



Introduction to the Census of the Queensland Flora 2014

Queensland Herbarium

2014 Version 1.1

Prepared by

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3 October 2014

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About the Queensland Herbarium collections

The Queensland Herbarium houses the state's flora collections, comprising more than 830,000 specimens, and associated data, of mainly Queensland species of plants, fungi and algae. Botanists and members of the public contribute thousands of specimens to the herbarium collection each year, representing new species records and a new distribution records for both native and naturalised species. Specimens are mostly pressed and dried, mounted on cardboard sheets. Some bulky specimens are stored in boxes or paper bags, and some delicate specimens are stored in preserving liquid. Each specimen is labelled with the collector, collector's number, date of collection, location and habitat, and the plant's features such as bark and flower colour. This information is recorded in a database HERBRECS, available through [Wildlife Online](#) and [Australia's Virtual Herbarium](#) and summarised in the census lists.

A manual explaining [how to collect plant specimens](#) is available (Bean 2013). Algae and fungi require specialist processing, please contact us for further information on these groups.

Significance of the collections

The Queensland Herbarium specimen collections are fundamental and irreplaceable materials and data sources used to document the flora and vegetation of Queensland. They are essential for: i) taxonomy and the application of scientific names to plants; ii) species discovery, identification and distribution; iii) conservation planning and management; iv) ecology and biology; v) biodiversity; vi) state legislation (Vegetation Management Act, Nature Conservation Act, Land Protection Act, Environmental Protection Act); vii) weed identification and ecology; viii) forensic botany; ix) agriculture; x) ethnobotany; xi) anatomy and molecular biology; xii) teaching and education.

Type specimens

A type specimen is a specimen assigned by a taxonomist to be the reference point/material for the application of a scientific name. All species with a scientific name have type material, usually a plant specimen held in a Herbarium. The Queensland Herbarium holds 9,750 type specimens and images of the majority of these are available on line at [JSTOR](http://plant.jstor.org) (<http://plant.jstor.org>) as part of the Global Plants Initiative. Newly discovered species have to be published under international rules that standardise botanical name usage across the world (McNeil et al. 2012), and all must have assigned a type specimen housed in a Herbarium.

Voucher specimens

Scientists using plants in their research are usually required to deposit voucher specimens in a herbarium as a permanent and verifiable record of the plant sampled. Please contact us before collecting voucher specimens to find out what plant specimen quality and information is required.

Census of the Queensland flora

The census provides an authoritative published list of all the known native and naturalised species of plants, algae, fungi and lichens in Queensland, updated from the previous census (Bostock & Holland 2013). In addition, separate listings of the naturalised and doubtfully naturalised flora are presented. Species that are only present in cultivation are not included in any of the census lists.

The names of all native and naturalised species, subspecies, varieties, forms and hybrids known to occur in Queensland are listed, generated from the Queensland Herbarium specimen information database (HERBRECS) as at 1 September 2014. These records are primarily based on the Queensland Herbarium specimen collections representing 244 years of verified specimen data.

2014 presentation

The *Census of the Queensland Flora 2014* lists are provided in both xls format on the open data portal, and pdf format available through the [library catalogue](#). The census lists include current names, distributions (pastoral districts) and status of all currently known Queensland plants, algae, fungi and lichens (see definitions below).

A list of name and status changes from the 2013 census (Bostock & Holland 2013) is provided in Appendix A.

All combined records: Names, distributions and status of Queensland plants, algae, fungi, lichens and cyanobacteria combined into one list.

Vascular plants (Plantae): Queensland native and naturalised flowering plants, conifers, cycads and ferns.

Non-vascular plants (Plantae): Queensland mosses, liverworts and hornworts.

Green and red algae (Plantae): Queensland green and red algae.

True algae (Chromista): Queensland Chromista.

Macrofungi (Fungi): Queensland macrofungi (microfungi are excluded).

Lichens (Fungi): Queensland lichens.

Bacteria (Cyanobacteria only): Queensland cyanobacteria.

Naturalised plants: non-native plants that have become naturalised in Queensland.

Native plants naturalised: native Queensland plants that have naturalised outside of their native range.

Formerly naturalised plants: plants that have previously been naturalised in Queensland, but have not persisted.

Doubtfully naturalised plants: plants with populations occurring outside of cultivation, but that are not yet considered to be naturalised (established) in Queensland.

Full data set (new): The full data set includes the botanical names broken down into parts (genus, species etc.), names with and without authors and botanical classification number (unique identifier for each name).

The **Plantae** (green plants) comprise vascular plants (flowering plants, conifers, cycads, ferns and fern allies), and non-vascular plants (mosses, liverworts, hornworts, green algae and red algae). **True algae** include brown algae and some related groups, together with diatoms (Chromista). **Bacteria** are here restricted to the cyanobacteria, previously called blue-green algae. More information on the classification of these groups is given below.

The districts used are the Pastoral Districts of Queensland as outlined on maps issued by the former Survey Office of the Department of Natural Resources, Brisbane, based on State Map 4a. Specimen counts are given for each Queensland district, together with regional (non-Queensland) counts where applicable. Queensland collections not identifiable to a district are recorded under "QLD". Explanatory maps are provided for World regions (Map 1), and Australian States and Territories and Queensland pastoral districts (Map 2), at the end of this document. Note that districts of Queensland, normally abbreviated as 2 letters e.g. MO for Moreton, have been prefaced by a capital Q in the spreadsheets, to distinguish them from other regions e.g. QWA for Warrego, Qld and WA for Western Australia.

Where species and infraspecific taxa are recognised to exist, but not yet formally described, a temporary phrase name is provided e.g. *Tephrosia* sp. (Barkly Downs S.L. Everist 3384). Taxa that are known to occur in Queensland but which are only represented by verified specimen(s) held at another herbarium are given a value of "0" (zero). Species are listed alphabetically by family and genus in pdf documents.

Native status

Native species are here defined as those that are considered to have evolved in Queensland unaided by humans, or have migrated to and persisted in Queensland without assistance from humans, from an area in which they are considered native. The conservation status (X = Extinct in the wild, E = Endangered, V = Vulnerable or N = Near Threatened) is as recorded in the Queensland [Nature Conservation Act 1992](#) for species listed in the [Nature Conservation \(Wildlife\) Regulation 2006](#) (as at 9 May 2014). The remaining native plant species have a conservation status of Least Concern and these are not marked with a symbol in the status column.

Non-native status

Naturalised species are here defined as those that are considered to have established populations outside of their native range, by reproducing there without cultivation or other human intervention. Naturalised species are indicated by an asterisk (*) in the status column. Queensland native plants that have become naturalised in a pastoral district outside their native range are also recorded in a separate list.

There are separate census lists for naturalised (*), doubtfully naturalised (D) and formerly naturalised plant species (!). Formerly naturalised species are those that were previously considered naturalised, but are presumed to have disappeared from the landscape (not collected for more than 50 years). Doubtfully naturalised species have populations that may be in the early stages of naturalisation and not yet established in the landscape, or their continued existence in the landscape may be doubtful, for example where the entire Queensland population has been subject to an eradication program. Adventive plants or weeds appearing only in gardens and other cultivated situations are not considered to be either doubtfully naturalised or naturalised. Plants known only from cultivation are excluded from all lists.

Many naturalised and doubtfully naturalised species pose a threat to natural ecosystems, agriculture and grazing lands. More than 80 species are listed as declared pests under the

[Biosecurity Act 2014](#) as currently listed in the [Land Protection \(Pest and Stock Route Management\) Regulation 2003](#) (as at 1 July 2014).

Botanical names

The botanical names used in these census lists comply with the rules of the [International Code of Nomenclature of Algae, Fungi and Plants \(Melbourne Code\)](#) (McNeill *et al.* 2012) and the [International Code of Nomenclature for Cultivated Plants](#) (Brickell *et al.* 2009). Author abbreviations follow Brummitt and Powell (1992) and are also available from the [International Plant Names Index](#). Names at the level of Kingdom and Phylum follow Cavalier-Smith (2004).

Data limitations

These census lists are a snapshot of the flora of Queensland as at 1 September 2014, reflecting the scientific names and distribution of Queensland plants, algae, cyanobacteria, lichens and macrofungi in the State of Queensland based primarily on the Queensland Herbarium collections. Other Australian herbarium collections holding Queensland plant data are not included, but see comment above regarding species not represented by a [Queensland Herbarium specimen](#). Additional locations from other herbaria may be accessed from [Australia's Virtual Herbarium](#).

Readers may submit specimen collections to fill obvious distribution gaps, but are requested to please contact us first, and find out how to collect herbarium specimens. Bryophytes, algae, lichens and fungi usually require additional processing, and it is recommended that you first contact a specialist curator or technician before collecting these organisms. Note that a permit is required for collecting activities on state lands or where listed threatened species are involved.

