

Threatened species of the Northern Territory

Mischocarpus stipitatus

(previously *Toechima* sp. East Alligator)

Conservation status

Australia: Endangered (as *Toechima* sp. East Alligator)

Environment Protection and Biodiversity Conservation Act 1999

Northern Territory: Endangered

Territory Parks and Wildlife Conservation Act 1976



Credit: M. Armstrong

Description

Mischocarpus stipitatus is a small, multi-stemmed, slender branched tree to 5 m high. Under favourable conditions it grows to a tree of 15 m. It is able to regenerate from coppice/rhizomes. The bark is light grey- brown, almost smooth.

This taxon was known in Northern Territory (NT) as *Toechima* sp. East Alligator until 2017, when it was realised the sterile NT taxon was *M. stipitatus* (G. Guymer pers. comm.).

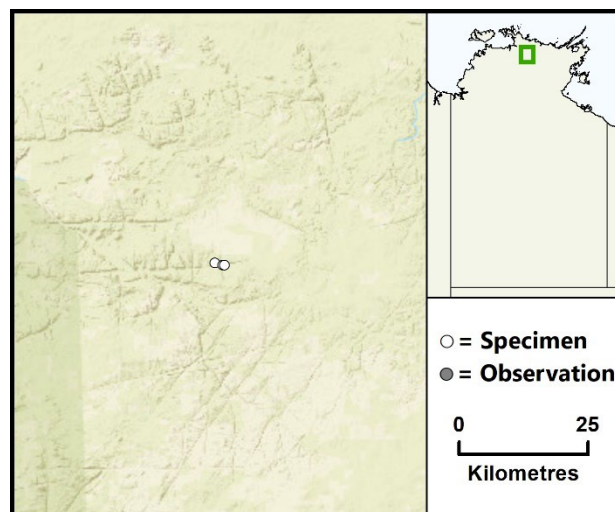
Flowering: not recorded.

Fruiting: not recorded.

Distribution

This species is known in NT from only one very small site in Arnhem Land near the Upper East Alligator River east of Kakadu National Park¹. The species also occurs in north Queensland, from Iron Range to Eungella.

NT conservation reserves where reported: None.



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

Ecology

Very little is known of this taxon. It occurs in a sandstone gorge in a rainforest patch dominated by the tree *Allosyncarpia ternata*. Queensland plants usually occur near water.

Threatening processes

As it is known from an *Allosyncarpia* rainforest in a deep sandstone gorge in Arnhem Land², it is difficult to identify immediate threats. While there is evidence to indicate that monsoon rainforests are vulnerable to disturbance from cattle, buffalo, pigs and dry-season wildfires³, collection notes document that the individuals occur in a very well protected gorge. It is also potentially vulnerable to stochastic events such as cyclones and drought, especially coupled with fire.

This species is known only from sterile or budding material and is noted as being able to regenerate as coppice from a rhizome. This species has red fruit with arillate seeds⁴ suggesting bird dispersal vectors. The NT plants may not be sexually reproducing.

Conservation objectives and management

Research priorities are to provide a more detailed assessment of its distribution, habitat requirements and population size; provide an assessment of the factors limiting distribution, and/or threats to its survival, and establish a monitoring program to assess demographic change and response to threats.

References

- ¹ 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.)
- ² Russell-Smith, J. 1992. Plant populations and monsoon rain forest in the Northern Territory, Australia. *Biotropica* **24**: 471-487.
- ³ Reynolds, S.T. and West, J.G. 1985. Sapindaceae. *Flora of Australia* **25**: 4-163.
- ⁴ Russell-Smith, J., and Bowman, D.M.J.S. 1992. Conservation of monsoon rainforest isolates in the Northern Territory. *Biological Conservation* **59**: 51-63.