

**Advice from the Threatened Species Scientific Committee (the Committee)
on 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 on:

***Phaleria biflora* (a shrub)**

2. Summary of Species Details

Taxonomy	Conventionally accepted as <i>Phaleria biflora</i> (C.T.White) Herber.
State Listing Status	Listed as rare under the Queensland <i>Nature Conservation Act 1992</i> .
Description	A shrub or small tree growing to 5 m high with bright red new growth. The leaves are decussate (forming a cross pattern up the branch), ovate in outline and measure 2.5–8 cm long by 1.5–4 cm wide. The inflorescences are axillary, borne on peduncles 10–35 mm long and bear 2–10 flowers. The fruits are fleshy and black (Rye, 1990; Queensland Herbarium, 2009a).
Distribution	The species is endemic to the Wet Tropics bioregion of north-east Queensland where it is confined to high altitudes of the Great Dividing Range and Thornton Range (Queensland Herbarium, 2009b). Three subpopulations are recorded over a range of approximately 40 km (Queensland Herbarium, 2009a) at Thornton Peak (Daintree National Park), the Black Mountain area (Daintree National Park) and Mt Lewis Forest Reserve. It is unknown whether the conservation of this species is specifically managed in these reserves.
Relevant Biology/Ecology	Flowers have been recorded December and January and fruits from May and December (White, 1933; Queensland Herbarium, 2009a). This species is restricted to high altitude areas of the Wet Tropics (Queensland Herbarium, 2009b).
Threats <i>Known</i> <i>Potential</i>	This species has no known threats. Climate change is a potential future threat to this species long term survival, especially as it is restricted to high altitude areas (Queensland Herbarium, 2009b).

3. Public Consultation

Notice of the proposed amendment was made available for public comment for 30 business days. Any comments received that are relevant to the survival of the species have been considered by the Committee.

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

Criterion 1: 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

Not eligible

Criterion element	Evidence
Reduction in numbers	No data

Criterion 2: Its geographic distribution is precarious for the survival of the species **and** is very restricted, restricted or limited

Not eligible

Criterion element	Evidence
Geographic distribution AND Geographic distribution precarious	Very restricted – The known area of occurrence is a minimum of 30 km ² (Queensland Herbarium, 2009a, 2009b). The known area of occupancy is unlikely to exceed 10 km ² (Queensland Herbarium, 2009b). Insufficient data – Known from only three subpopulations and is naturally fragmented (Queensland Herbarium, 2009b), there is no evidence of decline or population fluctuations. In the long term, this species is threatened by climate change due to its naturally restricted distribution (Queensland Herbarium, 2009b), however, the impact of this threat has not been quantified.

Criterion 3: 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

Not eligible

Criterion element	Evidence
Total no. of mature individuals AND Continued rate of decline	Insufficient data – Herbarium records describe this species as locally common to rare (Queensland Herbarium, 2009b). No data
OR	
Total no. of mature individuals AND Continued decline likely	Insufficient data – Herbarium records describe this species as locally common to rare (Queensland Herbarium, 2009b). No data

AND	
Geographic distribution precarious	No – See Criterion 2

Criterion 4: The estimated total number of mature individuals is extremely low, very low or low
Not eligible

Criterion element	Evidence
Total no. of mature individuals	Insufficient data – See Criterion 3

Criterion 5: 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

Not eligible

Criterion element	Evidence
Probability of extinction in the wild	No data

5. Recommendation

Although there are insufficient data to assess the species against the criteria, the Committee recommends a precautionary approach be applied and hence that **no amendment** be made to the list referred to in section 178 of the EPBC Act and that *Phaleria biflora* remains eligible for inclusion in the **vulnerable** category of the list.

Threatened Species Scientific Committee

2 December 2010

6. References cited in the advice

Queensland Herbarium (2009a). Specimen label information. Viewed 27 July 2009.

Queensland Herbarium (2009b). Conservation Status Assessment for *Phaleria biflora*. Unpublished report. Queensland Herbarium, Environmental Protection Agency. Brisbane.

Herber BE (2001). *Oreodendron* C.T.White reduced to *Phaleria* Jack (Thymelaeaceae, Thymelaeoideae). *Austrobaileya* 6(1): 96–97, Fig. 1.

Rye BL (1990). Thymelaeaceae. In: 'Flora of Australia vol. 18' (ed. George AS). Australian Government Publishing Service. Canberra.

White CT (1933). Ligneous plants collected for the Arnold Arboretum in North Queensland by S.F. Kajewski in 1929. *Contributions from the Arnold Arboretum of Harvard University* 4: 1–101.