## Coleus – Believe it or not, an Australian

native!

We were mulling over possible plants to feature for next week, when one of us, in jest, suggested Coleus, the plant with the great diversity of brightly coloured leaves, so much loved by elderly relatives, particularly popular during the 1940s, then again in the 1980s. However, like so many species we've researched in the last few years, scutellarioides took us by surprise. Would you believe it is actually an Australian native plant?



Photo: Sabina Bajracharya / CC BY-SA (https://creativecommons.org/licenses/by-sa/4.0)

widespread across northern Australia, but also naturally occurring in Sri Lanka, India, and south-east Asia. This begs the question, is this yet another plant species that may have arrived in Australia during one or both of the *Great Asiatic Floristic Interchanges* associated with continental drift and the subsequent collision of the Indian Plate, and later the Australian Plate, with South-east Asia? Or was it an Australian species that moved north? According to Rob Kooyman, the most likely scenario is that it is a Sunda (Malesian) species that has moved south.







Photo: Bjoertvedt / CC BY-SA (https://creativecommons.org/licenses/by-sa/4.0

Coleus has been used as a common name for our colourful garden plants, but there have been many changes to both genus and species, far too many record here. Linnaeus originally named it **Ocimum** scutellarioides in 1763. More recently it has been known as Plectranthus scutellarioides, but just last year (2019), botanists, including Trevor Wilson from the National Herbarium of NSW. transferred most of the species of Australian Plectranthus to Coleus (a few to Equilabium), so our colourful garden plant is now formerly known as Coleus scutellariodes, although few web pages have kept up with these changes. The wild form from Australia's north has green leaves but plant breeders have selected forms with brightly coloured leaves ever since the plants were introduced from Java to Europe in 1851.

Prior to the study by Trevor Wilson and his colleagues, botanists recognised about 350 species of *Plectranthus*, most of them from the southern hemisphere (Africa, Madagascar, India, south-east Asia, some Pacific islands and Australia).

The glorious colours we know today reflect the proportions of green pigment (chlorophyll) and red, purple and orange pigments (anthocyanins). The proportion of green and coloured pigments is dependent on light levels: the more light, the more colour (anthocyanins); greener the less light, the (chlorophyll). If you are looking for the best colours in your potted plants, you may need to move them until you find the optimum light levels for the colours you want.





Photo: Kurt Stüber [1] / CC BY-SA (http://creativecommons.org/licenses/by-sa/3.0/)



## Alison Downing, Brian Atwell, Kevin Downing Department of Biological Sciences

Trevor Wilson, Royal Botanic Gardens Sydney. 2019. *Coleus* genus resurrected. <a href="https://www.rbgsyd.nsw.gov.au/Stories/2019/Coleus-back-in-the-name-game">https://www.rbgsyd.nsw.gov.au/Stories/2019/Coleus-back-in-the-name-game</a>

Paton A J, Mwanyambo M, Govaerts R H A, Smitha K, Suddee S, Phillipsons P B, Wilson T C, Forster P I, Culham A. 2019. Nomenclatural changes in *Coleus* and *Plectranthus* (Lamiaceae): a tale of more than two genera. *PhytoKeys* 129: 1–158. doi: 10.3897/phytokeys.129.34988.

Australian Plants Society, East Hills Group Newsletter, May 2017.

https://austplants.com.au/resources/Documents/East-Hills-

Documents/APS%20East%20Hills%20Group%20newsletter%20MAY%202017%20copy.pdf

Wikipedia: https://en.wikipedia.org/wiki/Plectranthus\_scutellarioides

Nguyen P, Dal Cin V. 2009. The role of light on foliage colour development in *Coleus* (*Solenstemon scutellarioides* (L.) Codd). *Plant Phyliol. Biochem.* 47(10): 934-945.





