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The Western Australian Plant Census and Australian Plant Census

Plant Science and Herbarium

Project Core Team

Supervising Scientist	Cheryl Parker
Data Custodian	John Huisman
Site Custodian	Dr Kevin Thiele (Eubio Consulting)

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Project Team	granted
Program Leader	granted
Directorate	granted

The Western Australian Plant Census and Australian Plant Census

C Parker, J Percy-Bower, R Rees, E Wood-Ward, T Macfarlane, S James

Context

The Western Australian Plant Census (a component of WACensus) is the authoritative database of all names of plants in Western Australia, including synonyms created by taxonomic change. It is continually updated to reflect changes in our knowledge of the flora. The census constitutes the fundamental master list for many departmental processes and data sets, including the threatened and priority flora databases maintained by the Species and Communities Program, the Herbarium's specimen database, Max, *FloraBase* and *NatureMap*.

The Australian Plant Census (APC) is a project of the Council of Heads of Australasian Herbaria, designed to provide a consensus view of all Australian plant taxa. The APC delivers authoritative information on what species occur in Australia as a whole, to obtain accurate national statistics, and to resolve differences in opinion and knowledge for taxa that cross State boundaries. In addition to working systematically through the vascular plant families, the APC process provides for updates as taxonomic changes or new findings are formally published. The consensus also extends from family and genus level to an overall classification of the plants that occur in Australia. As the APC project continues, the Western Australian Plant Census is updated to reflect the consensus view. The APC provides the key name list for the Atlas of Living Australia and the Australasian Virtual Herbarium.

Aims

- Maintain an accurate and timely listing of all plants, algae, and fungi in Western Australia, including both current names and synonyms, and integrate this with the national taxonomic consensus.

Progress

- Seven hundred and thirty two plant names (704 formally published and 28 informal names) were added to the WACensus.
- A total of 1,812 other edits were made to the WACensus.
- WACensus updates were regularly distributed to 264 registered Max users.
- Provided critical review of several years backlog of APC name updates resulting from ongoing taxonomic activity in Australia and internationally.
- Contributed to discussions on taxonomy and nomenclature to assist in reaching national consensus for the National Species List (NSL), also known as the Australian Plant Census.
- Contributed to discussions and testing of a new online approach to the current inefficient document based process of handling APC name updates.
- The State's contribution to maintenance of this national cooperative database continued with the addition of 114 new vascular plant names to the NSL database and creation of 543 new instances (data on synonomy and publications).

Management implications

- WACensus provides users with a single, authoritative official list of plants for Western Australia, with their currently accepted classification, scientific name, correct spelling and authority. Delivery of this information is through the *FloraBase* website, Max (the department software for information based on taxonomic names) and other linked databases or websites.
- Users of plant names are able to access WACensus information to ensure that current information on names, taxonomic acceptance and occurrence in Western Australia is available for conservation status lists, publications, signage and legal requirements. Outdated names can be traced to their current status or updated name through WACensus.
- WACensus feeds Western Australian information to national biodiversity systems such as the Atlas of Living Australia, Australasian Virtual Herbarium, the Australian Plant Census (National Species List), and

the e-flora of Australia. The national list contributes to international names databases such as the Global Biodiversity Information Facility and Encyclopedia of Life.

Future directions

- Continue to provide a comprehensive and up to date census across all plant, algae, and fungal groups.