Queensland flora statistics 2014

The Queensland native flora is currently represented by 14,174 native species across all groups, nearly double the number listed by Bailey in 1913 (7,781 species), with 98 additional species added since the last census (Bostock & Holland 2013). Of these, 1,006 species are currently listed as threatened: Endangered (E) or Vulnerable (V), Near Threatened (NT) or Extinct in the wild (X). The remaining native species are listed as Least Concern (no symbol in the census lists).

There are currently 1,303 non-native species that are known to have become naturalised (*) in Queensland since European contact. The naturalised flora of Queensland has been increasing at the rate of approximately 10 species per year for more than 100 years according to Queensland Herbarium records, and now represents about 15% of the total vascular flora species. A further 356 species are considered to be doubtfully naturalised (D). In addition, 22 native Queensland species are recorded here as naturalised outside of their native range.

In Queensland, 93 non-native species previously considered to be naturalised have now disappeared from the landscape (not collected for more than 50 years) and are therefore not considered to be naturalised at the present time, here listed as formerly naturalised (!).

One hundred years of flora species discovery is summarised in **Table 1**. Census data over the last 20 years is summarised in **Figure 1**.

Table 1. Statistics—number of species

Kingdom & Group	2014	2013	2010	2007	2002	1997	1994	1913 (Bailey)
Plantae: Angiosperms (flowering plants)								
Native	8,098	8,078	8,005	7,901	7,677	7,512	7,252	4,626
Naturalised	1,284	1,262	1,241	1,175	1,066	1,001	910	297
Subtotal	9,382	9,340	9,246	9,076	8,743	8,513	8,162	4,923
Plantae: Gymnosperms (conifers, cycads and allies)								
Native	64	64	62	62	59	60	54	29
Naturalised	6	6	6	6	3	3	3	0
Subtotal	70	70	68	68	62	63	57	29
Plantae: Pteridophytes (ferns and allies)								
Native	383	381	381	381	377	374	375	233
Naturalised	11	11	11	10	10	7	5	0
Subtotal	394	392	392	391	387	381	380	233
Plantae: Non-vascular plants								
Mosses (Bryophyta)	558	561	555	556	574	595	not listed	360
Liverworts & hornworts	442	437	421	411	315	not listed	not listed	113
Algae (Plantae, Chromista and Cyanobacteria)								
Algae	1,558	1,555	1,505	1,433	1,011	1,004	not listed	718
Fungi								
Lichens	1,988	1,962	1,888	1,742	1,558	1,370	not listed	828
Native Macrofungi	1,083	1,036	1026	not listed	not listed	not listed	not listed	874
Naturalised fungi	2	2						

Kingdom & Group	2014	2013	2010	2007	2002	1997	1994	1913 (Bailey)
Totals								
Total native	14,174	14,076	—	—	—	—	—	7,781
Total naturalised	1,303	1,279	1,258	1,191	1,079	1,011	918	297
Overall total native and naturalised	15,477	15,355	—	—	—	—	—	8,078

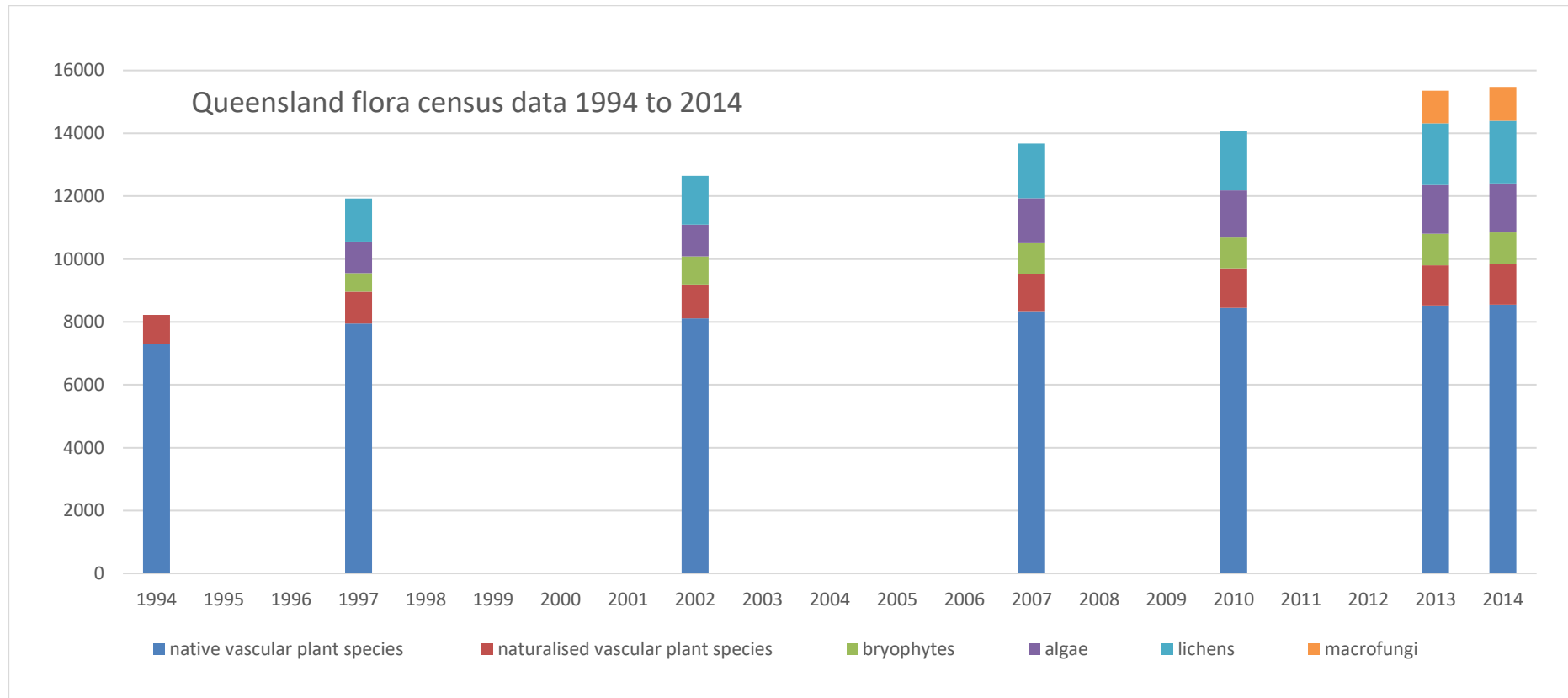


Figure 1. Census of the Queensland flora statistics 1994 to 2014

Plantae: vascular plants

Vascular plants are those that have distinct vascular tissue (xylem and phloem), as opposed to the non-vascular plants (see below). They are considered to have evolved from a single freshwater green algal ancestor, and now include around 250,000 species worldwide. The flowering plants (angiosperms) are the largest group, but Queensland also has many native conifers and cycads (gymnosperms) and ferns (pteridophytes). The classification presented here generally follows that of the [Australian Plant Census](#) and the [Angiosperm Phylogeny Group III](#), with some exceptions.

Queensland's 8,545 native vascular plant species represent about half of the known Australian vascular flora. More than one third of these species are endemic, that is they are only found in Queensland. New flora species are still being discovered and described in Queensland at the rate of over 50 species a year. Queensland has a wide diversity of [regional ecosystems](#), over 1,380, and includes some unique habitats such as lowland tropical rainforests and desert dune systems. Queensland is also the Australian centre of diversity for several iconic plant groups such as the cycads and zamia palms (44 species) and the ferns and fern allies (383 species).

The two largest families of vascular plants in Queensland are the grasses (Poaceae) and the myrtles and eucalypts (Myrtaceae) each with more than 600 species; these two families dominate many ecosystems. The next largest families are the legumes (Fabaceae) and the orchids (Orchidaceae) each with more than 400 species. The family with the most naturalised species is again the grasses (Poaceae, 181 species), followed by the daisies (Asteraceae, 137 species) and the legumes (Fabaceae, 129 species).

Ailsa Holland

Plantae: non-vascular plants—bryophytes

“Bryophyte” is a collective term for three distinct lineages of non-vascular land plants within the Kingdom Plantae: mosses (Bryophyta), liverworts (Marchantiophyta) and hornworts (Anthocerotophyta). The three lineages are grouped together because of shared traits, primarily small stature, lack of vascular tissue, and a life cycle including a sporophyte (diploid spore producing phase), and a dominant gametophyte (haploid sexual phase which is the most easily seen form). From an evolutionary viewpoint, the bryophytes mark the transition from aquatic to terrestrial environments and are considered the closest modern relatives of terrestrial plants but the classification and relationships of the three lineages is still debated. There are an estimated 20,000 species worldwide with approximately 1,800 occurring in Australia. With approximately 1,000 known species occurring in Queensland, the Bryophytes are the second-most diverse group of land plants after the angiosperms.

In Queensland, bryophytes occupy a diverse range of habitats from arid environments through to tropical rainforests. They are often among the first species to colonise exposed surfaces such as road cuttings, and along with cyanobacteria, lichens and algae, they are a critical component of the biological crusts which bind the soil surface in semi-arid to arid areas.

