Beach Bird's Eye

Alectryon coriaceus

Although this species is an endemic, Australian biogeographical origins of the genus Alectryon and the family, Sapindaceae, are quite complex. Bird's Eye, Alectryon Beach coriaceus, grows as a shrub or small tree in rainforest and scrub close to the sea from Port Stephens in New South Wales to Maryborough in Queensland. Growth is often stunted when plants grow in exposed locations near the coast.

The trees don't particularly stand out until the spectacular red and black seeds are produced in dense, terminal clusters from late

autumn to mid-winter. Three-lobed capsules open to expose glossy black seeds enclosed by smooth, bright red, fleshy *arils*. Arils are outgrowths from





seeds, partly, and can completely encase the seed. Technically, arils grow from the point at which the seed is attached to the ovary (funicle), although the term aril is often used for any fleshy, fruit-like appendages seeds on flowering plants, as with



Lychee, fruit, seed and fleshy edible aril. Photo: I, Luc Viatour, CC BY-SA 3.0 http://creativecommons.org/licenses/by-sa/3.0/, via Wikimedia Commons

Alectryon is a genus in Sapindaceae, the Soapberry Family, which consists of mostly trees and shrubs from tropical and sub-tropical regions of the world. The family is Gondwanan in origin, with genera endemic to Africa, Madagascar, New Caledonia, New Guinea and Australia. South-eastern Asia is now recognised as the centre of diversity. Australia has 30 genera and perhaps 200 species. The Sapindaceae includes a surprising number of important tropical fruit, lychee, longan, rambutan and ackee. Many are popular garden plants,

pomegranates. The sweet, fleshy edible flesh of lychees – *Litchi chinensis* (another member of the Sapindaceae) are highly developed arils, and not true fruit. Arils are important in seed dispersal; the bright colours attract dispersal agents such as birds and reward them with the sweet flesh. Not only do birds disperse the seeds, but passing through their guts can significantly improve germination.



Distribution of Beach Birds Eye, *Alectryon coriaceus*. Map modified from *Atlas of Living Australia*:

https://biocache.ala.org.au/occurrences/search?q=lsid:https://id.biodiversity.org.au/node/apni/2887464#t

others, such as maple (*Acer* species) are important timber trees. The name *Soapberry* comes from the many species that contain a milky sap with soaplike qualities.

There are 25 species in the genus *Alectryon*, with 15 species in Australia, including 13 endemics. Other *Alectryon* species are found to the north (New Guinea, Philippines, Indonesia), and throughout the western Pacific (New Caledonia, Fiji, New Zealand, Hawaii). Throughout these regions, they are common in drier rainforests, giving rise to the suggestion that *Alectryon* originated in a temperate region of Australia with radiation and speciation into seasonal habitats to the north, and later dispersal to New Guinea, New Zealand and further afield. However, the evidence is not conclusive, and a subtropical or tropical origin is also possible.

Atlas of Living Australia:

https://bie.ala.org.au/species/https://id.biodiversity.org.au/node/apni/2891604

Edwards K J, Gadek P A. 2001. Evolution and biogeography of *Alectryon* (Sapindaceae). *Molecular Phylogenetics and Evolution*. 20(1): 14–26, doi:10.1006/mpev.2001.0952

Edwards K J, Gadek P A, Metcalfe I, Smith J M B, Morwood M. 2001. Evolutionary history of *Alectryon* in Australia. *Faunal and floral migrations and evolution in SE Asia-Australia*. Lisse; Balkema, pp.243-251.

Plantnet: https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Alectryon~coriaceus

Reynolds S T. 2019. *Alectryon*. In: Flora of Australia. Australian Biological Resources Study, Department of the Environment and Energy, Canberra. https://profiles.ala.org.au/opus/foa/profile/Alectryon [Date Accessed: 19 November 2019]

Reynolds S T, West J G. 2019. Sapindaceae. In: Flora of Australia. Australian Biological Resources Study, Department of the Environment and Energy, Canberra. https://profiles.ala.org.au/opus/foa/profile/Sapindaceae [Date Accessed: 13 November 2019] Wikipedia: https://en.wikipedia.org/wiki/Aril

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