Apocissus antarctica (Syn. Cissus antarctica) Kangaroo Vine, Native Grape

Bushwalkers who are familiar with tropical and subtropical rainforests of eastern Australia will be well acquainted with Kangaroo Vine, so too, many gardeners, who will know this not only as an attractive garden plant, but as a hardy indoor plant.

Cissus includes more than 350 species, most from tropical and subtropical regions of the world, and is the largest genus in the economically important grape family, Vitaceae.

> *Cissus* is recognised as having its origins in Africa, after diverging from other genera in the Vitaceae in the late Cretaceous 66 mya. It colonised Asia at least three times during the Miocene and reached the Neotropics (the Am North Atlantic Land E





Kangaroo Vine, now V known as *Apocissus antarctica* in Australia

the Neotropics (the Americas) via the NALB – North Atlantic Land Bridges - in the middle

Grape-like fruit of *Apocissus antarctica*. Photo: MargaretRDonald, CC BY-SA 4.0 https://creativecommons.org/licenses/by-sa/4.0, via Wikimedia Commons. Fruits are edible, albeit somewhat acidic.



Eocene, a time when climate conditions in the Northern Hemisphere favoured tropical vegetation.



Australia has about twelve species of *Cissus* species. Four (including *C. antarctica*) which are either Australian endemics or limited in their distribution to Australia and New Guinea, together with four South American species, have been grouped together in a *Neotropical – Australian clade*. So how is it that four South American *Cissus* are so closely related to four Australian species? Previously it was thought that there may have been exchange of *Cissus* species between South America and Australia via Antarctica (a Gondwanan connection), but the timelines suggest otherwise, and now it is considered more likely that the South American species arrived in Australia from South America via 'long distance dispersal' likely mediated by animals carrying propagules.



Apocissus antarctica - Furry, reddish-brown young leaves and branched tendril.

Apocissus antarctica is a vigorous climbing plant with hairy, rusty brown new growth and round, purple fruits, not dissimilar to those of closely related grapes, Vitis vinifera. Cissus even uses tendrils to climb.

Two of the most commonly occurring Australian Cissus vines, previously Cissus antarctica and C. hypoglauca, have been moved to a



new genus, and are now known as Apocissus antarctica, and Apocissus hypoglauca, respectively. Apocissus hypoglauca is also widespread in rainforests along the east coast of Australia. It has compound, palmate (palmshaped) leaves, usually with leaflets in multiples of five, and is often referred to as Giant Water Vine because it is possible to cut sections of woody stems and drink the sap as water, a potentially life-saving attribute.

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- Jackes B, Trias Blasi A. 2023. Apocissus Jackes & Trias-Blasi, a new genus in the Vitaceae. Austrobaileya, 13:94-104. 10.5962/p.411120.
- Liu XQ, Ickert-Bond S M, Chen LQ, Wen J. 2013. Molecular phylogeny of Cissus L. of Vitaceae (the grape family) and evolution of its pantropical intercontinental disjunctions, Molecular Phylogenetics and Evolution, 66(1): 43-53.
- Rosetto M, Crayn D M, Jackes B R, Porter C. 2007. An updated estimate of intergeneric phylogenetic relationships in the Australian Vitaceae. Canadian Journal of Botany, 85(8): 722-730. DOI: 10.1139/B07-022

Wikipedia: https://en.wikipedia.org/wiki/Cissus antarctica Wikipedia: https://en.wikipedia.org/wiki/Cissus hypoglauca









Apocissus hypoglauca