

**Advice to the Minister for Environment Protection, Heritage and the Arts
from the Threatened Species Scientific Committee (the Committee)
on Amendment to the list of Threatened Species
under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)**

1. Reason for Conservation Assessment by the Committee

This advice follows assessment of new information provided through the Species Information Partnership with Western Australia on:

Ricinocarpos brevis

2. Summary of Species Details

Taxonomy	Conventionally accepted as <i>Ricinocarpos brevis</i> (Halford and Henderson, 2007).
State Listing Status	Listed as declared rare flora under the <i>Western Australian Wildlife Conservation Act 1950</i> . Managed as critically endangered by the Western Australian Government.
Description	A shrub that can grow to 1.8 m high. The flowers are white, and the flowering period is from June to July (Western Australian Herbarium, 2006; Halford and Henderson, 2007).
Distribution	Endemic to Western Australia and known from five populations. Three populations occur at Windarling Range, the fourth population occurs 30 km north of Windarling Range and the fifth population is located 100 km north-east of Windarling Range (DEC, 2009).
Relevant Biology/Ecology	Grows in shallow sandy soils on rocky banded ironstone outcrops (Halford and Henderson, 2007). The species' generation length is unknown (DEC, 2009).
Threats	
<i>Past</i>	N/A
<i>Present</i>	Mining and associated impacts (e.g. exposure to increased dust levels) is the key threat to the species with mining activity occurring in close proximity to the species (DEC, 2009). The species is also threatened by weed invasion as several minor pastoral weed species with aerial dispersed seed occur in low numbers at Windarling Range (DEC, 2009), grazing predation by the native moth <i>Microlepidoptera</i> sp., inappropriate fire regimes and commercial flora collecting which may inadvertently damage plants (DEC, 2009).
<i>Future</i>	Mine expansion and mineral exploration (DEC, 2009).

3. Public Consultation

The information used in this assessment was made available for public exhibition and comment for 30 business days. No comments were received.

4. How judged by the Committee in relation to the EPBC Act criteria and Regulations

Criterion 1: Eligible for listing as endangered

It has undergone, is suspected to have undergone or is likely to undergo in the immediate future a very severe, severe or substantial reduction in numbers

Criterion element	Evidence
Reduction in numbers	Severe – a 58% population size reduction over a time period which includes both the past and the future. An observed 38% population size reduction occurred between 2003 and 2006 due to clearing for mine development. Subject to development approvals, a projected further 20% of the species' population could be impacted by future mine development (DEC, 2009).

Criterion 2: Eligible for listing as endangered

Its geographic distribution is precarious for the survival of the species **and** is very restricted, restricted or limited

Criterion element	Evidence
Geographic distribution AND	Restricted – extent of occurrence 1700 km ² . The three populations that occur at Windarling Range have a combined area of occupancy of 1 km ² , however area of occupancy has not been recorded for populations four and five (DEC, 2009).
Geographic distribution precarious	Yes – exists at three locations and continued decline is inferred due to ongoing threats (see Criterion 1).

Criterion 3: Eligible for listing as vulnerable

The estimated total number of mature individuals is very low, low or limited; **and either**

(a) evidence suggests that the number will continue to decline at a very high, high or substantial rate; **or**

(b) the number is likely to continue to decline **and** its geographic distribution is precarious for its survival

Criterion element	Evidence
Total no. of mature individuals AND	Limited – 8200 mature plants (DEC, 2009).
Continued rate of decline	High – subject to development approvals, a projected further 20% of the species' population could be impacted by future mine development within five years (DEC, 2009). The life of the mine is currently scheduled to end in 2017 (DEC, 2009).
OR	

Total no. of mature individuals AND Continued decline likely AND Geographic distribution precarious	Limited – 8200 mature plants (DEC, 2009). Yes – see Criterion 1. Yes – see Criterion 2.
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Criterion 4: Not eligible

The estimated total number of mature individuals is extremely low, very low or low

Criterion element	Evidence
Total no. of mature individuals	Not low – 8200 mature plants (DEC, 2009).

Criterion 5: Not eligible

Probability of extinction in the wild that is at least

- (a) 50% in the immediate future; or
- (b) 20% in the near future; or
- (c) 10% in the medium-term future

Criterion element	Evidence
Probability of extinction in the wild	No data.

5. Recovery Plan

The Committee considers that there should not be a recovery plan for *Ricinocarpos brevis* as the approved conservation advice for the species provides sufficient direction to implement priority actions and mitigate against key threats. The Committee notes that an Interim Recovery Plan is being drafted by the mining company operating at Windarling, in consultation with the Western Australian Department of Environment and Conservation

6. Recommendations

- (i) The Committee recommends that the list referred to in section 178 of the EPBC Act be amended by **including** in the list in the **endangered** category:

Ricinocarpos brevis

- (ii) The Committee recommends that there should not be a recovery plan for this species.

Associate Professor Robert J.S. Beeton *AM FEIANZ*

Chair

Threatened Species Scientific Committee

7. References cited in the advice

DEC (Department of Environment and Conservation) (2009). Records held in DEC's declared flora database and rare flora files. Western Australian Department of Environment and Conservation, Western Australia.

Halford DA and Henderson RJF (2007). A taxonomic revision of *Ricinocarpos* Desf. (Euphoriaceae: Ricinocarpeae, Ricinocarpinae). *Austrobaileya* 7(3): 399–401.

Western Australian Herbarium (2006). FloraBase – the Western Australian flora. Department of Environment and Conservation.

Available on the Internet at: <http://florabase.calm.wa.gov.au/>