

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

1. Scientific name (common name)

Adenanthos cunninghamii (Albany Woollybush)

A genetic analysis of *Adenanthos cunninghamii* confirmed that it is a hybrid between *Adenanthos sericeus* and *Adenanthos cuneatus* (Walker 2002).

2. Description

The Albany Woollybush is a spreading, erect, woody shrub to 1.5 metres. It has single, dull red flowers and soft, hairy leaves (Gilfillan and Barrett 2004). The hybrid's morphology is intermediate between its two parents, *Adenanthos sericeus* and *Adenanthos cuneatus* (Walker 2002). The Albany Woollybush occurs on deep, sandy soils in low woodland, heath or low scrub, and co-occurs with its parent species. It flowers in March, September and October (Hopper et al. 1990; Rye and Hopper 1981).

3. National Context

The Albany Woollybush is endemic to Western Australia, and is known from twenty populations in southern coastal areas near Albany (Gilfillan and Barrett 2004). The taxon occurs in the Torndirrup National Park, and surrounding private property and Shire Reserve, approximately 15 kilometres south west of Albany. It also occurs in Two Peoples Bay Nature Reserve and at Gull Rock, east of Albany (Gilfillan and Barrett 2004). Based on surveys conducted between 1991 and 2004, the total population size is approximately 130 mature individuals (CALM 2005).

The parent species, *Adenanthos sericeus* and *Adenanthos cuneatus*, are more widely distributed along the south coast of Western Australia (CALM 2005).

The Albany Woollybush is not listed under the *Western Australian Wildlife Conservation Act 1950*.

The parent species, *Adenanthos sericeus* and *Adenanthos cuneatus*, are not listed under the *Western Australian Wildlife Conservation Act 1950* or the EPBC Act.

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

The Committee judges that *Adenanthos x cunninghamii* is **not eligible** for listing under the EPBC Act, for the following reasons:

Adenanthos cunninghamii was conventionally accepted to be a species until 2003. In 2003, a genetic analysis of *Adenanthos cunninghamii* confirmed that it is a hybrid between *Adenanthos sericeus* and *Adenanthos cuneatus* and does not have any unique genetic identification to differentiate it as a separate species (Walker 2002).

The plants found at Torndirrup National Park represent the first generation of *Adenanthos x cunninghamii*. The plants found at Two Peoples Bay Nature Reserve contain the first generation as well as individuals from the second generation, which have resulted from crosses between hybrids and backcrosses between hybrids and parent species. The second generation of hybrids do not have the true morphology of *Adenanthos x cunninghamii*, but

display morphological characters more similar to either one of the parent species (Walker 2002).

As *Adenanthos x cunninghamii* is a hybrid between *Adenanthos sericeus* and *Adenanthos cuneatus*, it does not meet the definition of a species under section 528 of the EPBC Act. Therefore, the taxon is not eligible for listing under the EPBC Act.

5. Recommendation

The Committee recommends that the list referred to in section 178 of the EPBC Act be amended by **deleting** from the list in the **endangered** category:

Adenanthos cunninghamii (Albany Woollybush)

References cited in the advice

CALM (2005). Records held in CALM's Declared Flora Database and rare flora files. WA Department of Conservation and Land Management.

Hopper, S.D., S. van Leeuwen, A.P. Brown and S.J. Patrick (1990). Western Australia's Endangered Flora and other plants under consideration for declaration.

Gilfillan, S. and S. Barrett (2004). Draft interim recovery plan. Albany Woollybush *Adenanthos x cunninghamii* 2004-2009. Unpublished draft report. WA Department of Conservation and Land Management, Perth.

Rye, B.L. and S.D. Hopper (1981). A Guide to Gazetted Rare Flora of Western Australia in Report No. 42, pp 1-211.

Walker, E. (2002). Determining the hybrid status of *Eucalyptus bennettiae* and *Adenanthos cunninghamii*, Honours Thesis, Murdoch University.