

Introduction to the Census of the Queensland flora 2019

Queensland Herbarium

Prepared by: Queensland Herbarium, Department of Environment and Science

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December 2019

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About the Queensland Herbarium Collections

The Queensland Herbarium houses the State's flora collections, comprising more than 880,000 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, of which some represent new species records and new distribution records for both native and naturalised species. Most specimens are pressed and dried, and mounted on archival 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, habitat and the plant's features such as bark and flower colour, as provided by the collector. This information is recorded in the HERBRECS database, and the Queensland native and naturalised specimen data are available on Queensland's [open data portal](http://qldspatial.information.qld.gov.au/catalogue/custom/search.page?q=Queensland+Herbarium+records) (<http://qldspatial.information.qld.gov.au/catalogue/custom/search.page?q=Queensland+Herbarium+records>), [Wildlife Online](https://www.qld.gov.au/environment/plants-animals/species-list/) (<https://www.qld.gov.au/environment/plants-animals/species-list/>) and [Australia's Virtual Herbarium](http://avh.chah.org.au/) (<http://avh.chah.org.au/>). The information is summarised in the [census lists](https://data.qld.gov.au/dataset/census-of-the-queensland-flora-2019) (<https://data.qld.gov.au/dataset/census-of-the-queensland-flora-2019>).

A manual explaining [how to collect plant specimens](https://www.qld.gov.au/environment/plants-animals/plants/herbarium/identify-specimens/) (<https://www.qld.gov.au/environment/plants-animals/plants/herbarium/identify-specimens/>) is available. 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: taxonomic and phylogenetic research, the application of scientific names, new species discovery, identification of species, mapping the distribution of species, conservation planning and management, ecology of species, biodiversity assessment, state legislation (*Vegetation Management Act*, *Nature Conservation Act*, *Land Protection Act*, *Environmental Protection Act*), weed identification and ecology, agriculture, ethnobotany, forensic botany, molecular biology 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 specimen(s). New species must be published under international rules that standardise botanical name usage across the world (Turland et al. 2018) and all must be assigned a Type specimen housed in an internationally recognised Herbarium. The Queensland Herbarium holds more than 10,000 Type specimens. High resolution images of the vascular plant Type specimens held at the Queensland Herbarium (BRI) are now available on line at [JSTOR](http://plants.jstor.org) (Global Plants Initiative) (<http://plants.jstor.org>) as part of the Global Plants Initiative.

Voucher specimens

Scientists using plants in their research are usually required to deposit voucher specimens in a herbarium collection as a permanent and verifiable record of the plant sampled. Voucher specimens are also required to verify a new declared weed or threatened species record and are often used as points of reference for published photographs of species, seed bank accessions or other records. Please contact us before collecting voucher specimens to find out what is required and discuss lodgement considerations.

Census of the Queensland Flora

This census provides authoritative published lists of all the known native and naturalised species of plants, algae, fungi and lichens in Queensland, updated from the previous census lists (Bostock & Holland 2018). Separate listings of the naturalised and doubtfully naturalised flora are also presented, along with an all combined data list. Queensland species that are only known from cultivation are not included in any of the census lists.

The accepted 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 17th December 2019. These records are based on the Queensland Herbarium specimens, from collections made over the last 249 years.

2019 presentation

The *Census of the Queensland Flora 2019* lists (<https://data.qld.gov.au/dataset/census-of-the-queensland-flora-2019>) are provided in spreadsheet compatible format on the Queensland open data portal. The census lists include scientific name, distribution (pastoral district) and status of all currently known Queensland plants, algae, fungi and lichen taxa (see definitions below). Print format for some lists is also available on request. A list of abbreviations is also supplied on the open data portal to assist with interpretation.

A list of name and status changes, since the publication of the *Census of the Queensland Flora 2018* (Bostock & Holland 2018), is provided in Appendix A of this document (vascular plants only).

To view Type specimen images on JSTOR (Global Plants Initiative) <http://plants.jstor.org>, copy and paste species name into the search box. Some specimen images are also available on the *Atlas of Living Australia* <https://www.ala.org.au/> and can be accessed via our [collector page](https://collections.ala.org.au/public/show/co49) <https://collections.ala.org.au/public/show/co49> or through search results of Queensland Herbarium records.

Census of the Queensland Flora 2019 lists (spreadsheet compatible format)

Full data set: The full data set includes names (including botanical names broken down into parts, i.e. genus, species etc.), distributions and status of Queensland plants (native and naturalised), algae, fungi, lichens and cyanobacteria combined into one list.

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

All Threatened, Near Threatened and Presumed Extinct: plants listed under Queensland's *Nature Conservation Act (1992)*, as of 17th December 2019.

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

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

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

Lichens (Fungi): Queensland lichens.

Chromista (True algae): Queensland Chromista.

Bacteria and Cyanobacteria: Queensland cyanobacteria.

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

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

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.

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.

Specimen counts are given for each Queensland pastoral district, together with regional (non-Queensland) counts where applicable. Queensland collections not identifiable to a district are recorded under "Qld". You may notice a change in regional area names from previous years. This is due to a change we have made in the database system we use. Please refer to the explanatory notes and 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 pastoral districts of Queensland, normally abbreviated as two letters e.g. Mo for Moreton, have been spelled out in full in the spreadsheets to distinguish them from other regions.

Where species (subspecies or varieties) are recognised to exist, but not yet formally described, a temporary phrase name linked to a herbarium specimen 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 included with the text 'No specimen in BRI' in the notes column of the spreadsheets.

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 to be native. This includes species introduced to Queensland in pre-European times. Native species to Queensland are indicated by having 'Native to QLD' in the Naturalisation status column.

Queensland native plants that have become naturalised in a pastoral district outside their native range are also recorded in a separate list. These have a naturalisation status of 'Native and Naturalised in QLD'. Please see the notes column in the spreadsheets for information about where these plants are native or naturalised.

Non-native status

Naturalised taxa are indicated in the naturalisation status column. There are three types of naturalised taxa recognised in Queensland — naturalised, doubtfully naturalised and formerly naturalised — and there are separate census lists for these different groups.

Naturalised taxa are wildlife introduced to Australia, or Queensland, by human intervention (excluding pre-European introductions) and which have subsequently successfully established populations by reproducing without cultivation or other human intervention. 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 100 of these species are listed as pests (restricted or prohibited) under the *Queensland Biosecurity Act 2014* (<https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-2014-007>).

In previous years we have used the following symbols to indicate the different non-native status: naturalised (*), doubtfully naturalised (D) and formerly naturalised (!). This year they are spelled out in full.

Conservation (NCA) status

The conservation status (Presumed Extinct in the wild, Endangered, Vulnerable or Near Threatened) is as recorded in the Queensland *Nature Conservation Act 1992* (<https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-1992-020>) for species listed in the *Nature Conservation (Wildlife) Regulation 2006* (<https://www.legislation.qld.gov.au/view/pdf/inforce/current/sl-2006-0205>) as of 20 September 2019. The remaining native plant species have a conservation status of Least Concern and these have no text in the NCA status column.

