

# *Angophora hispid* Dwarf Apple

When compared to towering local *Eucalyptus* and *Angophora* trees, this shrubby, dwarf tree looks pretty average for most of the year, but when in bud, and in full flower, it can be quite spectacular. Bushwalkers will know it from exposed sandstone ridges where it thrives on low nutrient, sandy soils, often in heathland or scrub where, together with



*Banksia*, *Hakea* and *Leptospermum*, it forms dense, almost impenetrable thickets, a source of misery for bushwalkers.



Young stems and flower buds are covered in distinctive bristly hairs, hence the specific name *hispid*, Latin for *hairy, bristly, rough or shaggy*.

Leaves of the Dwarf Apple are arranged opposite each other along the stems, a characteristic they share with other species of *Angophora*, but which marks them apart from most species of *Eucalyptus* which have leaves arranged alternatively along the stem. However,

Although the Dwarf Apple is well known to Sydney-siders, it has a remarkably limited distribution, from the Woronora Plateau near Wedderburn just south of Sydney, to Gosford in the north. In comparison, *Angophora costata*, the Smooth Barked Apple, or Sydney Red Gum, can be found from Narooma on the South Coast of NSW, all the way through to south-eastern Queensland.



*Angophora hispid* - distribution map modified from Atlas of Living Australia:

[https://biocache.ala.org.au/occurrences/search?q=lsid:https://id.biodiversity.org.au/node/apni/2889602#tab\\_mapView](https://biocache.ala.org.au/occurrences/search?q=lsid:https://id.biodiversity.org.au/node/apni/2889602#tab_mapView)



unlike other *Angophora* species, the leaves of the Dwarf Apple have stalks so short (0 – 4mm long) they are barely noticeable and the heart-shaped (cordate) leaf bases clasp the stems.



The Dwarf Apple is well equipped to survive bushfires, and can resprout from woody, underground storage organs known as *lignotubers*, and from *epicormic buds* which lie protected from fire beneath the bark of tree trunks and branches. Remarkably, plants can flower within a year of being decimated by bushfires, and in the process, they can provide a critical source of food for birds (noisy miner, wattlebirds) and insects, including native and honey bees, butterflies, moths, flies and beetles, all the more pertinent this year after the devastating bushfires of last summer. In 1990, a pre-and post-fire study conducted by botanists from University of Wollongong after a moderate wildfire on Hawkesbury Sandstone, found that, with one exception, all species, post-fire, including *A. hispida*, had the same mycorrhizal associations after the fire that they had before the fire.



Regrowth from underground lignotuber



Regrowth from epicormic shoots

In 1795, Surgeon-General of New South Wales, John White, collected and sent a specimen to English botanist James Edward Smith in London. In 1797, Smith formerly described the plant as *Metrosideros hispida*, but in the same year, the famous Spanish botanist, Antonio José Cavanilles, described it as *Angophora cordifolia*. Which name should take precedence? This was not resolved until 1976, when Sydney Botanist, Don Blaxell, established that Smith had published his treatise in May, 4 months earlier than Cavanilles (September), and established the name we currently use, *Angophora hispida*.

Molecular biologists now tell us that *Angophora* is closely related to *Eucalyptus*, so it may be that, at some time in the future, *Angophora hispida* will be known as *Eucalyptus hispida*.



*Angophora hispida* - Illustration by Edward Minchen, in J. H. Maiden's *Flowering Plants and Ferns of New South Wales with Especial Reference to their Economic Value*. Parts I to VII. 1895. Department of Mines and Agriculture (Forest Branch), Sydney, Australia.

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- Wikipedia: [https://en.wikipedia.org/wiki/Angophora\\_hispida](https://en.wikipedia.org/wiki/Angophora_hispida)



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