

This Conservation Advice was approved by the Minister / Delegate of the Minister on: 3/07/2008.

Approved Conservation Advice  
(s266B of the *Environment Protection and Biodiversity Conservation Act 1999*)

**Approved Conservation Advice for**  
***Xanthostemon youngii* (Crimson Penda)**

This Conservation Advice has been developed based on the best available information at the time this conservation advice was approved.

**Description**

*Xanthostemon youngii*, Family Myrtaceae, also known as the Crimson Penda, is a shrub or tree with reddish-brown, rough bark, and most parts of the plant are whitish and hairy. Leaves are alternating on the stem. The leaf stalks are approximately 0.5 cm long, and the leaf blades are 5–8 cm long, with prominent venation. Flowers are in leaf axils, the petals red, 7–10.5 mm long, and the sepals are broadly triangular. Stamens are up to 25 mm long, in a continuous whorl but drawn in towards the base. Fruit are approximately 15 mm in diameter and the seeds are not winged (Wilson, 1990).

**Conservation Status**

The Crimson Penda is listed as **vulnerable**. This species is eligible for listing as vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act) as, prior to the commencement of the EPBC Act, it was listed as vulnerable under Schedule 1 of the *Endangered Species Protection Act 1992* (Cwlth). The Crimson Penda is also listed as rare under the *Nature Conservation Act 1992* (Queensland).

**Distribution and Habitat**

The Crimson Penda is confined to the east coast of Cape York Peninsula, Queensland, from the Nesbit River north to the Olive River, with a distributional range of approximately 170 km (Wilson, 1990; Queensland Herbarium, 2008). There are at least seven recorded populations with an unknown number of mature individuals. The area of occupancy is greater than 1700 km<sup>2</sup> in total, with known populations occurring between Bolt Head and the Olive River, one population from Iron Range National Park and one population near the Nesbit River (Landsberg and Clarkson, 2004; Queensland Herbarium, 2008).

Herbarium records suggest the species is frequent within its habitat and is common at some sites (Queensland Herbarium, 2008). It is recorded growing in heath, vine thickets and low closed forests, always on coastal sand and often in windswept situations, to 30 m above sea level (Wilson, 1990; Queensland Herbarium, 2008).

This species occurs within the Cape York (Queensland) Natural Resource Management region.

The distribution of this species overlaps with “The community of native species dependent on natural discharge of groundwater from the Great Artesian Basin” EPBC Act-listed threatened ecological community.

**Threats**

The main potential threats to the Crimson Penda include damage from irregular storms and cyclones.

**Research Priorities**

Research priorities that would inform future regional and local priority actions include:

- Design and implement a monitoring program.

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- More precisely assess population size, distribution, ecological requirements and the relative impacts of threatening processes.
- Undertake survey work in suitable habitat and potential habitat to locate any additional populations/occurrences/remnants.

### **Regional and Local Priority Actions**

The following priority recovery and threat abatement actions can be done to support the recovery of Penda.

#### **Habitat Loss, Disturbance and Modification**

- Identify populations of high conservation priority.
- Monitor known populations to identify key threats.
- Investigate formal conservation arrangements such as the use of covenants, conservation agreements or inclusion in reserve tenure.

#### **Conservation Information**

- Raise awareness of the Crimson Penda within the local community, particularly landholders and local councils.

#### **Enable Recovery of Additional Sites and/or Populations**

- Undertake appropriate seed collection and storage.
- Investigate options for linking, enhancing or establishing additional populations.
- Implement national translocation protocols (Vallee et al., 2004) if establishing additional populations is considered necessary and feasible.

This list does not necessarily encompass all actions that may be of benefit to the Crimson Penda, but highlights those that are considered to be of highest priority at the time of preparing the conservation advice.

### **Existing Plans/Management Prescriptions that are Relevant to the Species**

- Cape York Back on Track Biodiversity Action Plan (EPA, 2008).

This prescription was current at the time of publishing; please refer to the relevant agency's website for any updated versions.

### **Information Sources:**

Environmental Protection Agency 2008, *Cape York Back on Track Biodiversity Action Plan*, Environmental Protection Agency, Queensland.

Landsberg, J & Clarkson, J 2004, *Threatened Plants of the Cape York Peninsula: A report to the Australian Government Department of the Environment and Heritage*, Queensland Parks & Wildlife Service.

Queensland Herbarium 2008, specimen label information, viewed 12 March 2008.

Vallee, L, Hogbin, T, Monks, L, Makinson, B, Matthes, M & Rossetto, M 2004, *Guidelines for the Translocation of Threatened Plants in Australia - Second Edition*, Australian Network for Plant Conservation, Canberra.

Wilson, PG 1990, 'A revision of the genus *Xanthostemon* (Myrtaceae) in Australia', *Telopea* vol. 3, no. 4, pp. 451–476.