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## NEW DISCOVERIES

### First record of *Phytophthora boehmeriae* in Western Australia

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C.A.L.M.'s Vegetation Health Service (VHS) has identified a species of *Phytophthora* never before recorded in Western Australia. This is the 16th species of *Phytophthora* recorded in the state. It is generally agreed that all *Phytophthora* have been introduced since European settlement.

Soil samples were sent into the VHS for routine *Phytophthora* testing by Mike Wright, of C.A.L.M. Busselton District, in July 1996. Included was a sample collected from Workman's Pool in St. John's Conservation Park near the south west town of Nannup. Laboratory staff became aware that routine screening revealed a subculture that was not a species regularly encountered in samples from natural vegetation. The most common species in the south west are *P. cinnamomi*, *P. citricola*, *P. cryptogea*, *P. drechsleri* and *P. megasperma*.

Traditional morphological charts and the electronic *Phytophthora* identification key (INTKEY), established by C.A.L.M.'s Nicholas Lander and Helen Coleman, were used to identify the species tentatively as *P. boehmeriae*. Isoenzyme profiles of the new culture and a known *P. boehmeriae* isolate were then compared. Results indicated that the two cultures were 'isozymically' similar.

Finally, the culture was sent to Centraalbureau Voor Schimmelcultures, at the Institute of the Royal Netherlands Academy of Arts and Sciences, to confirm its identity. Confirmation was received in January 1997.

*Phytophthora boehmeriae* is known to occur in Taiwan, Japan, China, Greece and Argentina. In Australia, *P. boehmeriae* was first reported in Queensland in 1962 and associated with deaths of *Pinus patula*. It was subsequently reported in New South Wales in 1976 and associated with deaths of *Eucalyptus pilularis*. In both cases it was not determined whether deaths were caused by the fungus. The isolate from W.A. was similarly associated with the death of *Persoonia longifolia* but whether death was caused by the fungus could not be ascertained.

Workman's Pool is near the site of the Barrabup Mill which operated between 1908 and 1925. The site has a plantation of eastern states *Acacia* species which may be the source of introduction for the isolate. Hence it is possible that *Phytophthora boehmeriae* has been in Western Australia for many decades.

The VHS has submitted a short paper to the Australasian Plant Pathology Society's journal, which is currently being reviewed. A culture of the isolate has been retained in the VHS culture collection with the culture number 3884. It has also been lodged at the Centraalbureau Voor Schimmelcultures in the Netherlands.