Scientific names

The scientific names used in these census lists comply with the rules of the *International Code of Nomenclature of Algae, Fungi and Plants (Shenzhen Code)* (<https://www.iapt-taxon.org/nomen/main.php>) (Turland *et. al.* 2018) and the *International Code of Nomenclature for Cultivated Plants - Ninth Edition*

(<https://www.ishs.org/scripta-horticulturae/international-code-nomenclature-cultivated-plants-ninth-edition>) (Brickell *et al.* 2016). Author abbreviations are available from the [International Plant Names Index](#) (<http://www.ipni.org/index.html>). 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 17th December 2019, reflecting the accepted 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: see comment above regarding species not represented by a Queensland Herbarium specimen. Additional locations from other herbaria may be accessed from the [Australasian Virtual Herbarium](#) (<http://avh.chah.org.au/>).

Readers may submit specimen collections to fill obvious distribution gaps, but are requested to please contact us first and find out what is required. Bryophytes, algae, lichens and fungi usually require additional processing. Note that a permit is required for collecting activities on state lands or where listed threatened species are involved. Contact the Queensland Herbarium Queensland.Herbarium@qld.gov.au

Queensland flora statistics 2019

The Queensland native flora is currently represented by 14,476 native species across all groups, nearly double the number listed by Bailey in 1913 (7,781 species). These native species include 975 species currently listed as threatened: Endangered, Vulnerable, Near Threatened or Presumed extinct in the wild. The remaining native species are listed as Least Concern (no symbol in the census lists).

There are currently 1,375 non-native species that are known to have become naturalised in Queensland, including two fungi species. 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 more than 15% of the total vascular flora. A further 343 species are considered to be doubtfully naturalised. In addition, 26 native Queensland species are recorded here as naturalised outside of their native range. In Queensland, 94 non-native species previously considered to be naturalised have now disappeared from the landscape (not collected for more than 50 years) are here listed as formerly naturalised.

One hundred and six years of flora species discovery is summarised in Table 1. Census data over the last two decades are summarised in Figure 1.

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 approximately 250,000 species worldwide. The flowering plants (angiosperms) are the largest group, but Queensland also has many native conifers, cycads and ferns. The classification presented here for angiosperms generally follows that of the [Australian Plant Census](#) (<https://biodiversity.org.au/nsl/services/apc>) with some exceptions. The families of the ferns and lycophytes have recently been updated to follow the Pteridophyte Phylogeny Group classification (PPG1 2016).

Queensland's 8,659 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 vascular plant species are still being discovered and described in Queensland at the rate of approximately 20 species per year. Queensland has a wide diversity of [regional ecosystems](#) (<http://www.qld.gov.au/environment/plants-animals/plants/herbarium/mapping-ecosystems/>): currently there are 1,424 identified ecosystems which include many 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 (45 species) and the ferns and fern allies (392 species).

The three largest families of native vascular plant species in Queensland are the legumes (Leguminosae) 883 species, the grasses (Poaceae 639 species) and myrtles and eucalypts (Myrtaceae 595 species); these three families dominate many ecosystems. The next largest families are the orchids (Orchidaceae 445 species – see below), the sedges (Cyperaceae 377 species) and the daisies (Asteraceae 376 species). The family with the most naturalised species is the grasses (Poaceae 194 species), followed by the daisies (Asteraceae 138 species) and the legumes (Leguminosae 130 species).

Gill Brown

Orchids

The classification of some families in Australia (e.g. some genera in Orchidaceae) is currently being reviewed by the Australian Plant Census. Classifications used by the Queensland Herbarium may currently differ, but will be updated when this census is complete and available. Where views of researchers differ, synonyms may be found at the [Australian Plant Name Index \(APNI\) website](https://biodiversity.org.au/nsl/services/apni) (<https://biodiversity.org.au/nsl/services/apni>).

Mike Mathieson, Ashley Field

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 (Eubacteria), 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 total species as there are many species still 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

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 almost 1,100 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. Along with cyanobacteria, lichens and algae, bryophytes 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 either erect or creeping 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 costa. Many species grow on other plants, especially in high-rainfall forests and are important as habitats for invertebrates and, together with mosses, are important 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 on rough barked trees in rainforests.

Documenting the bryophyte flora of Queensland is far from complete with many areas yet to be properly surveyed. However, with more identification resources readily available such as [Bryophytes of Australia](https://profiles.ala.org.au/opus/boa) (<https://profiles.ala.org.au/opus/boa>) and well-illustrated field guides, a greater understanding of the bryophyte diversity and distribution in Queensland is possible.

Andrew Franks

Fungi: macrofungi

Fungi are an important, oft-overlooked component of ecosystem biodiversity. The functions that fungi perform include decomposition of organic matter, and thereby recycling of nutrients; symbiotic fungi that are associated with plant roots and tissues, assisting with water and nutrient absorption, and in some cases serving a protective role; carbon sequestration; soil structure and stability; bioremediation; and the pathogenic roles associated with disease, such as wood rot and myrtle rust. Notably, 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 mycorrhizal. 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 recognised 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, boletes, 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 \(http://qldfungi.org.au/\)](http://qldfungi.org.au/) are actively involved in discovering and documenting the fungi flora.

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

Nigel Fechner

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.

