

A statement for the purposes of approved Conservation Advice
(s266B of the *Environment Protection and Biodiversity Conservation Act 1999*)

Approved Conservation Advice for
Acriopsis javanica

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.

Following taxonomic revision, the name of this species has changed and is listed under the EPBC Act as at 25 September 2013 as:

Acriopsis emarginata

Description

Acriopsis javanica, Family Orchidaceae, also known as Pale Chandelier Orchid, is an epiphytic orchid with dense, onion-shaped pseudobulbs and a mass of white aerial roots (Jones, 2006). This species has 2–4 dark green leaves, up to 20 cm long and 2.5 cm wide. Many flowers are born on the wiry, branched panicles. Flowers are 5 mm across, cream or pinkish, with a white, three-lobed, triangular labellum (modified petal at the front of the flower). Flowering occurs between June and November (Jones, 2006). Flowers last 2–4 days and are pollinated by native bees (Jones et al., 2006).

The species is listed under the EPBC Act as *Acriopsis javanica*, however, the Australian taxon was described as *Acriopsis emarginata* in 2006 (Jones & Clements, 2006). As the result of taxonomic investigations, *A. javanica* is no longer an accepted name: south-east Asian specimens are referred to as *A. liliifolia* (J.König) Ormerod (Beaman et al., 2001; Royal Botanic Gardens Kew, 2008) and Australian specimens are referred to as *Acriopsis emarginata* (Jones, 2006; Jones et al., 2006; Clements, 2008).

Conservation Status

Acriopsis javanica 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 species is also listed as vulnerable under the *Nature Conservation Act 1992* (Queensland).

Distribution and Habitat

Acriopsis javanica is endemic to north Queensland, from the tip of Cape York Peninsula to the Daintree River (Jones, 2006). This species has been recorded from Daintree River valley, Leo Creek (Timber Reserve 14), Mcllwraith Range, Mount Bulbin South, Tozers Gap, and Mount Norkwa (Queensland Herbarium, 2008).

Acriopsis javanica is considered widespread and common within its range (Jones, 2006). This species occurs within the Wet Tropics and Cape York (Queensland) Natural Resource Management Regions.

Acriopsis javanica grows on trees in hot, humid, lowland rainforest, rainforest margins, and in swamps (Jones, 2006; Queensland Herbarium, 2008). This species is found in near-coastal swamps in the most southerly parts of its range where it can

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be found growing on paperbarks, palms, and *Pandanus* spp. (Dockrill, 1969, 1992; Jones, 2006). It has been found growing up to 380 m above sea level (Queensland Herbarium, 2008). Specimens from the Leo Creek area were recorded from a complex mesophyll vine forest along a watercourse on metamorphic soils (Queensland Herbarium, 2008).

The distribution of this species is not known to overlap with any EPBC Act-listed threatened ecological communities.

Threats

The main potential threats to *Acriopsis javanica* include illegal collecting, changed fire regimes, weed invasion, and habitat degradation from settlement pressures (Landsberg and Clarkson, 2004).

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 and the relative impacts of threatening processes.
- Undertake survey work in suitable habitat and potential habitat to locate any additional populations/occurrences/remnants.
- Undertake seed germination trials to determine the requirements for successful establishment; include mycorrhizal association trials, if appropriate.
- Investigate the potential and efficacy of DNA-based or other approaches for the identification of individual plants and/or populations to provide a means for detecting and prosecuting illegal collection from the wild (Palsboll et al., 2006).

Regional and Local Priority Actions

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

Habitat Loss, Disturbance and Modification

- Monitor known populations to identify key threats.
- Monitor the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.
- Identify populations of high conservation priority.
- Ensure road widening and maintenance activities (or other infrastructure or development activities such as cane farming) involving substrate or vegetation disturbance in areas where *A. javanica* occurs do not adversely impact on known populations.
- Minimise adverse impacts from land use at known sites.
- Control access routes to suitably constrain public access to known sites on public land.
- Suitably control and manage access on private land.
- Investigate formal conservation arrangements, management agreements and covenants on private land, and for crown and private land investigate inclusion in reserve tenure if possible.

Invasive Weeds

- Identify and remove weeds in the area, which could become a threat to *A. javanica*, using appropriate methods.

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- Manage sites to prevent introduction of invasive weeds, which could become a threat to *A. javanica*, using appropriate methods.

Fire

- Develop and implement a suitable fire management strategy for *A. javanica*.
- Provide maps of known occurrences to local and state Rural Fire Services and seek inclusion of mitigative measures in bush fire risk management plan(s), risk register and/or operation maps.

Conservation Information

- Raise awareness of *A. javanica* within the local community.

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 *A. javanica*, 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 Peninsula Natural Resource Management Plan (Earth Tech, 2005), and
- Cape York Peninsula Pest Management Plan (CYPPMAG, 2005), which includes management of weeds that are a threat to *Acriopsis javanica*.

These prescriptions were current at the time of publishing; please refer to the relevant agency's website for any updated versions.

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