

**FLORA & FAUNA
GUARANTEE**

FLORA AND FAUNA GUARANTEE - SCIENTIFIC ADVISORY COMMITTEE
FINAL RECOMMENDATION ON A NOMINATION FOR LISTING

The spread of *Phytophthora cinnamomi* from infected sites into parks or reserves, including roadsides, under the control of a state or local government authority
(Potentially Threatening Process)

Date of receipt of the nomination: 30 August 2000
Date of preliminary recommendation: 13 November 2001
Date of final recommendation: 5 February 2002

File No.: FF/54/0091

Validity: The nomination is for a valid item

Prescribed Information: The prescribed information was provided.

Name of the Nominator is adequately provided.

Name and Description of the process:

In the opinion of the SAC the process is adequately defined and described.

The nominated process is 'The spread of *Phytophthora cinnamomi* from infected sites into parks or reserves, including roadsides, under the control of a state or local government authority.'

Phytophthora cinnamomi Rands (cinnamon fungus) is a plant pathogen which causes root rot and dieback in native forests, woodlands and heaths. It occurs widely across the State, being easily transported in soil, gravel and in drainage water. The use of infected gravel in construction works can result in the spread of *Phytophthora* to uninfected, vulnerable areas.

The range of flora or fauna affected or potentially affected was adequately stated in the nomination.

Significance of the threat which the potentially threatening process poses or has the potential to pose was adequately stated in the nomination.

Eligibility for listing as a potentially threatening process under the Flora and Fauna Guarantee

The nominated item satisfies at least one criterion of the set of criteria prepared and maintained under Section 11 of the **Flora and Fauna Guarantee Act 1988**, and stated in Schedule 1 of the Flora and Fauna Guarantee Regulations 1991.

Evidence that criteria are satisfied:

Sub-criterion 5.1.1 *The potentially threatening process, in the absence of appropriate management, poses or has the potential to pose a significant threat to the survival of two or more taxa.*

Evidence:

There is evidence (Weste 1974; Kennedy & Weste 1986; Wilson *et al.* 1990) to indicate that the survival of the following species is threatened by the spread of *Phytophthora*:

- *Grevillea steiglitziana*, *G. williamsonii*, and *Gonocarpus mezianus*
- Vertebrate fauna species which depend on these flora, e.g. Heath Rat *Pseudomys shorridgei* and New Holland Mouse *P. novaehollandiae*.

Additional Information

- A related nomination on *Phytophthora* was listed as a potentially threatening process under the Act in 1991 (SAC 1991).
- Dieback caused by the root-rot fungus *Phytophthora cinnamomi* was listed as a key threatening process on schedule 3 of the Commonwealth Endangered Species Protection Act in 1993.
- A draft *Threat Abatement Plan* on this item was issued by the Commonwealth in July 1999 (Biodiversity Group 1999).
- Evidence from Western Australia shows that invertebrate fauna of soil and litter are affected by *Phytophthora* infection (Postle *et al.* 1986).

Advertisement for public comment

In accordance with the requirements of Section 14 of the **Flora and Fauna Guarantee Act 1988**, the preliminary recommendation was advertised for a period of at least 30 days.

The preliminary recommendation was advertised in:

'The Age' - on 26 December 2001

'The Weekly Times' - on 26 December 2001

The *Government Gazette* - on 27 December 2001

Submissions closed on 30 January 2002.

Further evidence provided:

Nine submissions were received, although no evidence was provided to warrant an alteration of the Scientific Advisory Committee's preliminary recommendation that the taxon is eligible for listing.

Documentation

The published information and research data provided to the SAC have been assessed. Based on the available information, the SAC believes that the data presented are not the subject of scientific dispute and the inferences drawn are reasonable and well supported.

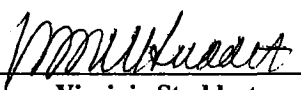
Final Recommendation of the Scientific Advisory Committee

The Scientific Advisory Committee concludes that on the evidence available the nominated item is eligible for listing in accordance with Section 11 of the Act because primary criterion 5.1 has been satisfied. The Scientific Advisory Committee recommends that the nominated item be supported for listing on Schedule 3 of the **Flora and Fauna Guarantee Act 1988**.

Selected references:

- Biodiversity Group (1999) Threat Abatement Plan for Dieback caused by the root-rot fungus *Phytophthora cinnamomi*. Environment Australia: Canberra.
As at December 2001, available at: <http://www.ea.gov.au/biodiversity/threatened/tap/phytophthora/index.html>
- Kennedy, J. & Weste, G. (1986) Vegetation changes associated with invasion by *Phytophthora cinnamomi* on monitored sites in the Grampians, Western Victoria. *Aust. J. Bot.* **34**: 251-279
- NRE (2000) *Threatened Vertebrate Fauna in Victoria - 2000. A systematic list of vertebrate fauna considered extinct, at risk of extinction or in major decline in Victoria*. Department of Natural Resources and Environment: Victoria.
- Postle, A. C., Majer, J. D. & Bell, D. T. (1986) Soil and litter invertebrates and litter decomposition in Jarrah (*Eucalyptus marginata*) forest affected by Jarrah dieback fungus (*Phytophthora cinnamomi*). *Pedobiologia* **29**: 47-69.
- SAC (1991) Final Recommendation on a nomination for listing: Use of *Phytophthora*-infected gravel in construction of roads, bridges and reservoirs (Nomination no. 41). Scientific Advisory Committee, Flora and Fauna Guarantee. Department of Conservation and Environment: Melbourne.
- Weste, G. (1974) *Phytophthora cinnamomi* - the cause of severe disease in certain native communities in Victoria. *Aust. J. Bot.* **22**: 1-8.
- (1975) The distribution of *Phytophthora cinnamomi* within the National Park, Wilsons Promontory, Victoria. *Aust. J. Bot.* **23**: 67-76.
- Weste, G. & Marks, G. (1987) The biology of *Phytophthora cinnamomi* in Australasian forests. *Ann. Rev. Phytopathol.* **25**: 207-229.
- Wilson, B. A., Robertson, D., Moloney D. J., Newell, G. R. & Laidlaw W. S. (1990) Factors affecting small mammal distribution and abundance in the Eastern Otway Ranges, Victoria. *Proc. Ecol. Soc. Aust.* **16**: 379-396.

Endorsement by the Convenor of the Scientific Advisory Committee**Date**


 Professor Virginia Studdert
 Convenor

11 FEB 2002