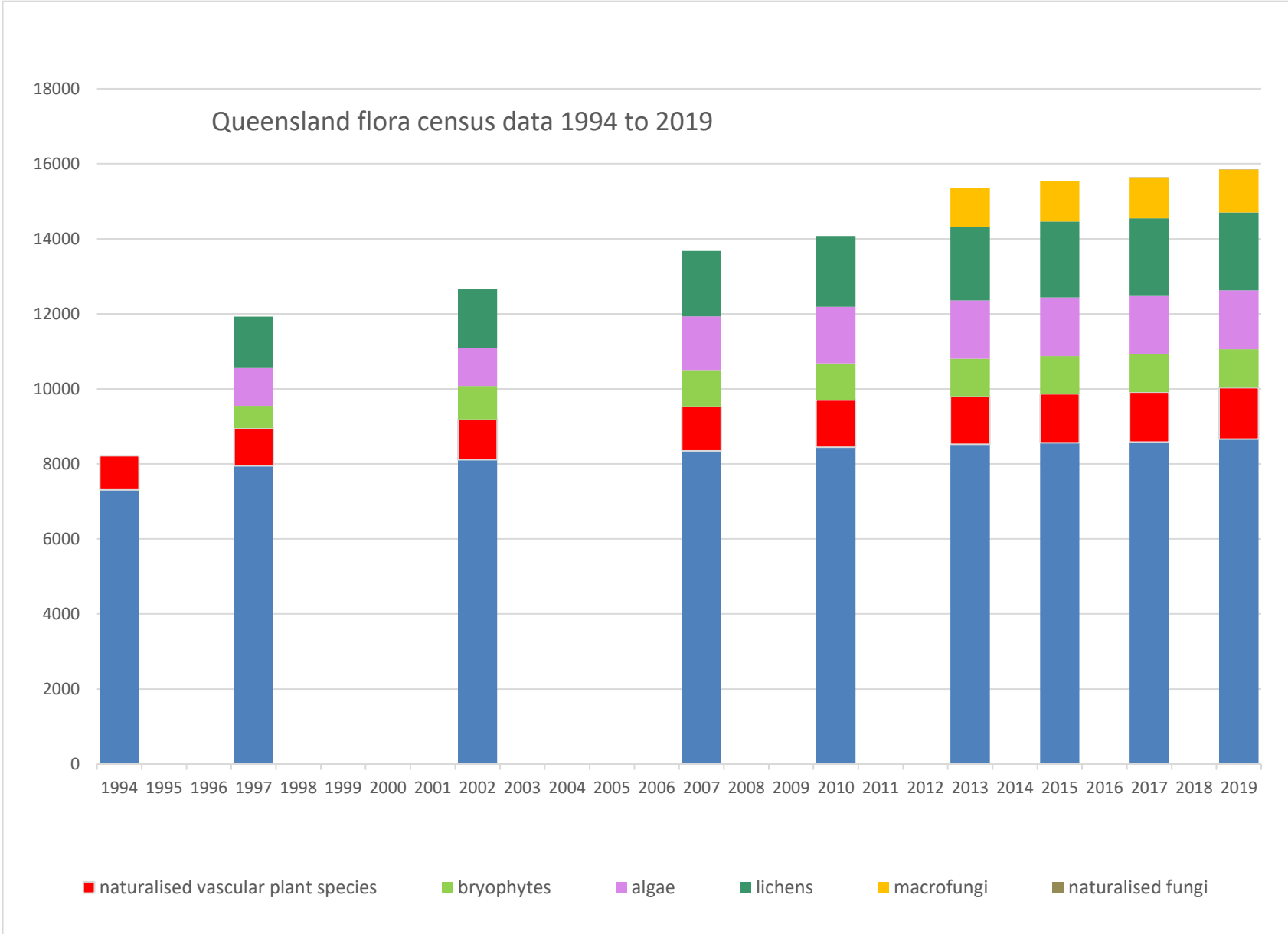
Rod Rogers

Table 1. Queensland Flora Statistics: 1913 to 2019

	Kingdom & Group	2019	2018	2017	2013	2010	2007	2002	1997	1994	1913 (Bailey)
Plantae: Angiosperms (flowering plants)	Native	8,201	8,163	8,133	8,078	8,005	7,901	7,677	7,512	7,252	4,626
	Naturalised	1,355	1,320	1,312	1,262	1,241	1,175	1,066	1,001	910	297
	Subtotal	9,531	9,483	9,446	9,340	9,246	9,076	8,743	8,513	8,162	4,923
Plantae: Gymnosperms (conifers, cycads and allies)	Native	66	66	65	64	62	62	59	60	54	29
	Naturalised	6	6	6	6	6	6	3	3	3	0
	Subtotal	72	72	71	70	68	68	62	63	57	29
Plantae: Pteridophytes (ferns and allies)	Native	392	386	386	381	381	381	377	374	375	233
	Naturalised	11	11	11	11	11	10	10	7	5	0
	Subtotal	403	397	397	392	392	391	387	381	380	233
Plantae: non-vascular plants	Mosses (Bryophyta)	573	571	569	561	555	556	574	595	not listed	360
	Liverworts & hornworts	453	452	448	437	421	411	315	not listed	not listed	113
Algae (Plantae, Chromista and Cyanobacteria)	Algae	1,566	1,654	1,561	1,555	1,505	1,433	1,011	1,004	not listed	718
Fungi (lichens and	Lichens	2,080	2,067	2,052	1,962	1,888	1,742	1,558	1,370	not listed	828

	Kingdom & Group	2019	2018	2017	2013	2010	2007	2002	1997	1994	1913 (Bailey)
macrofungi groups)	Native Macrofungi	1,140	1,116	1,090	1,036	1026	not listed	not listed	not listed	not listed	874
	Naturalised fungi	2	2	2	2						
Totals	Total native	14,471	14,385	14,304	14,076	—	—	—	—	—	7,781
	Total naturalised	1,374	1,339	1,331	1,279	1,258	1,191	1,079	1,011	918	297
	Overall total native and naturalised	15,845	15,724	15,635	15,355	—	—	—	—	—	8,078

Figure 1. Queensland Flora Statistics: 1994 to 2019



Useful references and web resources

- Australasian Virtual Herbarium, Council of Heads of Australasian Herbaria <http://avh.chah.org.au>
- Australian Plant Census, IBIS database, Centre for Australian National Biodiversity Research, Council of Heads of Australasian Herbaria, <https://biodiversity.org.au/nsl/services/apc>
- Australian Plant Name Index, IBIS database, Centre for Australian National Biodiversity Research, Australian Government, Canberra <https://biodiversity.org.au/nsl/services/APNI>
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Contributors

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

Flowering Plant families (Angiosperms):

Bean A.R.: Acanthaceae, Adoxaceae, Amaranthaceae, Apiaceae, Asteraceae, Balsaminaceae, Caprifoliaceae, Chrysobalanaceae, Cleomaceae, Hydatellaceae, Hydroleaceae, Lythraceae, Mazaceae, Melastomataceae, Myodocarpaceae, Passifloraceae, Pedaliaceae, Plantaginaceae, Ranunculaceae, Rhamnaceae, Rosaceae, Solanaceae, Sphenocleaceae, Stylidiaceae, Thymelaeaceae

Bean A.R. (Leptospermoideae); Guymer G.P. & Jessup L.W.* (Myrtoideae): Myrtaceae

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

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

Booth R.: Centrolepidaceae, Cyperaceae, Juncaceae, Restionaceae

Brown G.K.: Leguminosae (Mimosaceae and Fabaceae)

Clarkson J.R.*: Erythroxylaceae

Crayn D.*: Ericaceae

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

Fechner N.: Cannabaceae, Linderniaceae, Papaveraceae, Phrymaceae, Stackhousiaceae

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

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

Forster P.I.: Agavaceae, Amaryllidaceae, Apocynaceae, Araceae, Arecaceae, Argophyllaceae, Asphodelaceae, Begoniaceae, Blandfordiaceae, Bromeliaceae, Cactaceae, Campanulaceae, Carpodetaceae, Commelinaceae, Convallariaceae, Costaceae, Crassulaceae, Dioscoreaceae, Doryanthaceae, Dracaenaceae, Escalloniaceae, Flagellariaceae, Haemodoraceae, Hyacinthaceae, Iridaceae, Loganiaceae, Melianthaceae, Moringaceae, Phyllanthaceae, Piperaceae, Ptaeroxylaceae, Putranjivaceae, Quintiniaceae, Ripogonaceae, Rutaceae, Smilacaceae, Stemonaceae, Taccaceae, Violaceae, Xanthorrhoeaceae, Xyridaceae.

Forster P.I. and Edginton (*Grevillea* & *Hakea*): Proteaceae

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

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

Forster P.I. and Ngugi L.: Zingiberaceae

Guymer G.P.: Alseuosmiaceae, Balanopaceae, Bignoniaceae, Bombacaceae, Byttneriaceae, Capparaceae, Corynocarpaceae, Dilleniaceae, Elaeagnaceae, Elaeocarpaceae, Gesneriaceae, Helicteraceae, Icacinaceae, Leptaulaceae, Loranthaceae, Malvaceae, Nothofagaceae, Orobanchaceae, Pennantiaceae, Pentapetaceae, Simaroubaceae, Stemonuraceae, Surianaceae, Tamaricaceae, Winteraceae

Guymer G.P. & McDonald W.J.*: Sterculiaceae

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

Halford J.J.: Leguminosae (Caesalpiniaceae)

Holland A.E.* (to May 2019): Asteraceae (with Bean A.R.), Bataceae, Begoniaceae, Cannabaceae, Corsiaceae, Dilleniaceae, Fabaceae, Goodeniaceae, Gyrostemonaceae, Hydrangeaceae, Martyniaceae, Moringaceae, Nitrariaceae, Olacaceae, Oxalidaceae, Papaveraceae, Petiveriaceae, Resedaceae, Triuridaceae, Zygophyllaceae.

