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Did you notice?

There is, in general, a diminishing relationship between figures in subsequent rows of the table, as figures in each category are subtracted from the ones above.

Eg. in each column: $A - B = C$.

Having trouble deciding ...

... the most appropriate data for your purpose? The highlighted rows are the recommended figures if you need:

- to cite the actual number of known vascular plant entities in WA ^D, or
- a conservative estimate of the number of well-documented vascular plant species ^H.

'Green's Census'

For those familiar with Green, J.W. (1985) *Census of the vascular plants of Western Australia* 2nd ed., WA Herbarium, Perth and subsequent supplements, the following four PDF tables are presented in the style of Green's statistical summaries. They provide further details corresponding to row H in the above table. Data also sourced on 1st June 2010.

- Table 1. [Conspectus Of Families And Genera With Statistics](#)
- Table 2. [Families Ranked By Number Of Species](#)
- Table 3. [Genera Ranked By Number Of Species](#)
- Table 4. [Size Of Vascular Plant Divisions](#)

Western Australian Flora Statistics

This page provides the user with a set of standard statistics on the size, diversity and endemism of the Western Australian vascular flora.

Current Statistics - Vascular Flora - June 2010

Table 1. Analysis of the size of vascular plant divisions for various categories of name

Category	Pteridophytes	Gymnosperms	Monocots	Dicots	Total
Total names ^A	141	35	3727	16014	19917
Non-current names ^B	34	11	1082	4295	5422
Current names ^C	107	24	2645	11719	14495
Species with infraspecies ^K	7	0	151	956	1114
Current taxa ^D	100	24	2494	10763	13381
Current alien taxa	8	7	359	835	1209
Current native taxa	92	17	2135	9928	12172
Current species ^E	98	24	2336	9766	12224
Current alien species	8	7	351	824	1190
Current native species	90	17	1985	8942	11034
Manuscript names ^F	0	0	36	224	260
Phrase names ^G	0	0	267	1073	1340
Published species ^H	98	24	2060	8629	10811
Published alien species ^I	8	7	351	822	1188
Published native species ^J	90	17	1709	7807	9623

Notes

Data sourced on 1st June 2010. Compare with [the 2009 figures](#).

The terms *taxa* refers to entities at species level and below; and *species* refers only to those entities at species rank.

^A - total number of vascular plant names in the database

^B - number of synonymous, excluded or misapplied names (ie. plant names no longer in current use, at least in WA)

^C - number of currently accepted plant names (ie. includes the species-level name when infra-species exist)

^D - number of currently accepted taxa (ie. excludes the species-level name when infra-species of that taxon exist)

^E - number of currently accepted species (ie. only the species-level names, excludes any infra-species names)

^F - number of proposed but unpublished taxa (ie. informal names proposed on specimens or in manuscripts)

^G - number of assigned but unpublished taxa (ie. informal names assigned to specimens for further analysis)

^H - number of formally published species names (ie. formally published names described in botanical literature)

^I - number of published naturalised alien species (ie. formally published names of weed species occurring

in WA)

^J - number of published species native to Western Australia (ie. formally published names of native WA species)

^K - number of species with subordinate current taxa (subspecies, varieties and formas).

2010 Highlights

For the vascular plants, a brief comparison of the 2010 data with 2009 data shows:

- the addition of 386 names to the Census of Western Australian Plants database;
- there are 168 additional taxa recognised as occurring in the State: 158 native taxa and 10 naturalised taxa;
- the number of published species rose by 87 to 10,811, including 75 native species and 12 naturalised species;
- a decrease, for the third consecutive year, in the number (-43) of manuscript names in current use, down to 260, due either to their formal publication or their conversion to phrase names as part of the Australian Plant Census project;
- a significant increase (+118) in the number of phrase names in current use, up to 1,340;
- therefore, there has been an increase (75) in the number of putative taxa yet to be researched and published, from 1,525 in 2009 to 1,600 in 2010;
- for the first time, additional figures have been calculated to split the number of current species into native and alien components: of the 12,224 current species of vascular plants in the Census, there are 1,190 naturalised species and 11,034 native species;

New classification

This is also the first floristic summary published subsequent to the WA Herbarium's adoption of the APGIII classification, which has seen [a major rearrangement of family \(and some generic\) concepts and relationships](#). These changes are not so noticeable at the species rank, however, you will notice that the accompanying 'Green's Census' tables are now arranged according to [the new linear sequence](#) and detail the currently accepted familial classification.

Table 2 below compares the number of taxa at each major rank in the four 'classical' vascular plant groups under the old Englerian classification (2009) and the new APGIII classification (2010). (Cf. Table 4 from 'Green's Census'.)

Table 2. Size of Vascular Plant Divisions in 2010 (and 2009)

Group	Family	Genera	Species
Pteridophytes	20 (24)	45 (45)	98 (96)
Gymnosperms	5 (5)	7 (7)	24 (24)
Monocots	50 (51)	405 (408)	2060 (2035)
Dicots	136 (150)	1136 (1135)	8629 (8569)
TOTAL	211 (230)	1593 (1595)	10811 (10724)

Other Collections Statistics

Data sourced on Tuesday, 1 June 2010. Other core statistics often required for citation in various works

include the number of:

- specimens now held in the WA Herbarium Specimen Database (WAHERB) = 722,671
- names now held in the WA Herbarium Census of WA Plants Database (WACENSUS) = 22,046
- accessions now held in the WA Herbarium Library Database (WALIB) = 23,735
- images now held in the WA Herbarium Image Collection = 37,885
- composite images illustrating taxa in FloraBase = 6,970

Compiler's Note. While the current contents are manual concatenations of census data, or static tables drawn from recent published works, it is intended that future versions of this page will contain live flora statistics drawn directly from the constantly maintained datasets held at the Western Australian Herbarium. At that time we would also seek to disseminate the standard logic behind the accurate calculation of these statistics. In this way, not only will the latest figures be available at all times, but the correct methodology for calculating and applying those figures will become better understood.

Compiled by [Alex Chapman](#); last updated on 3 June 2010.



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