

Threatened species of the Northern Territory

Crepidium marsupichilum

(previously *Malaxis marsupichila*)

Conservation status

Australia: Not listed

Environment Protection and Biodiversity Conservation Act 1999

Northern Territory: Vulnerable

Territory Parks and Wildlife Conservation Act 1976



Credit: I.D. Cowie

Description

Crepidium marsupichilum is a deciduous, terrestrial orchid. Its leaves are 15 cm x 7 cm, dark green, thin-textured, shiny and stalked, with wavy margins. The flower stem grows to 50 cm tall, green and purple. The light purple to dark purple flowers are about 8 mm across with three-lobed labellum or lower lip.

Flowering: January to April

Fruiting: May.

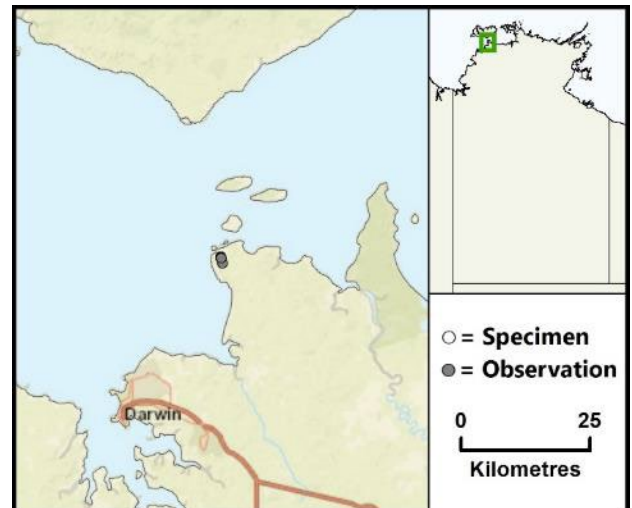


Caption: Flower of *Crepidium marsupichilum* (Credit: I.D. Cowie)

Distribution

This species is an Australian endemic, known from north-eastern Queensland and the Northern Territory (NT). In the NT, it is known from only one locality, Gunn Point, where it was first collected in 1984.

Conservation reserves where reported: none.



Caption: Known locations of *Crepidium marsupichilum* in the NT (nrmmaps.nt.gov.au)

Ecology

This species forms colonies in sandy or clay soils rich in leaf litter. It favours protected shady locations in moist soils along the edges of patches of monsoon rainforest and also in littoral rainforest, often close to the sea¹.

Crepidium marsupichilum was relocated in late January 2019 at one locality on the western side of Gunn Point in monsoon rainforest in a small incised gully discharging to the adjacent littoral zone. The overstorey vegetation at the site supporting *C. marsupichilum* is broadly representative of the monsoon rainforest communities in the Greater Darwin region. However, this site has an unusual ground layer comprising a distinct continuous layer of surface leaf litter with mosses and lichens prominent on exposed laterite and tree roots, features noticeably absent from the majority of the areas searched for *C. marsupichilum* around Gunn Point peninsula since 2014. Extensive searching of the monsoon rainforests along the western side of Gunn Point did not locate any additional plants despite superficially suitable habitat being present. Variation in the microclimate, hydrological and disturbance regimes may be important to the maintenance of the species at this locality.

Threatening processes

The threats to this species are grassy weed invasions in conjunction with changed fire regimes; feral animals (in particular pigs either by direct consumption or through excavation of plants); and stochastic (chance) disturbances, particularly cyclones. In addition, illegal harvesting of plants is a potential threat. Opening of the overhead canopy as a result of cyclones may also affect the suitability of the habitat.

Conservation objectives and management

Mitigation measures relevant to the conservation of rainforest patches are relevant to this species.

References

- ¹ Jones, D.L. 1988. *Native Orchids of Australia*. (Reed, Sydney.)
- ² Russell-Smith, J. 1991. Classification, species richness, and environmental relations of monsoon rain forest in northern Australia. *Journal of Vegetation Science* 2, 259-278.
- ³ Liddle, D.T., Russell-Smith, J., Brock, J., Leach, G.J., and Connors, G.T. 1994. *Atlas of the vascular rainforest plants of the Northern Territory*. Flora of Australia Supplementary Series No. 3. (ABRS, Canberra.)