Jackes B.: Vitaceae

Jessup L.W.*: Actinidiaceae, Akaniaceae, Aphanopetalaceae, Aristolochiaceae, Atherospermataceae, Austrobaileyaceae, Basellaceae, Berberidaceae, Berberidopsidaceae, Bixaceae, Burseraceae, Calycanthaceae,

Cardiopteridaceae, Caricaceae, Clusiaceae, Cochlospermaceae, Connaraceae, Datisceae, Dichapetalaceae, Dipentodontaceae, Elatinaceae, Eupomatiaceae, Hamamelidaceae, Hanguanaceae, Hernandiaceae, Himantandraceae, Juglandaceae, Lauraceae, Malpighiaceae, Meliaceae, Memecylaceae, Menispermaceae, Moraceae, Myristicaceae, Myrsinaceae, Ochnaceae, Opiliaceae, Paulowniaceae, Pittosporaceae, Samolaceae, Sapotaceae, Sphenostemonaceae, Theaceae, Trimeniaceae, Turneraceae, Ulmaceae

Jessup L.W.* & Field A.R.: Annonaceae, Ebenaceae

Jessup L.W.* & Halford J.J.*: Achariaceae, Anacardiaceae, Aquifoliaceae, Celastraceae, Cornaceae, Monimiaceae, Symplocaceae, Urticaceae

Jessup L.W.* & Laidlaw M.J.: Cunoniaceae

Laidlaw, M.J.: Calceolariaceae, Heliconiaceae, Salicaceae, Tetrachondraceae

Mathieson, M.T.: Byblidaceae, Droseraceae, Frankeniaceae, Goodeniaceae, Lentibulariaceae, Zygophyllaceae

Mathieson M.T., Field A.R. (northern) & Bostock P.D.*: Orchidaceae

McDonald W.J.*: Combretaceae

Ngugi L.B.: Asparagaceae, Cannaceae, Marantaceae, Musaceae

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

Simmons, C.L.: Casuarinaceae

Thomas M.B.*: Aizoaceae, Caryophyllaceae, Macarthuriaceae, Molluginaceae, Portulacaceae

Thompson E.J.*: Boraginaceae, Polygalaceae

Thompson E.J.* & Kelman D. (*Bambusa*): Poaceae

Wang J.: Alliaceae, Alstroemeriaceae, Anthericaceae, Balanophoraceae, Boryaceae, Cecropiaceae, Colchicaceae, Gentianaceae, Hemerocallidaceae, Hugoniaceae, Hypoxidaceae, Johnsoniaceae, Laxmanniaceae, Liliaceae, Linaceae, Luzuriagaceae, Maesaceae, Pentaphragmaceae, Petermanniaceae

Wolff J.*: Verbenaceae

Wood A.: Geraniaceae, Lecythidaceae, Magnoliaceae, Strelitziaceae, cultivated species (all flowering plants)

Yates N.: Petiveriaceae, Phytolaccaceae, Plumbaginaceae, Tropaeolaceae

Conifers, cycads and allies (Gymnosperms): Forster P.I.; Edginton M. (Pinaceae)

Ferns and fern allies (Pteridophytes): Field A.R. & Bostock P.D.*

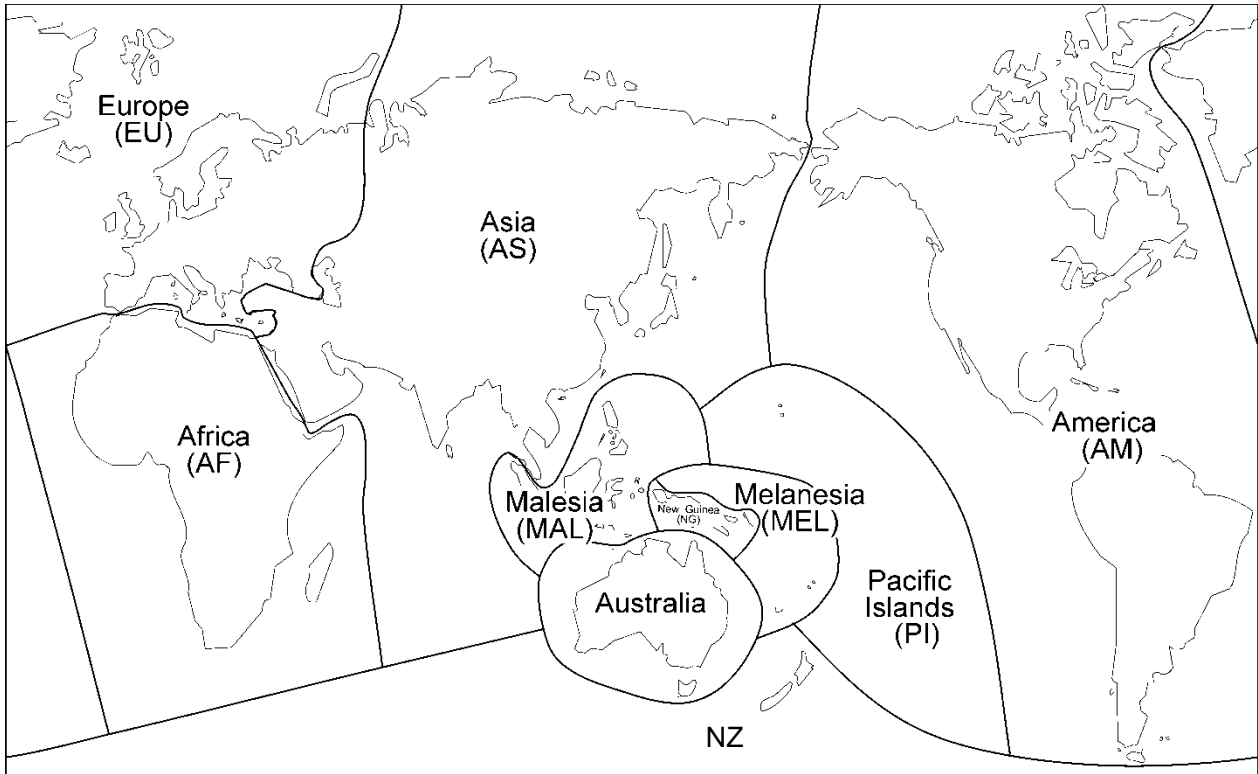
Mosses, liverworts, hornworts (Bryophytes): Franks A.J.

