

Threatened Species of the Northern Territory

GLORY OF THE CENTRE

Ricinocarpus gloria-medii

Conservation status

Australia: Vulnerable

Northern Territory: Near Threatened



Description

Ricinocarpus gloria-medii is a shrub to 2 m high, erect or spreading. The leaves are narrow, grey-green with a covering of star shaped hairs; and the margins are strongly revolute. The flowers are white or creamy. The seed capsule is white-tomentose with star shaped hairs (Kalotis 1981).

Flowering: May–October.

Fruiting: July–October.



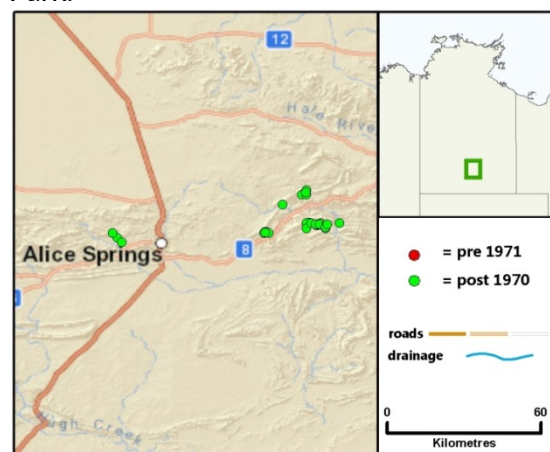
Female (above) and male flowers (below) of *Ricinocarpus gloria-medii*.

Distribution

This species is endemic to the Northern Territory (NT), and is confined to the MacDonnell Ranges Bioregion, where it is known from five separate populations, three of which are within or partly within conservation reserves (White *et al.* 2000). Its distribution is predominantly in the East MacDonnell Ranges. However, there is one population in the West MacDonnell Ranges National Park in the Simpsons Gap area. The total area occupied by this species is expected to be less than 400 ha (Soos *et al.* 1987). The latitudinal range is 20 km and the longitudinal range is 81 km.

Conservation reserves where reported:

N'Dhala Gorge Nature Park, Trepkina Gorge Nature Park and West MacDonnell National Park.



Known locations of *Ricinocarpus gloria-medii*

Ecology

Ricinocarpus gloria-medii occurs in deep gullies and well-shaded areas on south facing slopes of quartzite or sandstone hills. Sites often contain a large amount of rock outcropping which provides protection from fire.

This species has a patchy distribution within most of the identified populations. In the most favoured sites it is sometimes the dominant species or understorey species over small areas, such as sheltered rock gullies and the base of steep cliffs. It also occurs as more sparsely scattered individuals, such as on mid to lower scree slopes.

This species has long been regarded as fire sensitive, however field observation suggests that adult plants are able to withstand low-intensity fire. A patch of this species was burned by a wildfire in October 2002. The fire was probably of low to moderate intensity at that location. Out of 13 plants completely scorched by the fire, 11 resprouted. Most resprouted from the base and a few from the stems (A. Duguid *pers. obs.*). Presently, it is unknown whether or not this species has the capacity to withstand high severity/short-interval fire.

Surveys in four of the stands in 2005 found no evidence of spinifex encroachment into this species' habitat (Leitch 2005).

Conservation assessment

In 2005, Leitch (2005) estimated the population size at three surveyed sites as 3 900 individuals. Given known but unsampled populations, the total population is estimated to be in the order of 5 000 to 15 000 plants.

The conservation status of the species approaches Vulnerable (under criteria B2a and D2) based on:

- area of occupancy <20 km²; and
- severely fragmented or known to exist at no more than ten locations.

But there is no evidence of a population decline and there are presently no known threats that could drive this species to extinction. The species is classified in the NT as **Near Threatened**.

Threatening processes

Processes restricting the spread and increase of populations of this species are unknown and no threats to the species have been identified. Fire was thought to be a threat, but current evidence refutes this: i) the species is a strong resprouter; ii) there has been no change in fuel type (e.g. Buffel Grass) in *Ricinocarpus gloria-medii* habitat in the last decade; iii) this species mainly occurs in fire-protected habitat (rock outcrops, deep gullies and south-facing slopes) and there is little reason to expect major changes in fire frequency or severity where it occurs in the up-coming decades; and iv) *Ricinocarpus gloria-medii* occurs in two locations – in the East and West MacDonnell Ranges – and it is therefore unlikely that the entire population would be simultaneously exposed to wildfire.

Conservation objectives and management

The entire known population has been mapped (Soos 1987); with four stands having been done at high resolution (Leitch 2005).

The species has been grown from cuttings but not from seeds at the Alice Springs Desert Park (Tim Collins *pers. comm.*).

A national recovery plan for this species, and threatened arid zone Acacias, has been prepared by the Territory Government together with other state agencies (Nano *et al.* 2006). Recovery actions identified include to:

- i. implement management strategies for key threatening processes as required; and in particular to minimise the potential threat of hot spinifex fires during summer;

- ii. collect and store seeds from all populations in recognised seed-banks; and
- iii. engage indigenous ecologists to provide input into the recovery process.

Additionally, at least representative populations should be monitored to assess trends in population size and assess the impacts of threatening processes.

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References

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