The true mosses (Bryophyta) are the most diverse group, and generally have leaves spirally arranged around the stem and usually have a mid-rib (costa). Mosses are generally erect in form and are attached to the substrate via root-like structures (rhizoids).

Liverworts (Marchantiophyta) may be either flat (thallose) or leafy and superficially resemble mosses but leaves lack a mid-rib. Many species grow on other plants, especially in high-rainfall forests and are important as habitats for invertebrates and in regulating forest hydrology.

Hornworts (Anthocerotophyta) have distinctive elongated sporophytes that split longitudinally to release the spores, while the gametophytes are flat. Most species are terrestrial, growing on moist earthen banks or in gaps between ground covers. One genus (*Dendroceros*) is epiphytic, growing on rough barked trees in rainforests.

The bryophyte flora of Queensland is far from complete with many areas undersurveyed. However, with more identification resources readily available, such as Australian Mosses Online, and well-illustrated field guides, a greater understanding of the bryophyte diversity and distribution in Queensland will be possible.

Andrew Franks, Ross Patterson

Algae

Algae and Cyanobacteria (blue-green algae) have traditionally been grouped together based on their ability to undertake photosynthesis in aquatic environments. Unlike land plants which evolved from a common ancestor, different lineages of algae have evolved separately in aquatic environments over the last three billion years. These different evolutionary histories are reflected in the current classification scheme which assigns 'algal' species to four of the six Kingdoms of Life on Earth: cyanobacteria (Bacteria), red and green algae (Plantae), euglenoids and dinoflagellates (Protozoa, not covered in this census) and the brown algae, diatoms and several other phyla (Chromista, algae in the narrow sense). The classification of the 'algae' has changed markedly over the last fifty years and is expected to undergo further revisions as new species are discovered and more intensive studies generate new data. The arrangement of the kingdoms and their constituent cyanobacterial and algal species in this census follows Cavalier-Smith (2004).

Globally, there are approximately 34,000 described species of cyanobacteria and algae, but this is probably only a tenth of the species still waiting to be discovered. These organisms play an important role in aquatic ecosystems underpinning food webs including those supporting commercial fisheries, contributing to global carbon, nitrogen and sulphur cycles, stabilizing sediments to improve water quality and providing habitat for many other species.

Julie Phillips, Glenn McGregor

Fungi: macrofungi

Fungi are an important part of ecosystem processes. The roles of different fungi include decomposers that recycle nutrients, mycorrhizal fungi that are associated with plant roots and assist water and nutrient absorption, and the disease fungi such as myrtle rust which attack their hosts. Many fungi are important food sources for native animals.

Fungi appear in the fossil record at around the same time as plants and animals. The macrofungi recorded here include those with larger, more visible fruiting bodies, and are mainly decomposers or mycorrhiza. Two groups are included in this census, reflecting the majority of fungal collections: the sac fungi (Ascomycetes), and the club fungi (Basidiomycetes). The sac fungi are recognized by the typical ascus (plural asci), a cup or sac usually containing eight sexually-produced spores. These include the cup fungi, morels, truffles and most lichens. Club fungi are recognised by their distinctive basidium (plural basidia), or club shaped cells, which usually bear sexually-produced

spores in groups of four. They include the mushrooms, puffballs, coral fungi, bracket fungi and many other forms.

The fungal biodiversity of Queensland is still largely unknown and the classification of fungi is undergoing rapid changes due to the results of molecular studies. Recent surveys in south-eastern Queensland have shown that more than 70% of fungi species in this area are new to science. The Queensland Herbarium and the Queensland Mycological Society are actively involved in discovering and documenting the fungi flora.

Two species are known to be non-native naturalised in Queensland.

Nigel Fechner, Megan Prance

Fungi: lichens

The lichens are a group of organisms characterised by a symbiotic relationship between a fungus and a photobiont (photosynthetic organism). The photobiont is usually a green alga or a cyanobacterium (blue-green alga). The fungus is almost always a sac fungus (Ascomycete) but may also be a club fungus (Basidiomycete). About 40% of sac fungi are lichenized. Lichens are considered to be ancient in origin, appearing in the earliest known land floras.

A lichen name is strictly applicable to the fungal component only, the photobiont being classified separately. Most of the green-algal photobionts are not known to occur outside of lichens and many show genetic adaptation to the lichen life-style. Lichenization has occurred at least five times within the Ascomycota and several times in the Basidiomycota.

About half of the known Australian lichens occur in Queensland, with many more yet to be discovered, especially in central and northern Queensland. The Queensland Herbarium and the Queensland Mycological Society are actively involved in discovering and documenting the lichen flora.

Rod Rogers

Useful references and web resources

Australia Biological Resources Study (2014). Australian Mosses Online.

http://www.anbg.gov.au/abrs/Mosses_online/index.html

Australian Plant Census, IBIS database, Centre for Australian National Biodiversity Research, Council of Heads of Australasian Herbaria, <http://www.chah.gov.au/apc/index.html>

Australian Plant Name Index, IBIS database, Centre for Australian National Biodiversity Research, Australian Government, Canberra <http://www.cpbr.gov.au/cgi-bin/apni>

Australia's Virtual Herbarium, Council of Heads of Australasian Herbaria <http://avh.ala.org.au>

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- The International Plant Name Index. <http://www.ipni.org>
- USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. <http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl?language=en>

Contributors

[*= Queensland Herbarium honorary research associate or external contributor]

Flowering Plant families (Angiosperms)

Bean, A.R.: Acanthaceae, Amaranthaceae, Apiaceae, Balsaminaceae, Caprifoliaceae, Chrysobalanaceae, Cleomaceae, Hydatellaceae, Hydroleaceae, Lythraceae, Mazaceae, Melastomataceae, Myodocarpaceae, Myrtaceae (Leptospermoideae), Pedaliaceae, Plantaginaceae, Ranunculaceae, Rhamnaceae, Rosaceae, Sambucaceae, Solanaceae, Sphenocleaceae, Stylidiaceae, Thymelaeaceae.

Bean, A.R. & Jessup, L.W.: Araliaceae.

Bean, A.R. & Forster, P.I.: Lamiaceae.

Booth, R.: Centrolepidaceae, Cyperaceae, Restionaceae.

Clarkson, J.R.*: Erythroxylaceae.

Crayn, D.*: Ericaceae.

Dowling, R: Rhizophoraceae.

Edginton, M.: Brassicaceae, Chenopodiaceae, Cucurbitaceae, Passifloraceae, Santalaceae, Scrophulariaceae, Viscaceae.

Fechner, N.: Linderniaceae, Phrymaceae, Stackhousiaceae.

Fensham, R.J.: Burmanniaceae, Eriocaulaceae, Pandanaceae.

Field, A.R.: Cymodoceaceae, Nymphaeaceae, Ruppiaceae, Zosteraceae.

Forster, P.I.: Agavaceae, Amaryllidaceae, Apocynaceae, Arecaceae, Argophyllaceae, Asphodelaceae, Blandfordiaceae, Bromeliaceae, Cactaceae, Campanulaceae, Carpodetaceae, Commelinaceae, Costaceae, Crassulaceae, Dioscoreaceae, Doryanthaceae, Dracaenaceae, Escalloniaceae, Flagellariaceae, Haemodoraceae, Hyacinthaceae, Iridaceae, Loganiaceae, Melianthaceae, Phyllanthaceae, Piperaceae, Proteaceae (Edginton M.: *Grevillea* & *Hakea*); Ptaeroxylaceae, Putranjivaceae, Quintiniaceae, Ripogonaceae, Rutaceae, Smilacaceae, Stemonaceae, Taccaceae, Violaceae, Vitaceae, Xanthorrhoeaceae, Xyridaceae.

Forster, P.I. & Guymer, G.P.: Sapindaceae.

Forster, P.I. & Halford, D.A.*: Euphorbiaceae, Picrodendraceae, Rubiaceae.

Forster, P.I. & Laidlaw, M.J.: Araceae.

Forster, P.I. & Ngugi, L.: Zingiberaceae.

Guymer, G.P.: Aceraceae, Alseuosmiaceae, Balanopaceae, Bignoniaceae, Bombacaceae, Byttneriaceae, Capparaceae, Corynocarpaceae, Elaeagnaceae, Elaeocarpaceae, Gesneriaceae, Helicteraceae, Icacinaceae, Leptaulaceae, Loranthaceae, Malvaceae, Nothofagaceae, Orobanchaceae, Pennantiaceae, Pentapetaceae, Simaroubaceae, Stemonuraceae, Sterculiaceae (McDonald W.J.: *Argyrodendron*), Surianaceae, Tamaricaceae, Winteraceae.

Guymer, G.P. & Jessup, L.W.: Myrtaceae (Myrtoideae).

Halford, D.A.*: Brownlowiaceae, Convolvulaceae, Muntingiaceae, Sparrmanniaceae.

Harris, W.K.*: Oleaceae.