Algae (all groups): McGregor G.B.* (freshwater); Phillips J.A.* (marine)

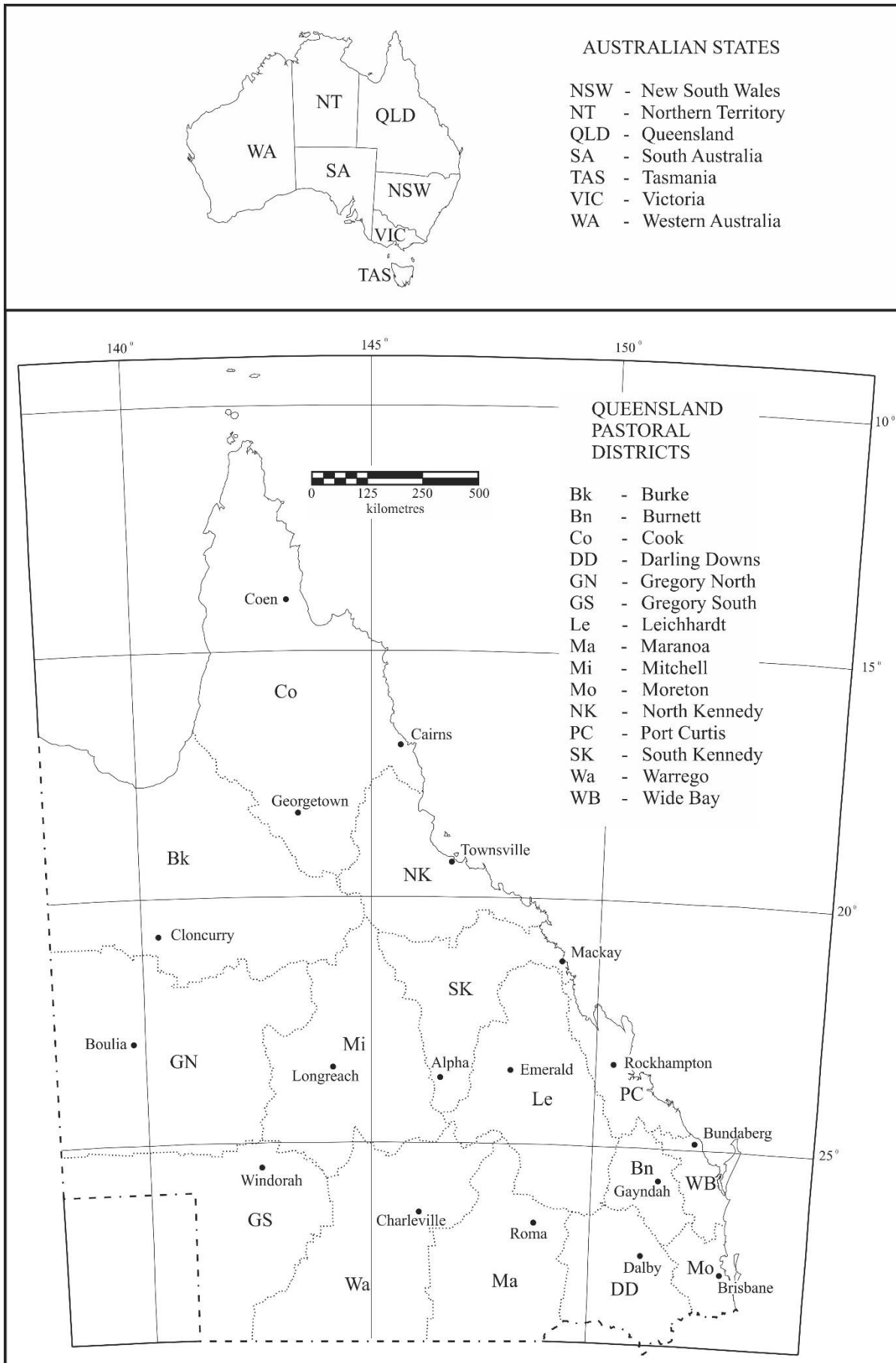
Lichens: Rogers, R.* & Holland, A.E.*

Macrofungi: Fechner N., with assistance from Evans G.*, Guard F.*, McMullan-Fisher S.*, Prance M.* & Ryan V.*

Map 1. Regions of the world



Map 2. States of Australia and pastoral districts of Queensland



Appendix A: New names and name and status changes 2018 to 2019

Ferns and fern allies

Athyriaceae

Callipteris prolifera (Lam.) Bory to *Diplazium proliferum* (Lam.) Kaulf.

Davalliaceae

Humata pectinata (Sm.) Desv. to *Davallia pectinata* Sm.

Humata repens (L.f.) Sm. ex Diels to *Davallia repens* (L.f.) Kuhn

Lycopodiaceae

Lycopodiella cernua (L.) Pic.Serm. to *Palhinhaea cernua* (L.) Franco & Carv.

Lycopodiella lateralis (R.Br.) B.Ollg. to *Lateristachys lateralis* (R.Br.) Holub

Lycopodiella limosa Chinnock to *Pseudolycopodiella limosa* (Hook.) A.R.Field, in press

Lycopodiella serpentina (Kunze) B.Ollg. to *Pseudolycopodiella serpentina* (Kunze) Holub

Lycopodium deuterodensum Herter to *Pseudolycopodium densum* (Rothm.) Hol

Polypodiaceae

Colysis ampla (F.Muell. ex Benth.) Copel. to *Dendroconche ampla* (F.Muell. ex Benth.) Testo, Sundue & A.R.Field

Colysis sayeri (F.Muell. & Baker) Copel. to *Dendroconche sayeri* (F.Muell. ex Benth.) Testo, Sundue & A.R.Field

Microsorium pustulatum (G.Forst.) Copel. subsp. *pustulatum* to *Zealandia pustulata* (G.Forst.) Testo & A.R.Field

Microsorium scandens (G.Forst.) Tindale to *Dendroconche scandens* (G.Forst.) Testo, Sundue & A.R.Field

Pteridaceae

Vittaria elongata Sw. to *Haplopteris elongata* (Sw.) E.H. Crane

Vittaria ensiformis Sw. to *Haplopteris ensiformis* (Sw.) E.H.Crane

Gymnosperms

Podocarpaceae

Prumnopitys ladei (F.M.Bailey) de Laub. to *Pectinopitys ladei* (F.M.Bailey) C.N.Page

Flowering plants

Acanthaceae

Acanthus mollis L., new Doubtfully Naturalised taxon for Queensland

Amaranthus graecizans subsp. *silvestris* (Vill.) Brenan, new Doubtfully Naturalised taxon for Queensland

Andrographis paniculata (Burm.f.) Wall. ex Nees, new Doubtfully Naturalised taxon for Queensland

Dipteracanthus australasicus subsp. *glabratus* R.M.Barker, a new species for Queensland

Amaranthaceae

Amaranthus graecizans subsp. *silvestris*, new Doubtfully Naturalised taxon for Queensland

Kelita uncinella A.R.Bean to *Ptilotus uncinellus* (A.R.Bean) T.Hammer

Ptilotus gaudichaudii subsp. *parviflorus* (Benth.) Lally to *Ptilotus modestus* T.Hammer, a new species for Queensland

Ptilotus nobilis subsp. *semilanatus* (Lindl.) A.R.Bean to *Ptilotus semilanatus* (Lindl.) J.M.Black

Ptilotus parviflorus (Lindl.) F.Muell., species reinstated

Ptilotus polystachyus (Gaudich.) F.Muell. x *Ptilotus xerophilus* T.Hammer & R.W.Davis, newly described hybrid

Ptilotus psilorhachis T.Hammer & R.W.Davis, a new species for Queensland

Ptilotus xerophilus T.Hammer & R.W.Davis, a new species for Queensland

Annonaceae

Melodorum topazensis Jessup orthographic variant updated to *Melodorum topazense* Jessup

Apocynaceae

Hoya inconspicua Hemsl., new species for Queensland for some specimens previously determined as *Hoya revoluta* Wight ex Hook.f.

