

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

Approved Conservation Advice for
Plectranthus leiperi

This Conservation Advice has been developed based on the best available information at the time this Conservation Advice was approved; this includes existing plans, records or management prescriptions for this species.

Description

Plectranthus leiperi, Family Lamiaceae, is a strongly aromatic herb to 50 cm tall with square stems. Leaves are opposite, fleshy, oval-shaped, silvery-green and hairy above, paler green below, with 11–17 teeth on each margin. Inflorescences are terminal spikes up to 18 cm long with clusters (verticillasters) of 10–12 small purple two-lipped flowers, 10–13 mm long. The fruiting calyx is 2.5–3.8 mm long. *Plectranthus leiperi* is similar to *P. suaveolens* but differs in having green rather than silver foliage, the absence of sessile (not stalked) glands, and a shorter fruiting calyx (Forster, 1994; Queensland Herbarium, 2008).

Conservation Status

Plectranthus leiperi 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). *Plectranthus leiperi* is also listed as vulnerable under the *Nature Conservation Act 1992* (Queensland).

Distribution and Habitat

Plectranthus leiperi is known from a restricted area near the Wivenhoe and Somerset dams in the Brisbane Valley, Queensland. It has an extent of occurrence of less than 200 km² and an area of occupancy of several hectares (Forster, 1994). At one locality there are six disjunct small populations of each with fewer than 100 individuals (Forster, 1994). It occurs as scattered individuals on rhyolite and granite rock outcrops and pavements in eucalypt forest (Forster, 1994; Queensland Herbarium, 2008). One population occurs under a power line (Queensland Herbarium, 2008). *Plectranthus leiperi* occurs within the South East Queensland Natural Resource Management Region.

Threats

The main identified threat to *P. leiperi* is habitat disturbance, which affects one population located under a power line, where access is needed for maintenance and fuel is reduced for fire prevention (P.I.Forster, 2008, pers. comm.).

The main potential threats to the species include competition from introduced weeds such as Lantana (*Lantana camara*) which can overgrow rocky areas and increase fuel loads and subsequent fire intensity (P.I.Forster, 2008, pers. comm.); and trampling of plants at one location near a popular local swimming hole (Forster, 1994).

Research Priorities

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

- Design and implement a monitoring program or, if appropriate, support and enhance existing programs.
- More precisely assess population size, distribution, ecological requirements, fire ecology, and the relative impacts of threatening processes.

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- 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 *P. leiperi*.

Habitat Loss, Disturbance and Modification

- Monitor known populations to identify key threats.
- Identify populations of high conservation priority.
- Control access routes to suitably direct public access to known sites on public land.
- Monitor the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.
- Ensure road widening and maintenance activities under powerlines involving substrate or vegetation disturbance do not adversely impact on known populations.
- Ensure chemicals and other mechanisms used to eradicate weeds do not have a significant adverse impact on *P. leiperi*.
- Minimise adverse impacts from land use at known sites.
- Investigate formal conservation arrangements, management agreements and covenants on private land, and for crown and private land investigate inclusion in reserve tenure if possible.
- Manage any other known, potential or emerging threats.

Invasive Weeds

- Implement a management plan for the control of Lantana in the local region.
- Identify and remove weeds in the local area, which could become a threat to *P. leiperi*, using appropriate methods.
- Manage sites to prevent introduction of invasive weeds, which could become a threat to the species, using appropriate methods.

Fire

- Develop and implement a suitable fire management strategy for *P. leiperi*.
- Provide maps of known occurrences to local and state Rural Fire Services and seek inclusion of mitigative measures in bush fire risk management plans, risk register and/or operation maps.

Conservation Information

- Raise awareness of the *P. leiperi* within the local community.

Enable Recovery of Additional Sites and/or Populations

- Undertake seed collection and storage.
- Investigate options for linking, enhancing or establishing additional populations.
- Implement appropriate 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 *P. leiperi*, 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

- Weeds of National Significance: Lantana (*Lantana camara*) (ARMCANZ, 2001).

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

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Information Sources:

Agriculture & Resource Management Council of Australia & New Zealand (ARMCANZ) 2001, *Weeds of National Significance: Lantana (Lantana camara) Strategic Plan*, National Weeds Strategy, viewed 17 June 2008, <<http://www.dpi.qld.gov.au/cps/rde/xbcr/dpi/TPA-Lantana-Nsplan.pdf>>.

Forster, PI 1994, 'Ten new species of *Plectranthus* L 'Her. (Lamiaceae) from Queensland', *Austrobaileya*, vol. 4, no. 2, pp. 159–186.

Forster, PI (Queensland Herbarium EPA). Personal communication. 29 May 2008.

Queensland Herbarium 2008, specimen label information, viewed 20 May 2008.

Vallee, L, Hogbin, T, Monks, L, Makinson, B, Matthes, M & Rossetto, M 2004, *Guidelines for the Translocation of Threatened Plants in Australia* (2nd ed.), Australian Network for Plant Conservation, Canberra.