

Dendrobium affine (Decne.) Steud.

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Joseph Decaisne first described this species in 1836 as *Onichyrum affine* (Nomencl. Bot. ed. 2, 1: 489, 1840). The name is derived from the Latin adjective 'affinis' meaning close, similar. The name applies to a certain similarity to *Dendrobium mirbelianum* Gaudich. (1829).

Synonyms

Onychium affine Decne. (1836); *Dendrobium dicuphum* F.Muell. (1874); *Dendrobium leucolophotum* Rchb.f. (1882); *Callista affinis* (Decne.) Kuntze (1891); *Callista dicupha* (F.Muell.) Kuntze (1891); *Callista leucolophota* (Rchb.f.) Kuntze (1891); *Dendrobium urvillei* Finet (1903); *Vappodes affinis* (Decne.) M.A.Clem. & D.L.Jones (2002); *Vappodes dicupha* (F.Muell.) M.A.Clem. & D.L.Jones (2002).

The species is found in Australia from Groote Eylandt and adjacent mainland around Numbulwar in the Northern Territory, and west to Talbot Bay in the Kimberley region of Western Australia. It is also found in Indonesia on Tanimbar and the Lesser Sunda Islands, Timor Leste, the Maluku Islands and West Papua.

Dendrobium affine is epiphytic and occasionally lithophytic, growing in a variety of forests and open woodlands and scarp country from sea level to 300 m. Host species range from mangroves and paperbarks in moist coastal forests to monsoon vine thicket species and *Cycas* spp. in inland areas. It can be found more than 300 km from the coast in central Arnhem Land where it forms dense colonies on *Cycas* species, in particular within open forests and savannah communities.

In Australia the plants in coastal swamps and mangrove communities tend to have narrower and longer canes, a growth character they retain in cultivation. Forms from more inland regions tend to have shorter, more robust canes. Plants are occasionally subject to fire in open forest situations, and plants growing on *Cycas* are often scorched and killed by hotter than normal fires. In more arid areas plants are deciduous, often losing leaves by May, and then becoming dormant until

the flowers spikes emerge around September. This coincides with the start of the build-up of the storm season. In moist situations closer to the coast it is still deciduous and dormant, but for a shorter period of time.

The hosts I have recorded include *Alstonia actinophylla* (northern milkwood), *Barringtonia acutangula* (freshwater mangrove), *Cycas armstrongii*, *C. arnhemica* (*Zamia* palms), *Erythrophleum chlorostachys* (Cooktown ironwood), *Livistona humilis* (sand palm) *Nauclea orientalis* (Leichardt tree), *Pandanus basedowii* and *P. spiralis* (screw palms), *Rhizophora stylosa* (stilt mangrove) and *Melaleuca* species (bottle brushes and paperbarks).

Dendrobium affine has tapered cylindrical pseudobulbs 10–35 cm long with alternate linear-lanceolate leaves with a pointed apex, leathery, glossy and green in colour with occasionally red to purple tint to striping dependent on light levels and growing conditions. Flowers are borne on arcuate, racemose inflorescences 20–50 cm long, from the upper nodes of the pseudobulbs from current and previous years without leaves. Flowers (8–20) are 3–5 cm diameter and open in succession from the basal end of the inflorescence. They are white with a greenish yellow spot at the base of the labellum. Plants from the central Arnhem area and eastern side of the Northern Territory often have a purple red spot at the base of the labellum. Flowers have oblong sepals with a pointed apex; the lateral sepals merge at the base of the column, forming a spur. Petals are ovate to obovate; the labellum is three lobed, with rounded lateral lobes surrounding the column and an oblong central lobe with pointed apex.

Cultivation

This is a very ornamental species with flowers lasting 1–2 months. In tropical areas it can be grown outdoors on living trees with hard non-shedding bark. *Melaleuca viminalis* is a favourite of mine in Mackay, Queensland, for all sorts of epiphytic plants including *D. affine*. In the orchid house plants need good ventilation and



D. affine on *Cycas*, Arnhem Land.
Photo Grant Paterson



D. affine from Arnhem Land.
Photo Peter Adams