Argophyllaceae

Argophyllum curtum A.R.Bean & P.I.Forst., a new species for Queensland

Argophyllum ferrugineum A.R.Bean & P.I.Forst., a new species for Queensland

Argophyllum heterodontum A.R.Bean & P.I.Forst., a new species for Queensland

Argophyllum iridescens A.R.Bean & P.I.Forst., a new species for Queensland

Argophyllum loxotrichum A.R.Bean & P.I.Forst., a new species for Queensland

Argophyllum palumense A.R.Bean & P.I.Forst., a new species for Queensland

Argophyllum sp. (Babinda L.S.Smith 10213) to *Argophyllum jagonis* A.R.Bean & P.I.Forst., a new species for Queensland

Argophyllum sp. (Koolmoon Creek B.Gray 1040) to *Argophyllum ferrugineum* A.R.Bean & P.I.Forst., a new species for Queensland

Asteraceae

Dahlia pinnata, new Doubtfully Naturalised taxon for Queensland

Lagenophora gracilis Steetz to *Lagenophora sublyrata* (Cass.) A.R.Bean & Jian Wang ter, a new species for Queensland

Olearia sp. (Carnarvon NP W.Morley AQ249966) to *Olearia rosmarinifolia* (DC.) Benth.

Olearia sp. (Condamine K.A.Williams 72013) to *Olearia ramulosa* (Labill.) Benth.

Bignoniaceae

Handroanthus chrysotrichus (Mart. ex DC.) Mattos, new Doubtfully Naturalised species for Queensland

Tecomanthe sp. (Roaring Meg L.J.Brass 20326) to *Tecomanthe burungu* Zich & A.J.Ford, a new species for Queensland

Brassicaceae

Capsella bursa-pastoris (L.) Medik., orthographic variant updated to *Capsella bursa-pastoris* (L.) Medik.

Campanulaceae

Wahlenbergia gracilentia Lothian, a new species for Queensland

Capparaceae

Apophyllum anomalum F.Muell. to *Capparis anomala* (F.Muell.) Byng & Christenh.

Caryophyllaceae

Scleranthus biflorus (J.R.Forst.) Hook.f., this name re-instated for Queensland

Chenopodiaceae

Dysphania sphaerosperma Paul G.Wilson, a new species for Queensland

Sclerolaena bicornis var. *horrida* Domin x *S. unknown*, name updated to *Sclerolaena bicornis* var. *horrida* Domin x *Sclerolaena*

Sclerolaena densiflora (W.Fitzg.) A.J.Scott., a new species for Queensland

Cornaceae

Alangium sp. (Claudie River B.P.Hyland 2682RFK) to *Alangium solomonense* (Bloemb.) W.J. de Wilde & Duyfjes,

a new species for Queensland

Alangium villosum subsp. *polyosmoides* (F.Muell.) Bloemb., all QLD specimens redetermined to *Alangium polyosmoides* (F.Muell.) Baill. subsp. *polyosmoides*

Alangium villosum subsp. *tomentosum* (F.Muell.) Bloemb., all QLD specimens redetermined to *Alangium polyosmoides* subsp. *tomentosum* (F.Muell.) W.J.de Wilde & Dufyjes

Cucurbitaceae

Citrullus amarus Schrad., new name for Queensland applied to specimens that were previously determined as *Citrullus lanatus* (Thunb.) Matsum. & Nakai

Cyperaceae

Cyperus sp. (Mission Beach N.Byrnes MB14) to *Cyperus laxus* Lam.

Dilleniaceae

Hibbertia ferox B.R.Jackes, a new species for Queensland

Hibbertia sp. (Taravale J.E.Kemp+ 20074), a new phrase name for Queensland

Droseraceae

Drosera aquatica Lowrie, a new species for Queensland

Elaeocarpaceae

Elaeocarpus sp. (Mt Misery L.J.Webb+ 10905) to *Elaeocarpus carbinensis* J.N.Gagul & Crayn, a new species for Queensland

Ericaceae

Astroloma sp. (Baal Gammon B.P.Hyland 10341) to *Styphelia piliflora* Crayn a new species for Queensland

Rhododendron viriosum Craven, a new species recognised for Queensland

Styphelia geniculata Crayn, a new species for Queensland

Goodeniaceae

Goodenia cylindrocarpa Albr., a new species for Queensland

Scaevola revoluta var. *viscida* Carolin, a new variety for Queensland

Lamiaceae

Plectranthus acariformis P.I.Forst. to *Coleus acariformis* (P.I.Forst.) P.I.Forst.

Plectranthus actites P.I.Forst. to *Coleus actites* (P.I.Forst.) P.I.Forst.

Plectranthus alloplectus S.T.Blake to *Coleus alloplectus* (S.T.Blake) P.I.Forst. & T.C.Wilson

Plectranthus alloplectus S.T.Blake x *Plectranthus graveolens* R.Br. to *Coleus alloplectus* (S.T.Blake) P.I.Forst. & T.C.Wilson x *Coleus graveolens* (R.Br.) A.J.Paton

Plectranthus altanmouiensis T.C.Wilson, P.I.Forst. & M.A.M.Renner to *Coleus altanmouiensis* (T.C.Wilson, P.I.Forst. & M.A.M.Renner) T.C.Wilson & P.I.Forst.

Plectranthus amboinicus (Lour.) Spreng. to *Coleus amboinicus* Lour.

Plectranthus amiculatus T.C.Wilson, P.I.Forst. & M.A.M.Renner to *Coleus amiculatus* (T.C.Wilson, P.I.Forst. & M.A.M.Renner) T.C.Wilson & P.I.Forst.

Plectranthus amicorum S.T.Blake to *Coleus amicorum* (S.T.Blake) P.I.Forst. & T.C.Wilson

Plectranthus amoenus P.I.Forst. to *Coleus amoenus* (P.I.Forst.) P.I.Forst.

Plectranthus apreptus S.T.Blake to *Coleus apreptus* (S.T.Blake) P.I.Forst. & T.C.Wilson

Plectranthus apreptus S.T.Blake x *Plectranthus foetidus* Benth. to *Coleus apreptus* (S.T.Blake) P.I.Forst. & T.C.Wilson x *Coleus foetidus* (Benth.) A.J.Paton

Plectranthus apricus P.I.Forst. to *Coleus apricus* (P.I.Forst.) P.I.Forst.

Plectranthus arenicola P.I.Forst. to *Coleus arenicola* (P.I.Forst.) P.I.Forst.

Plectranthus argentatus S.T.Blake to *Coleus argentatus* (S.T.Blake) P.I.Forst. & T.C.Wilson

Plectranthus argentatus S.T.Blake x *Plectranthus graveolens* R.Br. to *Coleus argentatus* (S.T.Blake) P.I.Forst. & T.C.Wilson x *Coleus graveolens* (R.Br.) A.J.Paton

Plectranthus batianoffii P.I.Forst. to *Coleus batianoffii* (P.I.Forst.) P.I.Forst.

Plectranthus bellus P.I.Forst. to *Coleus bellus* (P.I.Forst.) P.I.Forst.

Plectranthus bipartitus P.I.Forst. to *Coleus bipartitus* (P.I.Forst.) P.I.Forst.

Plectranthus blakei P.I.Forst. to *Coleus blakei* (P.I.Forst.) P.I.Forst.

Plectranthus caninus Roth to *Coleus caninus* (Roth) Vatke subsp. *caninus*

Plectranthus congestus R.Br. to *Coleus congestus* (R.Br.) A.J.Paton

Plectranthus cyanophyllus P.I.Forst. to *Coleus cyanophyllus* (P.I.Forst.) P.I.Forst.

Plectranthus diversus S.T.Blake to *Coleus diversus* (S.T.Blake) P.I.Forst. & T.C.Wilson

Plectranthus dumicola P.I.Forst. to *Coleus dumicola* (P.I.Forst.) P.I.Forst.