- Hodgon, J.*: Juncaceae.
- Holland, A.E.: Bataceae, Begoniaceae, Cannabaceae, Casuarinaceae, Corsiaceae, Dilleniaceae, Goodeniaceae, Gyrostemonaceae, Hydrangeaceae, Martyniaceae, Moringaceae, Nitrariaceae, Olacaceae, Oxalidaceae, Papaveraceae, Petiveriaceae, Phytolaccaceae, Plumbaginaceae, Resedaceae, Triuridaceae, Tropaeolaceae, Zygophyllaceae.
- Holland, A.E. & Bean, A.R.: Asteraceae.
- Holland, A.E. & Pedley, L.*: Fabaceae.
- Hosking, J.* & Bean, A.R.: naturalised species.
- Jessup, L.W.: Actinidiaceae, Akaniaceae, Anacardiaceae, Aphanopetalaceae, Aquifoliaceae, Aristolochiaceae, Atherospermataceae, Austrobaileyaceae, Basellaceae, Berberidaceae, Berberidopsidaceae, Bixaceae, Burseraceae, Cardiopteridaceae, Caricaceae, Celastraceae, Clusiaceae, Cochlospermaceae, Connaraceae, Cornaceae, Datisceae, Dichapetalaceae, Elatinaceae, Eupomatiaceae, Flacourtiaceae, Hamamelidaceae, Hanguanaceae, Hernandiaceae, Himantandraceae, Idiospermaceae, Lauraceae, Malpighiaceae, Meliaceae, Memecylaceae, Menispermaceae, Monimiaceae, Moraceae, Myristicaceae, Myrsinaceae, Ochnaceae, Opiliaceae, Paulowniaceae, Pittosporaceae, Samolaceae, Sapotaceae, Sphenostemonaceae, Symplocaceae, Theaceae, Trimeniaceae, Turneraceae, Ulmaceae, Urticaceae.
- Jessup, L.W. & Field, A.R.: Annonaceae, Ebenaceae.
- Jessup, L.W. & Laidlaw, M.J.: Cunoniaceae.
- Laidlaw, M.J.: Calceolariaceae, Heliconiaceae, Salicaceae, Tetrachondraceae.
- Mathieson, M.T.: Byblidaceae, Droseraceae, Frankeniaceae, Lentibulariaceae.
- Mathieson, M.T., Field, A.R. & Bostock, P.D.*: Orchidaceae.
- McDonald, W.J.*: Combretaceae.
- Ngugi, L.B.: Asparagaceae, Cannaceae, Marantaceae, Musaceae.
- Pedley, L.*: Avicenniaceae, Caesalpiniaceae, Verbenaceae.
- Pedley, L.*, Holland, A.E. & Booth, R.: Mimosaceae.
- Pennay, C.: Alismataceae, Aponogetonaceae, Cabombaceae, Ceratophyllaceae, Haloragaceae, Hydrocharitaceae, Juncaginaceae, Limnocharitaceae, Maundiaceae, Mayacaceae, Menyanthaceae, Najadaceae, Nelumbonaceae, Onagraceae, Philydraceae, Podostemaceae, Polygonaceae, Pontederiaceae, Potamogetonaceae, Typhaceae.
- Pollock, A.: Nyctaginaceae.
- Simon, B.K.*, Thompson, E.J.*: Poaceae & Kelman, D.: *Bambusa*.
- Thomas, M.B.: Aizoaceae, Caryophyllaceae, Molluginaceae, Portulacaceae.
- Thompson, E.J.*: Boraginaceae, Polygalaceae.
- Wang, J.: Alliaceae, Alstroemeriaceae, Anthericaceae, Balanophoraceae, Boryaceae, Cecropiaceae, Colchicaceae, Gentianaceae, Hemerocallidaceae, Hugoniaceae, Hypoxidaceae, Johnsoniaceae, Laxmanniaceae, Liliaceae, Linaceae, Luzuriagaceae, Maesaceae, Pentaphragmaceae, Petermanniaceae.
- Wilson, G.*: Nepenthaceae.

Wood, A.: Geraniaceae, Lecythidaceae, Strelitziaceae.

Wood, A. & Cameron, P.*: cultivated species.

Conifers, cycads and allies (gymnosperms)

Forster, P.I.; Edginton, M. (Pinaceae)

Ferns and fern allies (pteridophytes)

Field, A.R. & Bostock, P.D.*

Mosses, liverworts, hornworts (bryophytes)

Franks, A.J.* , Patterson, R.* & Bolin, A.

Algae (all groups)

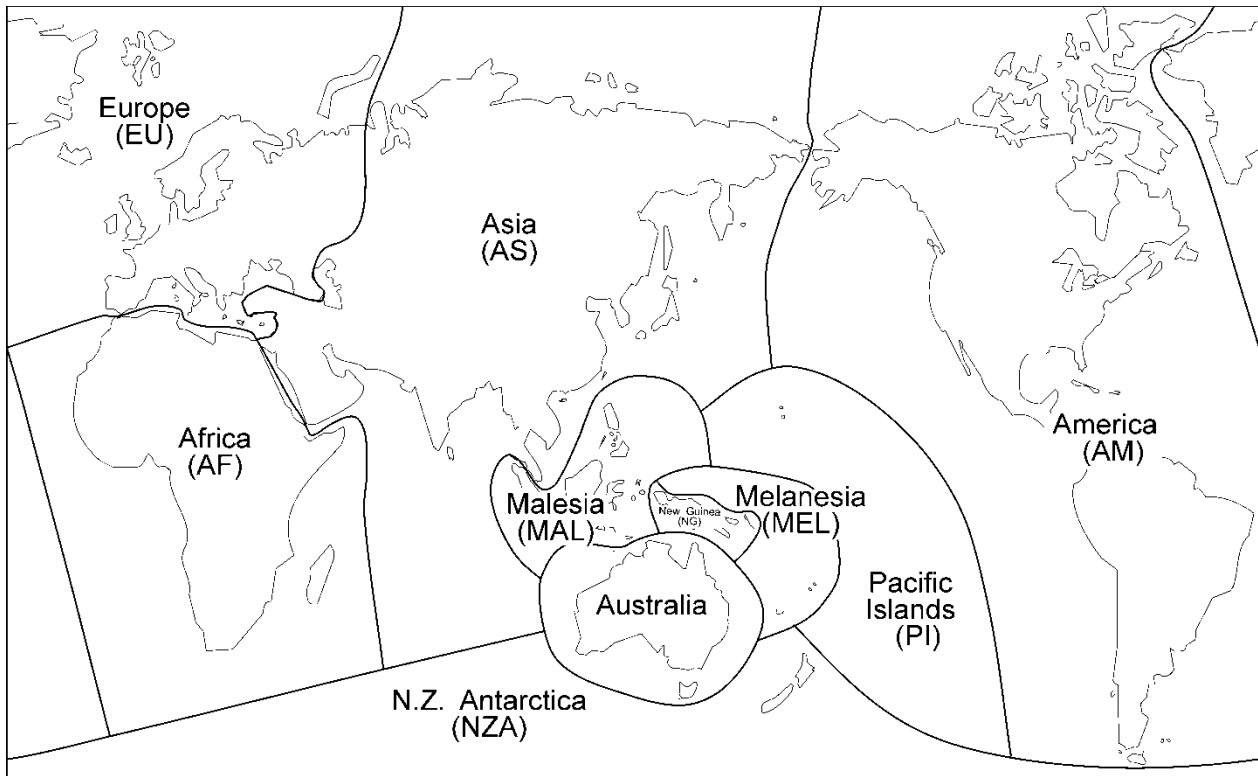
Bolin, A.; McGregor, G.B.* (freshwater); Phillips, J.A.* (marine)

