

**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:

***Symplocos baeuerlenii* (small-leaved hazelwood, shrubby hazelwood)**

2. Summary of Species Details

Taxonomy	Conventionally accepted as <i>Symplocos baeuerlenii</i> R.T. Baker (Baker, 1903).
State Listing Status	Listed as near threatened under the Queensland <i>Nature Conservation Act 1992</i> . Listed as vulnerable under the New South Wales <i>Threatened Species Conservation Act 1995</i> .
Description	<i>Symplocos baeuerlenii</i> is a tall shrub or small tree growing to 7 m. The bark is smooth and dark-brown, with vertical fissures. Buds and branchlets are finely hairy. Leaves are thin, 2.5–7 cm long, 0.7–2 cm wide, lance-shaped, and have a fine tip. Leaf margins are toothed, with 4–8 pairs of irregular teeth. Small cream flowers are clustered in racemes, and grow to red, fleshy oval-shaped fruit (drupes) (Harden, 1993).
Distribution	The species is restricted to the Mount Warning caldera from Springbrook, Queensland to Nightcap Range, north-east New South Wales and within 40 km of the Pacific Ocean (Queensland Herbarium, 2009). Known from approximately ten populations (Floyd, 2008; Queensland Herbarium, 2009). In New South Wales it is known from Nightcap National Park (NP), Mount Jerusalem NP, Wollumbin NP, Numinbah Nature Reserve, Whian Whian State Conservation Area, Duroby Nature Reserve, and the Tweed and Brunswick Valleys. In Queensland, it occurs in the Gold Coast Local Government Area, Mount Cougal NP, and Natural Arch NP (Briggs and Leigh, 1995).
Relevant Biology/Ecology	The species grows in subtropical and warm temperate rainforest on less fertile soils derived from rhyolite (Harden, 1993; DECC, 2005), and occasionally in wet sclerophyll forest adjacent to rainforest. Altitude ranges from 140 m to 1000 m above sea level (Queensland Herbarium, 2009). Flowers have been recorded for August and September; fruiting is recorded in December and February (Queensland Herbarium, 2009). It is not known whether the species can reproduce vegetatively. Pollinating mechanisms and disturbance response are unknown.
Threats	
<i>Known</i>	The main identified threats to this species are timber harvesting activities; inappropriate fire regimes; and clearing of warm temperate rainforest for agriculture and other development (DECC, 2005). However, many of the known stands are within conservation reserves, and hence would not be subject to timber harvesting or clearing.
<i>Potential</i>	There are no potential threats to this species.

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	Restricted – The extent of occurrence is 600 km ² (Queensland Herbarium, 2009). No – Has been recorded from ten locations, six of these are within conservation reserves. The species habitat is not considered to be fragmented and this species does not undergo extreme fluctuations in numbers (Queensland Herbarium, 2009).

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 – Quantitative population data are not available. Herbarium records include abundance measures of “very common”, “infrequent”, “occasional” and “rare at site” for known locations (Queensland Herbarium, 2009). No data
OR	

Total no. of mature individuals AND Continued decline likely AND Geographic distribution precarious	Insufficient data – Quantitative population data are not available. Herbarium records include abundance measures of “very common”, “infrequent”, “occasional” and “rare at site” for known locations (Queensland Herbarium, 2009). No data No – See Criterion 2
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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 – Quantitative population data are not available. Herbarium records include abundance measures of “very common”, “infrequent”, “occasional” and “rare at site” for known locations (Queensland Herbarium, 2009).

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. Recommendations

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 *Symplocos bauerlenii* remains eligible for inclusion in the **vulnerable** category of the list.

The Committee notes that this species is eligible for inclusion due to having known threats and a limited number of known locations.

Threatened Species Scientific Committee

26 August 2010

6. References cited in the advice

Baker RT (1903). On a New Species of *Symplocos* from New South Wales. Proceedings of the Linnean Society of New South Wales Series 2 27: 594, pl. xxviii.

Briggs JD and Leigh JH (1995). Rare or Threatened Australian Plants 1995 revised edition. CSIRO Publishing. Collingwood.

Department of Environment and Climate Change (DECC) (2005). Small-leaved Hazelwood – Profile.

Viewed: 17 September 2009

Available on the Internet at:

<http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/profile.aspx?id=10790>

Floyd AG (2008). Rainforest Trees of Mainland South-eastern Australia. Terania Rainforest Publishing. The Channon, Lismore.

Harden GJ (1993). *Symplocos*. In: 'Flora of New South Wales, vol. 3' (ed. GJ Harden). University of New South Wales Press. Sydney.

Queensland Herbarium (2009). *Symplocos baeuerlenii*. Specimen label information. Viewed 16 September 2009.