Plectranthus excelsus P.I.Forst. to *Coleus excelsus* (P.I.Forst.) P.I.Forst.

Plectranthus fasciculatus P.I.Forst. to *Coleus fasciculatus* (P.I.Forst.) P.I.Forst.

Plectranthus foetidus Benth. to *Coleus foetidus* (Benth.) A.J.Paton

Plectranthus fragrantissimus P.I.Forst. to *Coleus fragrantissimus* (P.I.Forst.) P.I.Forst.

Plectranthus geminatus P.I.Forst. to *Coleus geminatus* (P.I.Forst.) P.I.Forst.

Plectranthus glabriflorus P.I.Forst. to *Coleus glabriflorus* (P.I.Forst.) P.I.Forst.

Plectranthus graniticola P.I.Forst. to *Coleus eungellaensis* P.I.Forst. & A.J.Paton

Plectranthus gratus S.T.Blake to *Coleus gratus* (S.T.Blake) P.I.Forst. & T.C.Wilson

Plectranthus graveolens R.Br. to *Coleus graveolens* (R.Br.) A.J.Paton

Plectranthus graveolens R.Br. x *Plectranthus parviflorus* Willd. to *Coleus australis* (R.Br.) A.J.Paton x *Coleus graveolens* (R.Br.) A.J.Paton

Plectranthus graveolens R.Br. x *Plectranthus suaveolens* S.T.Blake to *Coleus graveolens* (R.Br.) A.J.Paton x *Coleus suaveolens* (S.T.Blake) P.I.Forst. & T.C.Wilson

Plectranthus habrophyllus P.I.Forst. to *Coleus habrophyllus* (P.I.Forst.) P.I.Forst.

Plectranthus insularis P.I.Forst. to *Coleus insularis* (P.I.Forst.) P.I.Forst.

Plectranthus intraterraneus S.T.Blake to *Coleus intraterraneus* (S.T.Blake) P.I.Forst. & T.C.Wilson

Plectranthus laetus P.I.Forst. to *Coleus laetus* (P.I.Forst.) P.I.Forst.

Plectranthus laxus T.C.Wilson & P.I.Forst. to *Coleus laxus* (T.C.Wilson & P.I.Forst.) T.C.Wilson & P.I.Forst.

Plectranthus leiperi P.I.Forst. to *Coleus leiperi* (P.I.Forst.) P.I.Forst.

Plectranthus megadontus P.I.Forst. to *Coleus megadontus* (P.I.Forst.) P.I.Forst.

Plectranthus minutus P.I.Forst. to *Coleus minutus* (P.I.Forst.) P.I.Forst.

Plectranthus mirus S.T.Blake to *Coleus mirus* (S.T.Blake) P.I.Forst. & T.C.Wilson

Plectranthus nitidus P.I.Forst. to *Coleus nitidus* (P.I.Forst.) P.I.Forst.

Plectranthus omissus P.I.Forst. to *Coleus omissus* (P.I.Forst.) P.I.Forst.

Plectranthus parviflorus Willd. to *Coleus australis* (R.Br.) A.J.Paton

Plectranthus pulchellus P.I.Forst. to *Coleus pulchellus* (P.I.Forst.) P.I.Forst.

Plectranthus scutellarioides (L.) R.Br. to *Coleus scutellarioides* (L.) Benth.

Plectranthus spectabilis S.T.Blake to *Coleus magnificus* P.I.Forst. & A.J.Paton

Plectranthus splendens P.I.Forst. to *Coleus splendens* (P.I.Forst.) P.I.Forst.

Plectranthus suaveolens S.T.Blake to *Coleus suaveolens* (S.T.Blake) P.I.Forst. & T.C.Wilson

Plectranthus thalassoscopicus P.I.Forst. to *Coleus thalassoscopicus* (P.I.Forst.) P.I.Forst.

Plectranthus torrenticola P.I.Forst. to *Coleus torrenticola* (P.I.Forst.) P.I.Forst.

Plectranthus ventosus P.I.Forst. to *Coleus ventosus* (P.I.Forst.) P.I.Forst.

Plectranthus venustus P.I.Forst. to *Coleus venustus* (P.I.Forst.) P.I.Forst.

Laxmanniaceae

Lomandra ramosissima Jian Wang ter, a new species for Queensland

Leguminosae (Fabaceae)

Aeschynomene patula Poir., a new naturalised species for Queensland

Derris involuta (Sprague) Sprague to *Solori involuta* (Sprague) Sirich. & Adema

Derris koolgibberah F.M.Bailey, all QLD records determined to *Solori koolgibberah* (F.M.Bailey) Sirich. & Adema

Tephrosia elegans Schumach. to *Tephrosia* sp. G. Kimberley Flora (G.J.Keighery 4828)

Tephrosia leveillei Domin to *Tephrosia flagellaris* Domin

Tephrosia sp. Central (P.K.Latz 17037), new phrase name for Queensland

Tephrosia sp. deserts (J.R.Maconochie 1403), new phrase name for Queensland

Tephrosia sp. Irvinebank (I.B.Staples IBS2090), new phrase name for Queensland

Tephrosia sp. Northern (K.F.Kenneally 11950), new phrase name for Queensland

Tephrosia sp. Willowra (G.M. Chippendale 4809), new phrase name for Queensland

Tephrosia vogelii Hook.f., new Doubtfully Naturalised species for Queensland

Leguminosae (Mimosaceae)

Acacia anadenia Pedley, a new species for Queensland

Acacia brownei (Poir.) Steud., orthographic variant corrected to *Acacia brownii* (Poir.) Steud

Acacia castorum Pedley, a new species for Queensland

Acacia dunnii Turrill, new Doubtfully Naturalised species for Queensland

Acacia lithgowiae Pedley, a new species for Queensland

Acacia philoxera Pedley, a new species for Queensland

Acacia pudica Pedley, a new species for Queensland

Acacia sp. (Boyd Creek A.R.Bean 19248) to *Acacia parvifoliolata* Pedley, a new species for Queensland

Acacia sp. (Fermoy Road I.V.Newman 487) to *Acacia dichromotricha* Pedley, a new species for Queensland

Acacia sp. (Gayndah P.I.Forster+ PIF24863) to *Acacia forsteri* Pedley, a new species for Queensland

Acacia sp. (Jericho G.R.Beeston 1065C) to *Acacia hierochoensis* Pedley, a new species for Queensland

Acacia sp. (Richards Creek J.R.Clarkson 5249) to *Acacia ammitia* Pedley, a new species for Queensland

Linderniaceae

Lindernia anagallis (Burm.f.) Pennell to *Torenia anagallis* (Burm.f.) Wannan, W.R.Barker, Y.S.Liang

Lindernia antipoda (L.) Alston to *Bonnaya antipoda* (L.) Druce

Lindernia ciliata (Colsm.) Pennell to *Bonnaya ciliata* (Colsm.) Spreng.

Lindernia crustacea (L.) F.Muell. to *Torenia crustacea* (L.) Cham. & Schldl.

Lindernia procumbens (Krock.) Philcox, a new species for Queensland; previously confused as *Lindernia alsinoides* R.Br.

Lindernia prolata W.R.Barker, a new species for Queensland

Lindernia pusilla (Thunb.) Bold. to *Yamazakia pusilla* (Willd.) W.R.Barker, Y.S.Liang & Wannan

Lindernia tenuifolia (Colsm.) Alston to *Bonnaya tenuifolia* (Colsm.) Spreng.