Lichens

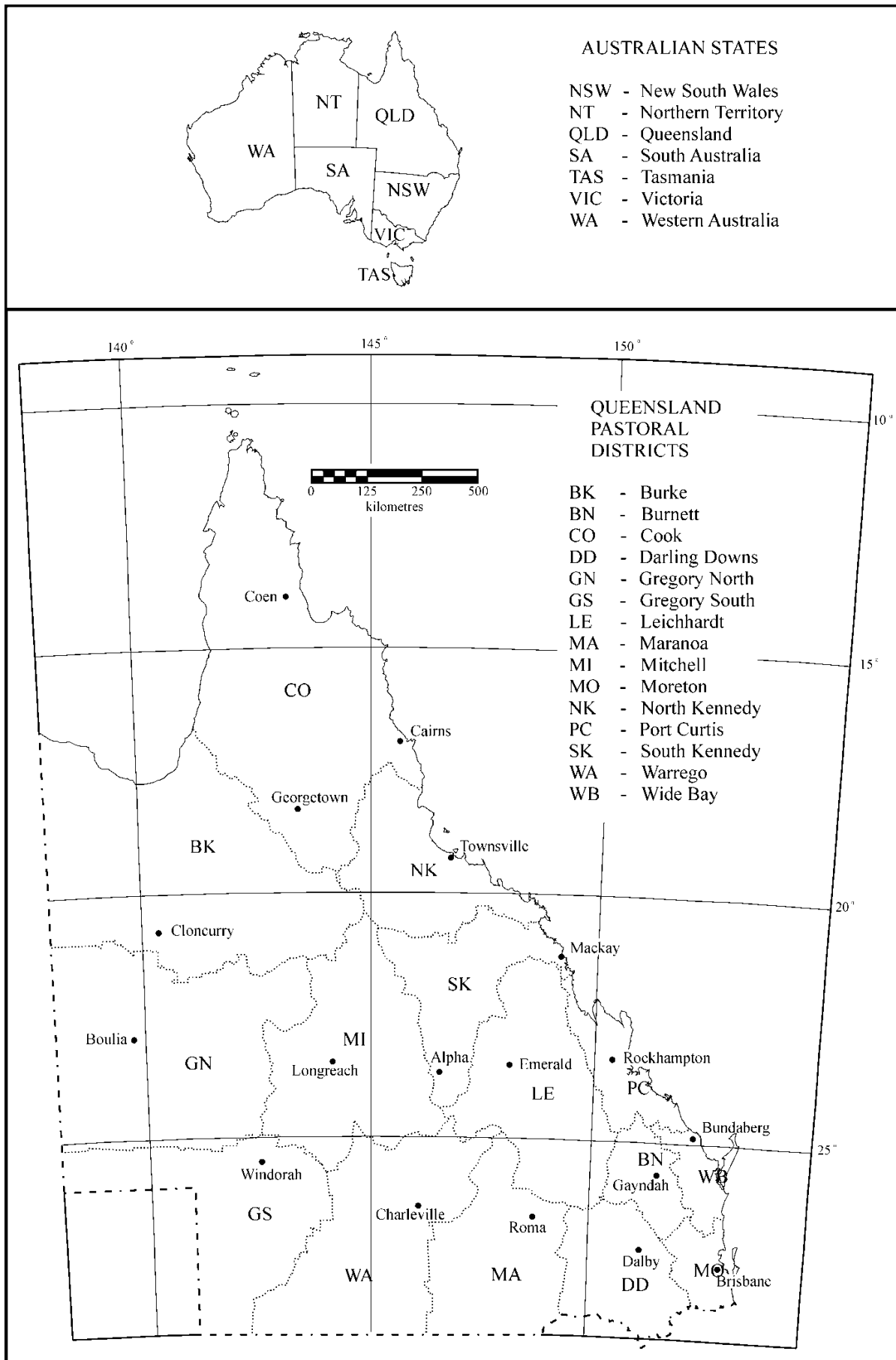
Rogers, R.* , Bolin, A. & Guymer, G.P.

Macrofungi

Fechner, N., Prance, M. (*Trametes* & *Geastrum*), Leonard P.* , Guard F.* & Evans G.*



Map 1. Regions of the world



Map 2. States of Australia and pastoral districts of Queensland

Appendix A. Name and status changes 2013 census to 2014 census (vascular plants only)

X = extinct; E = endangered; V = vulnerable; NT = near threatened; * = naturalised; D = doubtfully naturalised; ! = formerly naturalised

Ferns

Adiantaceae

Adiantum caudatum L., new record for Queensland

Athyriaceae

Diplazium squamuligerum (Rosenst.) Parris, newly recognised as occurring in Queensland

Azollaceae

Azolla filiculoides Lam. to *Azolla rubra* R.Br., name misapplied in Queensland

Blechnaceae

Doodia hindii Tindale ex T.C.Chambers, newly recognised as occurring in Queensland

Flowering Plants

Acanthaceae:

D *Brillantaisia cicatricosa* Lindau, new doubtfully naturalised species for Queensland

**Dicliptera chinensis* (L.) Juss., new naturalisation for Queensland

**Ruellia repens* L., new naturalisation for Queensland

**Ruellia solitaria* Vell., new naturalisation for Queensland

**Thunbergia laurifolia* Lindl. to **Thunbergia grandiflora* Roxb., synonym

Amaryllidaceae

Crinum yorkense Lehmillier, Lykos & Hamilton, new species for Queensland

Annonaceae

Haplostichanthus ramiflorus Jessup, N to LC, re-assessment of conservation status

Haplostichanthus submontanus subsp. *sessiliflorus* Jessup, N to LC, re-assessment of conservation status

Haplostichanthus ramiflorus Jessup to *Polyalthia xanthocarpa* B.Xue & R.M.K.Saunders, synonym

Apiaceae

Eryngium ovinum A.Cunn., newly recognised as occurring in Queensland

Eryngium paludosum (C.Moore & Betche) P.W.Michael, newly recognised as occurring in Queensland

Eryngium sp. (Warwick F.M.Bailey AQ89020), newly recognised but as yet to be described taxon

Apocynaceae

Alyxia sharpei P.I.Forst., N to LC, re-assessment of conservation status

! *Stapelia grandiflora* Masson, not persistent in the landscape (previously doubtfully naturalised, now considered to be formerly naturalised)

Argophyllaceae

Argophyllum cryptophlebium Zemann, N to V, re-assessment of conservation status

Argophyllum nullumense R.T.Baker, N to LC, re-assessment of conservation status

Argophyllum verae P.I.Forst., N to V, re-assessment of conservation status

Asparagaceae

**Asparagus retrofractus* L. to **Asparagus macowanii* Baker name misapplied in Australia

Asteraceae

**Acmella uliginosa* (Sw.) Cass., re-discovered (previously formerly naturalised)

Acomis acoma (F.Muell.) Druce, N to LC, re-assessment of conservation status

Acunniana procumbens (DC.) Orchard, newly recognised as occurring in Queensland

Angianthus brachypappus F.Muell., N to LC, re-assessment of conservation status

Apowollastonia cylindrica Orchard, new species for Queensland

Brachyscome ascendens G.L.R.Davis, N to V, re-assessment of conservation status

Brachyscome tesquorum J.M.Black, N to LC, re-assessment of conservation status

Craspedia sp. (Girraween NP S.T.Blake 23643) to *Craspedia paludicola* J.Everett & Doust, re-determined

Eclipta platyglossa F.Muell. subsp. *platyglossa*, new subspecies for Queensland

Eclipta platyglossa subsp. *borealis* E.W.Cross & Orchard, new subspecies for Queensland

**Eclipta prostrata*, now considered to be naturalised (was previously thought to be native)

D *Erigeron bellidioides* (Hook.f.) S.J.Forbes & D.I.Morris, new doubtfully naturalised species for Queensland

Epaltes cunninghamii (Hook.) Benth. to *Ethuliopsis cunninghamii* (Hook.) F.Muell., synonym

Epaltes Cass. to *Sphaeromorphaea* DC. and *Ethuliopsis* F.Muell. (in Australia)

Epaltes australis Less. to *Sphaeromorphaea australis* (Less.) Kitam., synonym

Olearia canescens subsp. (SF618 P.Forster PIF6660), newly recognised but yet to be described taxon

Olearia ferresii F.Muell. to *Olearia* sp., invalid name

Pluchea alata A.R.Bean, new species for Queensland

Peripleura spechtii (N.T.Burb.) G.L.Nesom var. *spechtii*, new record for Queensland

Rutidosia lanata A.E.Holland, E to V, re-assessment of conservation status

**Senecio vulgaris* L., new naturalisation from doubtfully naturalised

Sphaeromorphaea ephemera A.R.Bean, new species for Queensland

Sphaeromorphaea harrisii (F.Muell.) A.R.Bean, re-instated species for Queensland

Sphaeromorphaea littoralis (Retz.) A.R.Bean, re-instated species for Queensland

Sphaeromorphaea major A.R.Bean, new species for Queensland

Sphaeromorphaea subintegra A.R.Bean, new species for Queensland

Wedelia Jacq. to *Apowollastonia* Orchard and *Acunniana* Orchard, in Australia.

