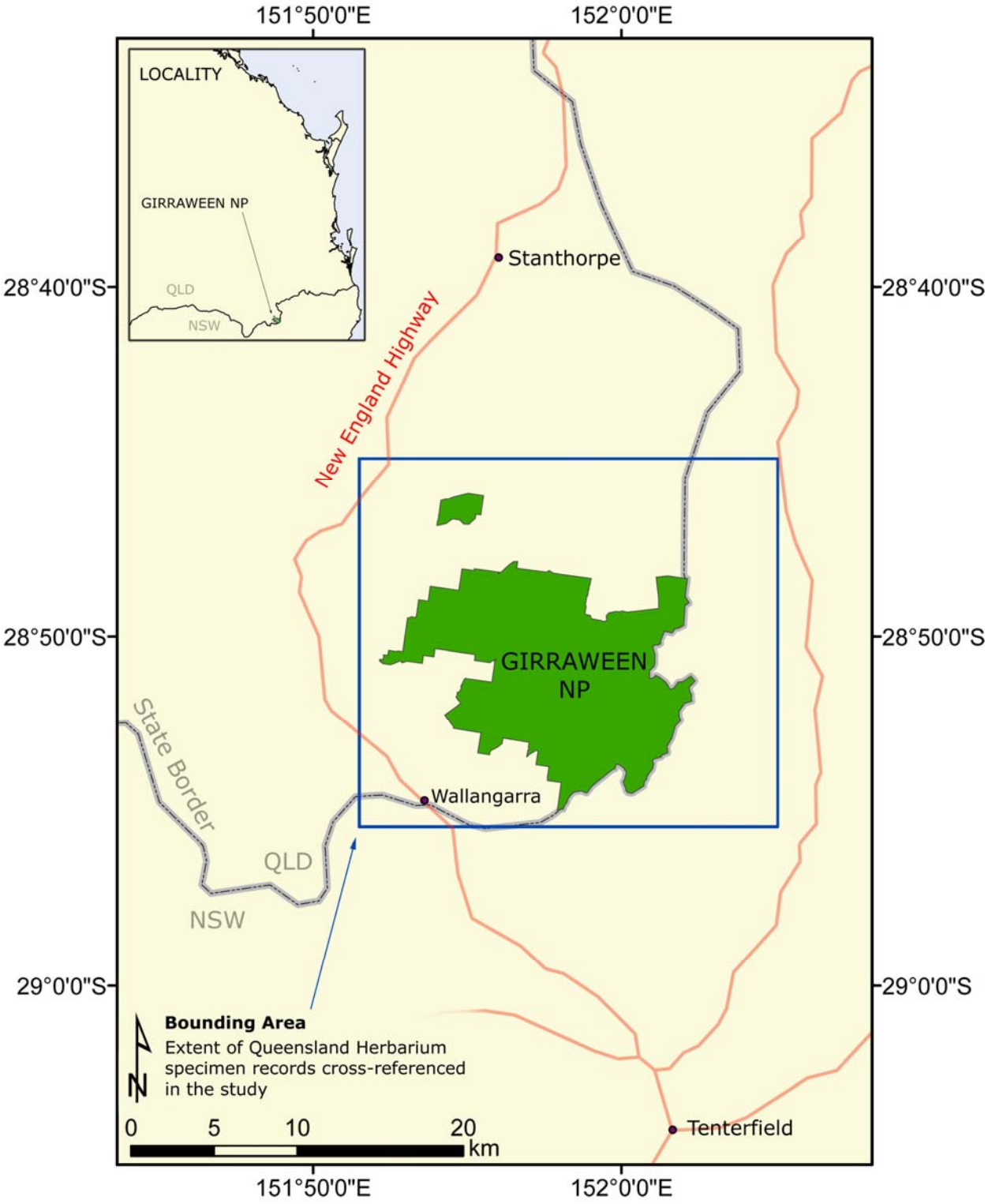

Figure 5 Locality and study area

Note: This map is approximate and for illustrative purposes only

Data packages used: General Purpose Map Major Road Network Queensland; Protected Areas of Queensland

Index to Plant Groups, Families and Genera

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