

# Threatened Species of the Northern Territory

## *Austrobryonia argillicola*

### I. Telford (CUCURBITACEAE)



Photo: M. Armstrong

#### Conservation status

Australia: Not listed

Northern Territory: Vulnerable

#### Description

*Austrobryonia argillicola* is a prostrate herb with thickened perennial rootstock and annual stems to 1 m long. The leaves have a heart-shaped base and serrated edges that can be shallowly 3–5-lobed. Leaves are usually glabrous above and stiff bristly hairs below. The pale yellow flowers (1.3–1.8 mm long) are often solitary and are male or female. The fruits are sub-globose to 25 mm in diameter and are smooth and pale yellow-green with darker stripes (Schaefer et al., 2008).

The species was previously referred to as *Mukia* sp. Tobermorey Station (Schaefer et al., 2008).

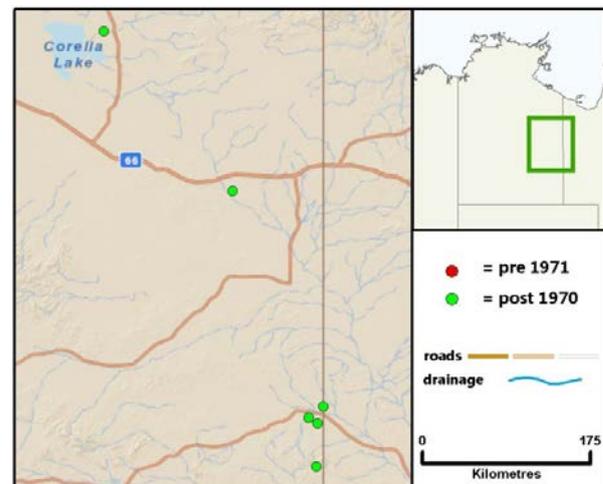
Flowering: March, May, July, October

#### Distribution

This species occurs in inland northern Australia from the Barkly Tablelands of the Northern Territory (NT) to Central western Queensland. It is recorded from the Georgina, Diamantina and Thompson River catchments (Schaefer et al., 2008). The species is rare in the NT, and is currently known from only five locations in the central-east. The western limit of this species' known range occurs within the NT.

Conservation reserves where reported:

None.



Known locations of *Austrobryonia argillicola*

#### Ecology

This species occurs along creeks and in poorly drained areas on cracking clay plains. It has been recorded from Bluebush swamps (dominated by *Chenopodium auricomum*), Gidgee (*Acacia georginae*) shrubland and riparian woodlands dominated by *Eucalyptus camaldulensis*.

#### Conservation assessment

*Austrobryonia argillicola* is classified in the NT as Vulnerable (under criteria D1 + D2) based on:

- number of mature individuals <1 000;

- an area of occupancy estimated to be <20 km<sup>2</sup>; and
- threats from human activities.

### Threatening processes

The species is unreserved. The preferred habitat of this species is favoured by stock and feral animals: there is no information available about its tolerance of grazing. Pastoral and infrastructure (e.g. road and seismic lines) developments in *Austrobryonia argillicola* habitat could have a major negative impact on this species.

### Conservation objectives and management

Research into the biology and potential threats to this species is required; and a monitoring program should be established for at least representative populations. Specific potential actions include:

- identify key threats;
- undertake surveys to quantify the population size and map its distribution;
- undertake research on habitat parameters;
- establish threat abatement actions and monitor population changes over time;
- minimise the impacts of future mining and pastoral developments;
- raise community awareness of this species; and
- collect and bank seeds and undertake seed biology research.

### Complied by

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 [updated December 2012]

### References

- Schaefer, H, Telford, IRH & Renner, SS 2008, 'Austrobryonia (Cucurbitaceae), A New Australian endemic Genus, is the closest Living Relative to the Eurasian and Mediterranean *Bryonia* and *Ecballium*', *Systematic Botany*, vol. 33, no. 1, 125–132.
- White, M., Albrecht, D., Duguid, A., Latz, P., and Hamilton, M. (2000). *Plant species and sites of botanical significance in the southern bioregions of the Northern Territory. Volume 1: significant vascular plants*. A report to the Australian Heritage Commission. (Arid Lands Environment Centre, Alice Springs.)