Wedelia longipes Klatt to *Apowollastonia longipes* (Klatt) Orchard, part synonym (Cook only)

Wedelia spilanthoides F.Muell. to *Apowollastonia spilanthoides* (F.Muell.) Orchard, synonym

Wedelia stirlingii Tate to *Apowollastonia stirlingii* (Tate) Orchard subsp. *stirlingii*, synonym, only this subspecies in Queensland

Wollastonia biflora (L.) DC. part to *Wollastonia biflora* (L.) DC. var. *biflora*, only this variety in Australia (Co only)

Wollastonia biflora (L.) DC part to *Wollastonia uniflora* (Willd.) Orchard, name part misapplied in Queensland

Craspedia uniflora G.Forst. to various species, re-determined, name misapplied in Australia

Basellaceae

**Basella alba* L., new naturalisation from doubtfully naturalised

Bignoniaceae

Dolichandrone alternifolia (R.Br.) Seem. to *Dolichandrone heterophylla* (R.Br.) F.Muell., name misapplied in Queensland

D *Handroanthus chrysotrichus* (Mart. ex DC.) Mattos, new doubtfully naturalised species for Queensland

Cactaceae

**Cylindropuntia rosea* (DC.) Backeb., newly recognised as naturalised in Queensland

Calceolariaceae (previously Scrophulariaceae)

**Calceolaria tripartita* Ruiz & Pav., family change only

Caprifoliaceae

**Viburnum odoratissimum* var. *awabuki* (K.Koch) Zabel, new naturalisation for Queensland

Celastraceae

Maytenus sp. (Mt Coolon D.Corr PA409) to *Denhamia* sp. (Mt Coolon D.Corr PA409), (synonym)

Dinghousia globularis (Ding Hou) R.H.Archer, N to LC, re-assessment of conservation status

Chenopodiaceae

Maireana lobiflora (F.Muell. ex Benth.) Paul G.Wilson, new record for Queensland

Maireana sp. (Tara T.J.McDonald 76) to *Maireana obrienii* N.G.Walsh, new species for Queensland

**Salsola tragus* L. to **Salsola australis* R.Br., name misapplied in Australia

Clusiaceae

Garcinia brassii C.T.White, N to LC, re-assessment of conservation status

Garcinia sp. (Claudie River L.J.Brass 19658) to *Garcinia jensenii* W.E.Cooper, new species for Queensland

Garcinia leggeae W.E.Cooper, new species for Queensland

D *Garcinia mangostana* L., new doubtfully naturalised species for Queensland

Garcinia russellii W.E.Cooper, new species for Queensland

Garcinia sp. (Davies Creek J.G.Tracey 14745) to *Garcinia zichii* W.E.Cooper, new species for Queensland

Hypericum pusillum Choisy to *Hypericum* sp., name misapplied

Convolvulaceae

Argyreia acuta Lour., removed, cultivated only in Queensland (previously thought to be native)

Bonamia dietrichiana Hallier f., N to LC, re-assessment of conservation status

Crassulaceae

Crassula sieberiana (Schult. & Schult.f.) Druce subsp. *sieberiana* to *Crassula sieberiana* (Schult. & Schult.f.) Druce, subspecies no longer recognised

Cunoniaceae

Geissois benthamiana F.Muell. to *Karrabina benthamiana* (F.Muell.) Rozefelds & H.C.Hopkins, synonym

Geissois biagiana (F.Muell.) F.Muell. ex Engl. to *Karrabina biagiana* (F.Muell.) Rozefelds & H.C.Hopkins, synonym

Cyperaceae

Carex breviscapa C.B.Clark, N to V, re-assessment of conservation status

Carex rafflesiana Boott, N to LC, re-assessment of conservation status

Cyperus rupicola S.T.Blake, N to V, re-assessment of conservation status

**Cyperus tuberosus* Rottb., to *Cyperus* sp., name misapplied in Queensland

Eleocharis blakeana L.A.S.Johnson & O.D.Evans, N to LC, re-assessment of conservation status

Eleocharis sp. (Arnhem Land P.K.Latz 2978) to *Eleocharis rivalis* K.L.Wilson, re-determined

Fimbristylis micans S.T.Blake, N to V, re-assessment of conservation status

Fimbristylis odontocarpa S.T.Blake, N to LC, re-assessment of conservation status

Fimbristylis sp. (Poison Creek S.T.Blake 8561) to *Fimbristylis* sp. (Lake Buchanan V.J.Neldner+ 3362), re-determined

Fimbristylis trigastrocarya F.Muell., new record for Queensland

Fimbristylis vagans S.T.Blake, N to E, re-assessment of conservation status

Gahnia insignis S.T.Blake, N to LC, re-assessment of conservation status

Dilleniaceae

Hibbertia expansa Toelken, new species for Queensland

Hibbertia mediterranea Toelken, new species for Queensland

Droseraceae

Drosera finlaysoniana Wall. ex Arn., newly recognised as occurring in Queensland

Drosera serpens Planch., newly recognised as occurring in Queensland

Elaeocarpaceae

Elaeocarpus stellaris L.S.Sm., N to LC, re-assessment of conservation status

Elaeocarpus thelmae B.Hyland & Coode, N to V, re-assessment of conservation status

Ericaceae

Gaultheria viridicarpa J.B.Williams, LC to V, new conservation status

Leucopogon sp. (Border Island G.N.Batianoff 9009182), newly recognised but as yet to be described taxon

Euphorbiaceae

**Acalypha herzogiana* Pax & K.Hoffm., new naturalisation from doubtfully naturalised

Adriana urticoides (A.Cunn.) Guymer to *Adriana tomentosa* Gaudich., name misapplied; this name re-instated

Adriana urticoides (A.Cunn.) Guymer var. *urticoides* to *Adriana tomentosa* Gaudich. var. *tomentosa*, name misapplied, re-instated

Adriana urticoides var. *hookeri* (F.Muell.) Guym. to *Adriana tomentosa* var. *hookeri* (F.Muell.) C.L.Gross & M.A.Whalen, name misapplied, re-instated

D *Dalechampia scandens* L., new doubtfully naturalised species for Queensland

Euphorbia australis var. *erythrantha* (F.Muell.) Benth., new record for Queensland

Euphorbia sp. (Rifle Creek D.Kelman+ AQ641966) to *Euphorbia operta* Halford & W.K.Harris, new species for Queensland

**Euphorbia umbellata* (Pax) Bruyns, re-assessed as naturalised (previously considered native)

Homalanthus nutans (G.Forst.) Guill. to *Homalanthus populifolius* Graham, name misapplied in Australia

Fabaceae

Aeschynomene micranthos (Poir.) DC. to *Aeschynomene brevifolia* L.f. ex Poir., synonym

**Aeschynomene falcata* (Poir.) DC., new naturalisation from doubtfully naturalised

Cullen sp. (Westmoreland C.H.Gittins 2491) to *Cullen spicigerum* (Domin) A.E.Holland, re-instated species; new combination

Daviesia reclinata A.Cunn. ex Benth. to *Daviesia flava* Pedley, re-determined

Daviesia ulicifolia subsp. (Warwick K.R.Mc.Donald KRM107) to *Daviesia ulicifolia* Andrews subsp. *ulicifolia*, re-determined

Daviesia ulicifolia subsp. (Bybera C.T.White 12612) to *Daviesia ulicifolia* subsp. *pilligensis* G.Chandler & Crisp, re-determined, newly recognised as occurring in Queensland

Daviesia sp. (Calliope N.Gibson TOI308) to *Daviesia umbellulata* Sm., re-determined

Desmodium macrocarpum Domin, N to LC, re-assessment of conservation status

**Lotus uliginosus* (L.) Schkuhr, new naturalisation for Queensland

Daviesia sp. (Isla Gorge K.R.McDonald KRM231) to *Pultenaea spinosa* (DC.) H.B.Will., re-determined

Tephrosia subpectinata Domin, new record for Queensland

**Vigna unguiculata* (L.) Walp. subsp. *unguiculata*, new naturalisation from doubtfully naturalised

Goodeniaceae

Goodenia modesta J.M.Black, newly recognised as occurring in Queensland

Goodenia microptera F.Muell. removed, not in Queensland

Haloragaceae

Gonocarpus effusus Orchard, N to V, re-assessment of conservation status

Helicteraceae

Helicteres cana (Schott & Endl.) Benth. to *Helicteres cana* (Schott & Endl.) Benth. subsp. *cana*, only this subspecies in Queensland

Iridaceae

**Freesia x hybrida* L.H.Bailey to **Freesia leichtlinii* Klatt, name misapplied in Queensland

Juncaceae

! *Juncus effusus* L., not persistent in the landscape, (was doubtfully naturalised, now considered to be formerly naturalised)

Juncaginaceae

Triglochin calcitrapa Hook. to *Triglochin isingiana* (J.M.Black) Aston, name misapplied in Queensland

Lamiaceae

**Clerodendrum splendens* G.Don, new naturalisation from doubtfully naturalised

D *Leonotis leonurus* R.Br. removed, cultivated only in Queensland

D *Leonurus japonicus* Houtt., re-assessed as doubtfully naturalised (previously considered to be naturalised)

**Ocimum africanum* Lour., newly recognised as naturalised in Queensland

Ocimum caryophyllum F.Muell., newly recognised as occurring in Queensland

Prostanthera sp. (Dinden P.I.Forster+ PIF17342) to *Prostanthera clotteniana* (F.M.Bailey) A.R.Bean, re-determined

Plectranthus sp. (Porcupine Gorge E.J.Thompson+ HUG204) to *Plectranthus intraterraneus* S.T.Blake, re-determined

Premna hylandiana Munir to *Premna tomentosa* Willd., synonym

Prostanthera albohirta C.T.White, X to E, re-discovery of this species

Prostanthera petraea B.J.Conn, LC to N, re-assessment of conservation status

Prostanthera leichhardtii Benth. to *Prostanthera ringens* Benth., synonym

Prostanthera howelliae Blakely to *Prostanthera* sp. (Baking Board V.Hando 135), name misapplied to this new taxon