Lindernia yarun Wannan, a new species for Queensland

Lythraceae

Sonneratia ovata Backer, a new species for Queensland

Malvaceae

Lawrencia viridigrisea Lander, a new species for Queensland

Molluginaceae

Trigastrotheca pentaphylla (L.) Thulin to *Mollugo pentaphylla* L.

Monimiaceae

Endressia wardellii (F.Muell.) Whiffin to *Pendressia wardellii* (F.Muell.) Whiffin

Moraceae

Ficus benjamina L., varieties no longer recognised

Ficus drupacea Thunb., varieties no longer recognised

Ficus microcarpa L.f., varieties no longer recognised

Ficus pantoniana King, varieties no longer recognised

Myrtaceae

Corymbia clarksoniana (D.J.Carr & S.G.M.Carr) K.D.Hill & L.A.S.Johnson – *Corymbia novoguineensis* (D.J.Carr & S.G.M.Carr) K.D.Hill & L.A.S.Johnson, all QLD records now *Corymbia clarksoniana*

Corymbia henryi (S.T.Blake) K.D.Hill & L.A.S.Johnson x *Corymbia torelliana* (F.Muell.) K.D.Hill & L.A.S.Johnson, QLD record now determined to *Corymbia citriodora* (Hook.) K.D.Hill & L.A.S.Johnson x *Corymbia torelliana* (F.Muell.) K.D.Hill & L.A.S.Johnson

Corymbia novoguineensis (D.J.Carr & S.G.M.Carr) K.D.Hill & L.A.S.Johnson – *Corymbia polycarpa* (F.Muell.) K.D.Hill & L.A.S.Johnson, all QLD records now determined to either *Corymbia polycarpa* or *Corymbia clarksoniana*

Corymbia plena K.D.Hill & L.A.S.Johnson x *Corymbia terminalis* (F.Muell.) K.D.Hill & L.A.S.Johnson, QLD record now determined to *Corymbia terminalis* (F.Muell.) K.D.Hill & L.A.S.Johnson

Eucalyptus dalveenica T.L.Collins, R.L.Andrew & J.J.Bruhl, a new species for Queensland

Psidium cattleianum Sabine var. *cattleianum*, orthographic variant corrected to *Psidium cattleyanum* Sabine var. *cattleyanum*

Nymphaeaceae

Nymphaea jacobsii Hellq., subspecies no longer recognised

Orchidaceae

Cadetia taylorii (F.Muell.) Schltr., orthographic variant corrected to *Cadetia taylori* (F.Muell.) Schltr.

Caladenia sp. (Kilcoy Creek R.Crane 1286) to *Caladenia picta* (Nicholls) M.A.Clem. & D.L.Jones

Dipodium stenochilum O.Schwarz, orthographic variant corrected to *Dipodium stenocheilum* O.Schwarz

Diuris sp. (Byfield R.Melzer+ RM651A) to *Diuris alba* R.Br.

Sarcochilus eriochilus Fitzg. to *Sarcochilus ceciliae* F.Muell.

Sarcochilus loganii D.L.Jones & M.A.Clem., a new species for Queensland

Sarcochilus tricalliatius (Rupp) Rupp, a new species for Queensland

Taeniophyllum baumei B.Gray, a new species for Queensland

Thelymitra media R.Br. var. *media*, QLD specimen determined to *Thelymitra ixiooides* Sw.

Phyllanthaceae

Glochidion barronense Airy Shaw to *Glochidion harveyanum* Domin var. *harveyanum*

Glochidion sp. (Danbulla L.J.Webb+ 7215) to *Glochidion sessiliflorum* var. *pedicellatum* Airy Shaw

Glochidion sp. (McIlwraith Range B.P.Hyland 7637) to *Glochidion sessiliflorum* Airy Shaw var. *sessiliflorum*

Plantaginaceae

Nuttallanthus canadensis (L.) D.A.Sutton to *Linaria canadensis* (L.) Dum.Cours.

Nuttallanthus texanus (Scheele) D.A.Sutton to *Linaria texana* Scheele

Stemodia anisata A.R.Bean, a new species for Queensland

Poaceae

Chloris sp. (Edgbaston R.J.Fensham 5694) to *Chloris circumfontinalis* Fahey & Fensham, a new species for Queensland

Thaumastochloa striata Sosef & de Koning, a new species for Queensland

Thelepogon australiensis B.K.Simon to *Arthraxon austaliensis* (B.K.Simon) E.J.Thomps., a new species for Queensland

Portulacaceae

Calandrinia sp. (Lumeah R.W.Purdie 2168) to *Calandrinia remota* J.M.Black

Calandrinia sp. (Mackay G.N.Batianoff+ 9207155) to *Calandrinia gracilis* Benth.

Portulaca sp. (Bang Bang A.Schmid AS158) to *Portulaca bicolor* F.Muell.

Portulaca sp. (Weipa Mission R.L.Specht+ W233) to *Portulaca australis* Endl.

Rubiaceae

Hydnophytum moseleyanum Becc., a new species for Queensland

Psychotria sp. (Pajinka W.Cooper+ WWC1435) to *Psychotria hebecarpa* Merr. & L.M.Perry, a new species for Queensland

Rutaceae

Asterolasia sola Duretto & P.R.Alvarez, a new species for Queensland

Dinosperma melanophloia (C.T.White) T.G.Hartley, orthographic variant updated to *Dinosperma melanophloium*

Phebalium graniticola I.Telford & J.J.Bruhl, a new species for Queensland

Zieria fordii Duretto, a new species for Queensland

Zieria wilhelminae Duretto, a new species for Queensland

Sapotaceae

Donella roxburghii Pierre ex Lecomte to *Donella lanceolata* (Blume) Aubrev.

Niemeyera discolor Jessup, a new species for Queensland

Planchonella pohlmaniana var. (Gilbert River C.T.White 1409) to *Planchonella pohlmaniana* (F.Muell.) Pierre ex Dubard

Pleioluma ferruginea Jessup, a new species for Queensland

Pleioluma pilosa Jessup, a new species for Queensland

Sersalisia obpyriformis (F.M.Bailey) Jessup, a new species for Queensland

Scrophulariaceae

Buddleja australis Vell. to *Buddleja stachyoides* Cham. & Schtdl.

Eremophila sp. (Warrego K.L.Kay 38) to *Eremophila bowmanii* subsp. *nutans* Chinnock

Myoporum sp. (Tinaroo Range V.K.Moriarty 302) to *Myoporum acuminatum* R.Br.

Solanaceae

Solanum nodiflorum Jacq. to *Solanum americanum* Mill.

Solanum phyalifolium var. *nitidibaccatum* (Bitter) Edmonds to *Solanum nitidibaccatum* Bitter

Sparrmanniaceae

Grewia savannicola R.L.Barrett, a new species for Queensland

Sterculiaceae

Brachychiton sp. (Blackwall Range R.J.Fensham 971) to *Brachychiton guymeri* J.A.Bever., Fensham & P.I.Forst., a new species for Queensland

Thymelaeaceae

Pimelea latifolia R.Br. subsp. *latifolia* to *Pimelea latifolia* R.Br.

Urticaceae

Dendrocnide photinophylla (Kunth) Chew, orthographic variant updated to *Dendrocnide photiniphylla* (Kunth) Chew

Violaceae

Hybanthus aurantiacus (F.Muell. ex Benth.) F.Muell. to *Afrohybanthus aurantiacus* (F.Muell. ex Benth.) Flicker