

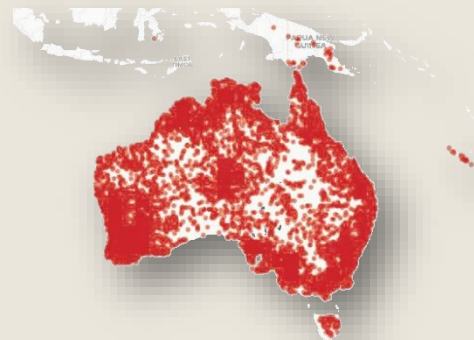
Grevillea Origins & Diversity

When we talk about iconic Australian genera, we tend to talk about the abundance of *Eucalyptus* and *Acacia* species, but rarely get round to considering which genus comes third in terms of number of species. You

may be surprised, as we certainly were, to find that apart from *Eucalyptus* and *Acacia*, *Grevillea*, has more species, 371, than any other Australian flowering plant! They are widespread across Australia, with the greatest diversity in terms of number of species in south-western Western Australia.

Grevillea belongs in a **subtribe Hakeinae** of the **Proteaceae** (*Protea* family), which includes *Hakea* (149 species) and *Buckinghamia*, the Ivory Curl Tree (2 species), plus two other less well-known genera. The subtribe is believed to have appeared about 50 Ma (million years ago) when Australia was still connected to South America via Antarctica and the Tasmanian land bridge. Australia began rafting northwards about 37 million years ago, a move combined with changes in climate and environment. About 15 million years ago, there was a dramatic shift to drier environments, and, not surprisingly, this shift coincides with the estimates for the origins and diversification of *Grevillea* and *Hakea*.

Very few *Grevillea* occur naturally outside Australia. *Grevillea baileyana*, a rainforest tree, and *Grevillea glauca*, a woodland tree, also occur in New Guinea; three



Grevillea distribution – Australia, New Caledonia (3 species), New Guinea (3), Sulawesi (1) Map from Atlas of Living Australia:

https://avh.ala.org.au/occurrences/search?taxa=Grevillea#tab_mapView



species (*G. exul*, *G. gillivrayi*, *G. meisneri*) are endemic to New Caledonia, and *G. elbertii* is endemic to Sulawesi and *G. papuana* to New Guinea.

Grevillea have long been popular with gardeners and include a range of shapes and sizes from horizontal ground cover plants to shrubs and trees. The diversity of flower shape and colour is astounding, as reflected in the stylised *Grevillea* flowers of our departmental logo. In addition to the vast number of species, there is an abundance of varieties, hybrids and, thanks to the enterprise of avid collectors and horticulturalists, a swag of cultivated varieties (cultivars) that differ sufficiently from wild ancestors to merit specific names. There is a common view that these are perfect garden plants to attract native birds but more recently, concern has been raised that abundantly flowering hybrid *Grevilleas* primarily attract the rather anti-social Noisy Miners to the exclusion of all else! When choosing *Grevillea* species and cultivars for your garden, select those with dense nets of prickly foliage that also afford refuge from predators for small birds and lizards.



Grevillea flowers are actually quite small but are clustered together in various arrangements. Back in the olden days, some would have been categorised as *spider* flowers or *toothbrushes* but there are many more that just don't fit into these categories.





In 2003, a stamp designed by Bruce McKinlay featuring *Grevillea* 'Superb', was one of four stamps featuring *plant cultivars* issued by Australia Post.

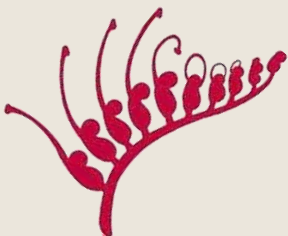
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The Australian Cultivar Registration Authority Inc.: [List of Australian Registered Cultivars \(anbg.gov.au\)](http://anbg.gov.au)

Australian Native Plants Society (Australia): <http://anpsa.org.au/grev1a.html>

Makinson R O. 2000. *Grevillea*, Flora of Australia, 17A: 1–460.

Mast A R, Olde P M, Makinson R O, Jones E, Kubes A, Miller E T, Weston P H. 2015. Paraphyly changes understanding of timing and tempo of diversification in subtribe Hakeinae (Proteaceae), a giant Australian plant radiation. *American Journal of Botany* 102(10): 1634 – 1646. <http://www.amjbot.org>



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