D *Salvia hispanica* L., new doubtfully naturalised species for Queensland

Lauraceae

Cryptocarya sp. (Boonjie L.W.Jessup + 319) to *Cryptocarya cercophylla* W.E.Cooper, new species for Queensland

Cryptocarya claudiana B.Hyland, N to LC, re-assessment of conservation status

Cryptocarya glaucocarpa B.Hyland, N to V, re-assessment of conservation status

Endiandra anthropophagorum Domin, N to V, re-assessment of conservation status

Endiandra dichrophylla F.Muell., N to LC, re-assessment of conservation status

Endiandra sideroxylon B.Hyland, N to LC, re-assessment of conservation status

Lentibulariaceae

Utricularia ameliae R.W.Jobson, new species for Queensland

Utricularia fenshamii R.W.Jobson, new species for Queensland

Utricularia lowriei R.W.Jobson, new species for Queensland

Linderniaceae (previously Scrophulariaceae)

Artanema fimbriatum D.Don, *Lindernia alsinoides* R.Br., *Lindernia anagallis* (Burm.f.) Pennell, *Lindernia antipoda* (L.) Alston, *Lindernia aplectra* W.R.Barker, *Lindernia ciliata* (Colsm.) Pennell, *Lindernia crustacea* (L.) F.Muell., *Lindernia hyssopoides* (L.) Haines, *Lindernia lobelioides* (F.Muell.) F.Muell., *Lindernia pusilla* (Thunb.) Bold., *Lindernia* sp. (Alice River B.S.Wannan 3607), *Lindernia* sp. (Bribie Island S.T.Blake 7089), *Lindernia* sp. (Hann River J.R.Clarkson 7953), *Lindernia* sp. (Sudley A.Gunness 1886), *Lindernia* sp. (Tingoorra A.R.Bean 10311), *Lindernia* sp. (Violet Vale B.S.Wannan + 1865), *Lindernia subulata* R.Br., *Lindernia subulata* subsp. (Lake Emma J.R.Clarkson+ 10041), *Lindernia tectanthera* W.R.Barker, *Lindernia tenuifolia* (Colsm.) Alston, *Torenia polygonoides* Benth., all family change only

Lindernia scapigera R.Br. to *Lindernia* sp. (Sudley A.Gunness 1886), name misapplied in Queensland

Lindernia tectanthera W.R.Barker, newly recognised as occurring in Queensland

D *Torenia fournieri* Lindl., new doubtfully naturalised species for Queensland

Lythraceae

Nesaea crinipes (F.Muell.) Koehne to *Ammannia crinipes* F.Muell., synonym

Nesaea muelleri Hewson to *Ammannia muelleri* (Hewson) S.A.Graham & Gandhi, synonym

Nesaea robertsii (F.Muell.) Koehne to *Ammannia robertsii* (F.Muell.) S.A.Graham & Gandhi, synonym

D *Lagerstroemia speciosa* (L.) Pers., re-assessed as doubtfully naturalised (previously considered to be naturalised)

Malvaceae

Hibiscus trionum L. to *Hibiscus tridactylites* Lindl. and *Hibiscus verdcourtii* Craven, name misapplied in Queensland

Marantaceae

D *Stromanthe thalia* (Vell.) J.M.A.Braga, new doubtfully naturalised species for Queensland

Melastomataceae

**Melastoma candidum* D.Don, new naturalisation for Queensland

Memecylaceae

Memecylon pauciflorum Blume var. *pauciflorum* to *Memecylon pauciflorum* Blume, varieties no longer recognised

Mimosaceae

Acacia capillosa Pedley, re-instated name

D *Pithecellobium dulce* Benth., new doubtfully naturalised species for Queensland

D *Acacia pennata* subsp. *insuavis* (Lace) I.C.Nielsen, to D *Senegalia pennata* subsp. *insuavis* (Lace) Maslin, Seigler & Ebinger, synonym

Myrsinaceae

D *Lysimachia congestiflora* Hemsl., new doubtfully naturalised species for Queensland

Myrtaceae

Angophora costata (Gaertn.) Britten to *Angophora costata* (Gaertn.) Britten subsp. *costata*, now recognised at subspecies level; only this subspecies in Queensland

**Eucalyptus salubris* F.Muell. removed, cultivated only in Queensland (previously thought to be naturalised)

Eucalyptus tereticornis subsp. (Bunya Mountains P.V.Holworth AQ397993) and *Eucalyptus tereticornis* subsp. (Consuelo Tableland M.I.Brooker B4880) both to *Eucalyptus tereticornis* subsp. *basaltica* A.R.Bean, new subspecies for Queensland

Eucalyptus tereticornis subsp. *rotunda* A.R.Bean, new subspecies for Queensland

Homoranthus inopinatus L.M.Copel., J.Holmes & G.Holmes, new species for Queensland

Kunzea parvifolia Schauer, new record for Queensland

Melaleuca brachyandra (Lindl.) Craven, removed, cultivated only in Queensland (previously considered to be native)

Melaleuca lophocoracorum A.J.Ford, Craven & Brophy, new record for Queensland (no specimen at BRI)

Melaleuca nervosa (Lindl.) Cheel subsp. *nervosa* and *Melaleuca nervosa* subsp. *crosslandiana* (W.Fitzg.) Barlow ex Craven both to *Melaleuca nervosa* (Lindl.) Cheel, subspecies no longer recognised for this species

Baeckea virgata var. *parvula* (Labill.) F.M.Bailey to *Sannantha bidwillii* (A.R.Bean) Peter G.Wilson, synonym

Syzygium amplum T.G.Hartley & L.M.Perry, removed, cultivated only in Queensland (previously considered to be native)

D *Syzygium jambos* (L.) Alston, re-assessed as doubtfully naturalised (previously considered to be naturalised)

Nyctaginaceae

**Boerhavia diffusa* L., name re-instated; newly recognised as naturalised in Queensland

Oleaceae

**Fraxinus griffithii* C.B.Clark, new naturalisation from doubtfully naturalised

Orchidaceae

Acianthus sp. (Lightning Falls M.T.Mathieson MTM606) to *Acianthus saxatilis* D.L.Jones & M.A.Clem., re-determined, newly recognised as occurring in Queensland

Appendicula reflexa Blume to *Appendicula australiensis* (F.M.Bailey) M.A.Clem. & D.L.Jones, name misapplied in Queensland

Corybas unguiculatus (R.Br.) Rchb.f. to *Corybas montanus* D.L.Jones, name misapplied in Queensland

Caladenia caerulea R.Br. var. *caerulea* to *Caladenia caerulea* R.Br., varieties no longer recognised

Calochilus sp. (Weipa B.R.Jahnke 5) to *Calochilus metallicus* D.L.Jones, re-determined

Chiloglottis reflexa (Labill.) Druce to *Chiloglottis diphylla* R.Br. and *Chiloglottis sylvestris* D.L.Jones & M.A.Clem., name misapplied in Queensland

Chiloglottis sp. (Maryborough A.E.Logan AQ673312) to *Chiloglottis diphylla* R.Br. and *Chiloglottis sylvestris* D.L.Jones & M.A.Clem., re-determined

Chiloglottis formicifera Fitzg. to *Chiloglottis truncata* D.L.Jones & M.A.Clem., name misapplied in Queensland

Caladenia caerulea R.Br. to *Cyanicula caerulea* (R.Br.) Hopper & A.P.Br., synonym

Dendrobium trilamellatum J.J.Sm., newly recognised as occurring in Queensland

Diuris sp. (Jollys Falls J.Loveday 31) to *Diuris chrysantha* D.L.Jones & M.A.Clem., re-determined

Goodyera ochroleuca F.M.Bailey, newly recorded from Queensland (no specimen at BRI)

Caleana minor R.Br. to *Paracaleana minor* (R.Br.) Blaxell, synonym

Pterostylis caligna M.T.Mathieson, new species for Queensland

Thelymitra sp. (Toy Creek P.I.Forster+ PIF21217) to *Thelymitra queenslandica* Jeanes, new species for Queensland

Orobanchaceae

D *Orobanche minor* Sm., new doubtfully naturalised species for Queensland

D *Striga asiatica* (L.) Kuntze, new doubtfully naturalised species for Queensland

Pandanaceae

Pandanus lauterbachii K.Schum. & Warb. ex Warb. to *Benstonea lauterbachii* (K.Schum. & Warb. ex Warb.) Callm. & Buerki, synonym

Pandanus monticola F.Muell. to *Benstonea monticola* (F.Muell.) Callm. & Buerki, synonym

Paulowniaceae (previously Scrophulariaceae)

D *Paulownia tomentosa* (Thunb.) Steud., family change only

Phyllanthaceae

**Phyllanthus acidus* (L.) Skeels, new naturalisation from doubtfully naturalised

Plantaginaceae (previously Callitrichaceae)

