

Threatened species of the Northern Territory

Hibbertia pancerea

Conservation status

Australia: Not Listed

Environment Protection and Biodiversity Conservation Act 1999

Northern Territory: Vulnerable

Territory Parks and Wildlife Conservation Act 1976

Description

Hibbertia pancerea is a spreading shrub that grows to 1.5 m tall. Plants are clothed in a dense covering of peltate scales. Leaves are broadly elliptic with rounded apices. The solitary flowers have large yellow petals about 15 mm long¹.

Hibbertia pancerea is in the *H. leptoda* subgroup and resembles *H. argyrochiton*.

Formerly referred to as *Hibbertia* sp. fire plot 121 (K.G. Brennan), it has been formally described and is conventionally accepted¹.

Flowering: February and March.

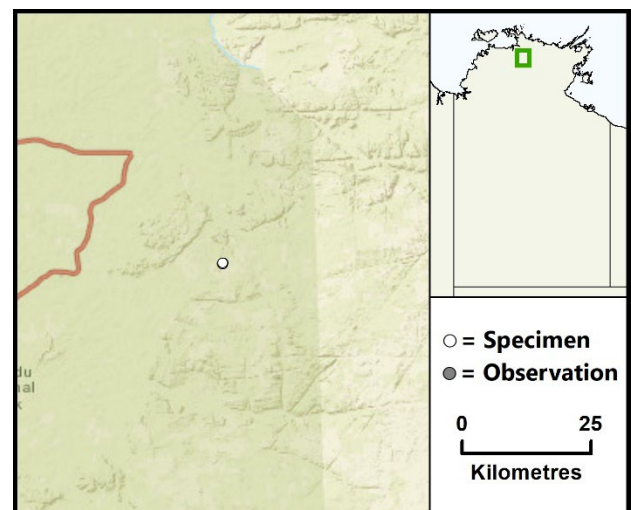
Distribution

This species is endemic to the Northern Territory (NT). To date *Hibbertia pancerea* is known only from the type location on the western escarpment of the Arnhem Land Plateau. The single known site is situated at the eastern edge of Kakadu National Park very near its border with Arnhem Land.

NT conservation reserves where reported:
Kakadu National Park



Credit: I.D. Cowie



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

Ecology

Hibbertia pancerea grows among sandstone rocks in shrubland to open forest on top of the Arnhem Land escarpment. It occurs on

sandstone boulder slopes around a cliff line and adjacent a seasonal stream on the escarpment.

Threatening processes

Hibbertia pancerea is a very restricted species² that is known only from the type locality. The species is also listed as a short range endemic in the NT.

As *H. pancerea* is confined to a single location it is at risk of stochastic events. Successive wildfire events could potentially threaten the species. The very rocky habitat of the species however provides some inherent protection from fire. The fire response of *H. pancerea* is unknown. The species may have the capacity to resprout from rootstock or dormant buds following fire, and thus have some resilience. Alternatively the species may be an obligate seeding shrub sensitive to fire regimes characterised by frequent intense fires.

Conservation objectives and management

Fire management of the sandstone heath in this area of Kakadu National Park should take account of the presence of this species. A site-based regular monitoring program would provide understanding of population dynamics and the fire responses of the species.

Given the inherent vulnerability of a single known locality, propagation of plant cuttings and cultivation, for example at the George Brown Botanic Gardens Darwin, may provide some conservation security ex situ.

References

¹ Toelken, H.R. 2010. Notes on *Hibbertia* (Dilleniaceae) 5. *H. melhanioides* and *H. tomentosa* groups from tropical Australia. *Journal of the Adelaide Botanical Gardens* **23**, 1-117.

² Woinarski, J.C.Z., Hempel, C., Cowie, I.; Brennan, K., Kerrigan, R., Leach, G., and Russell-Smith, J. 2006. Distributional patterns of plant species endemic to the Northern Territory, Australia. *Australian Journal of Botany* **54**, 627-640.