Callitriche muelleri Sond., *Callitriche sonderi* Hegelm., **Callitriche stagnalis* Scop., D *Cymbalaria muralis* P.Gaertn. et al. subsp. *muralis*, D *Maurandya scandens* (Cav.) Pers., D *Russelia equisetiformis* Schtdl. & Cham., D *Veronica anagallis-aquatica* L., D *Veronica peregrina* subsp. *xalapensis* (Kunth) Pennell, D *Veronica serpyllifolia* L., all family change only

D *Linaria pelisseriana* (L.) Mill., re-assessed as doubtfully naturalised (previously considered to be naturalised)

Poaceae

**Cynodon hirsutus* Stent, new naturalisation for Queensland

**Cynodon plectostachyus* (K.Schum.) Pilg., new naturalisation for Queensland

Dimorphochloa sp. (Miles E.J.Thompson EJT888), newly recognised but yet to be described taxon

! *Eragrostis superba* Peyr., not persistent in the landscape, (previously doubtfully naturalised, now considered to be formerly naturalised)

D *Miscanthus sinensis* Andersson, new doubtfully naturalised species for Queensland

Portulacaceae

Portulaca decipiens Poelln. to *Portulaca* sp. (Rockhampton Downs S.T. Blake 17854), misapplied name

Trianthema sp. (Charters Towers J.Corfield 3145) to *Trianthema triquetra* Rottb. ex Willd., re-determined

Rhizophoraceae

Ceriops australis (C.T.White) Ballment, T.J.Sm. & J.A.Stoddart, newly recognised as occurring in Queensland

Rosaceae

**Rubus niveus* Thunb., new naturalisation from doubtfully naturalised

D *Spiraea cantoniensis* Lour., new doubtfully naturalised species for Queensland

Rubiaceae

Lasianthus kurzii Hook.f. var. *kurzii* to *Lasianthus chlorocarpus* K.Schum., name misapplied in Queensland

Gynochthodes celebica (Miq.) GyuRazafim. & B.Bremer to *Morinda bracteata* var. *celebica* (Miq.) Valetton, synonym

**Spermacoce ocymifolia* Willd. ex Roem. & Schult., new naturalisation for Queensland

Rutaceae

Acronychia sp. (Batavia Downs J.R.Clarkson+ 8511) to *Acronychia peninsularis* T.G.Hartley, new species for Queensland

Bosistoa brassii T.G.Hartley to *Bosistoa medicinalis* (F.Muell.) T.G.Hartley, synonym

Bosistoa pentacocca (F.Muell.) Baill. var. *pentacocca* to *Bosistoa pentacocca* (F.Muell.) Baill. subsp. *pentacocca*, now recognised at the level of subspecies

Bosistoa pentacocca var. *connaricarpa* (Domin) T.G.Hartley, *Bosistoa pentacocca* subsp. *connaricarpa* (Domin) P.I.Forst., now recognised at the level of subspecies

Brombya sp. (Gap Creek L.S.Smith 11116) to *Brombya smithii* T.G.Hartley, new species for Queensland

D *Citrus reticulata* Blanco, new doubtfully naturalised species for Queensland

Clausena brevistyla Oliv. var. *brevistyla* to *Clausena brevistyla* Oliv., varieties no longer recognised

Medicosma sp. (Mt Mellum P.I.Forster+ PIF25572) to *Medicosma forsteri* T.G.Hartley, new species for Queensland

Medicosma sp. (Karnak P.I.Forster+ PIF15541) to *Medicosma heterophylla* T.G.Hartley, new species for Queensland

Medicosma sp. (East Mulgrave River R.L.Jago+ 3696) to *Medicosma mulgraveana* T.G.Hartley, new species for Queensland

Zanthoxylum parviflorum Benth. to *Zanthoxylum rhetsa* (Roxb.) DC., synonym

Sapindaceae

Dictyoneura microcarpa Radlk., newly recognised as occurring in Queensland

Sapotaceae

Planchonella cotinifolia (A.DC.) Dubard to *Planchonella cotinifolia* (A.DC.) Dubard var. *cotinifolia*, varieties re-instated

Pouteria brownlessiana (F.Muell.) Baehni to *Pleioluma brownlessiana* (Vink) Swenson, synonym

Pouteria pearsoniorum Jessup to *Pleioluma macrocarpa* (P.Royen) Swenson, synonym

Pouteria papyracea (P.Royen) Baehni to *Pleioluma papyracea* (P.Royen) Swenson, synonym

Pouteria queenslandica (P.Royen) Jessup to *Pleioluma queenslandica* (P.Royen) Swenson, synonym

Pouteria singuliflora (C.T.White & W.D.Francis) to *Pleioluma singuliflora* (C.T.White & W.D.Francis) Swenson, synonym

Planchonella sp. (Mt Lewis B.P.Hyland 14048) to *Pleioluma* sp. (Mt Lewis B.P.Hyland 14048), synonym

Pouteria xerocarpa (F.Muell. ex Benth.) Baehni to *Pleioluma xerocarpa* (F.Muell. ex Benth.) Swenson, synonym

Phrymaceae

Mimulus orbicularis Wall. ex Benth., new record for Queensland

Plantaginaceae

**Otacanthus caeruleus* Lindl., new naturalisation for Queensland

Scrophulariaceae (previously Buddlejaceae)

**Buddleja australis* Vell., D *Buddleja davidii* Franch. and **Buddleja madagascariensis* Lam., family change only

Scrophulariaceae (previously Myoporaceae)

Eremophila goodwinii subsp. *ecapitata* Chinnock, newly recorded subspecies for Queensland

Eremophila scoparia (R.Br.) F.Muell.), removed, cultivated only in Queensland (previously considered to be native)

Eremophila sp. (Eromanga E.R.Anderson 5069), newly recognised but yet to be described taxon

Solanaceae

D *Browallia americana* L. to **Browallia viscosa* Kunth, re-determined, and new naturalisation from doubtfully naturalised

Strelitziaceae (previously Musaceae)

D *Ravenala madagascariensis* J.F.Gmel., family change only

Tetrachondraceae (previously Buddlejaceae)

D *Polypremum procumbens* L., family change only

Turneraceae

D *Turnera subulata* Sm., new doubtfully naturalised species for Queensland

Ulmaceae

Celtis australiensis Sattarian to *Celtis strychnoides* Planch., synonym

Violaceae

Viola hederacea subsp. *perreniformis* L.G.Adams to *Viola perreniformis* (L.G.Adams) R.J.Little & G.Leiper, now recognised at the level of species

Vitaceae

D *Cissus rotundifolia* Vahl, new doubtfully naturalised species for Queensland

Zygophyllaceae

Roepera A.Juss. to *Zygophyllum* L., synonym

Roepera ammophila (F.Muell.) Beier & Thulin to *Zygophyllum ammophilum* F.Muell., synonym

Roepera apiculata (F.Muell.) Beier & Thulin to *Zygophyllum apiculatum* F.Muell., synonym

Roepera aurantiaca Lindl. to *Zygophyllum aurantiacum* (Lindl.) F.Muell. subsp. *aurantiacum*, synonym

Zygophyllum aurantiacum subsp. *cuneatum* H.Eichler ex R.M.Barker, newly recorded subspecies for Queensland

Roepera compressa (J.M.Black) Beier & Thulin to *Zygophyllum compressum* J.M.Black, synonym

Roepera confluens (H.J.Eichler) Beier & Thulin to *Zygophyllum confluens* H.Eichler, synonym

Roepera emarginata (H.J.Eichler) Beier & Thulin to *Zygophyllum emarginatum* H.Eichler, synonym

Roepera eremaea (Diels) Beier & Thulin to *Zygophyllum eremaeum* (Diels) Ostenf., synonym

Roepera glauca (F.Muell.) Beier & Thulin to *Zygophyllum glaucum* F.Muell., synonym

Roepera howittii (F.Muell.) Beier & Thulin to *Zygophyllum howittii* F.Muell., synonym

Roepera humillima (M.Koch ex Tate) Beier & Thulin to *Zygophyllum humillimum* M.Koch ex Tate, synonym

Roepera iodocarpa (F.Muell.) Beier & Thulin to *Zygophyllum iodocarpum* F.Muell., synonym

Roepera prismatotheca (F.Muell.) Beier & Thulin to *Zygophyllum prismatothecum* F.Muell., synonym

Roepera rowelliae (R.M.Barker) Beier & Thulin to *Zygophyllum rowelliae* R.M.Barker, synonym

Roepera similis (H.J.Eichler) Beier & Thulin to *Zygophyllum simile* H.Eichler, synonym

Roepera sp. (Simpson Desert NP R.G.Atherton 8) to *Zygophyllum* sp. (Simpson Desert NP R.G.Atherton 8), (synonym)

Roepera tesquorum (J.M.Black) Beier & Thulin to *Zygophyllum tesquorum* J.M.Black, synonym

Tribulus occidentalis R.Br., removed, not in Queensland