NEW DISEASE REPORT

Puccinia psidii on Eucalyptus globulus in Uruguay

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Puccinia psidii is native to South and Central America and the Caribbean, where it causes a serious leaf and shoot disease of a wide range of Myrtaceae (Coutinho *et al.*, 1998). These include the native *Psidium guajava* (guava) and introduced *Eucalyptus* species (Ferreira, 1983). In 2002 a rust fungus was observed causing severe damage to 1-year-old trees during a routine disease survey of *Eucalyptus globulus* in Uruguay. The disease occurred only in one plantation in the Levalleja area, and damage was uniform throughout the stand. The rust produced egg-yolk yellow pustules on the leaves and resulted in shoot-tip dieback. The characteristic pustules and morphological examination of uredinia and urediniospores showed that the fungus was indistinguishable from *Puccinia psidii*.

Puccinia psidii has previously been reported in Uruguay on native Myrtaceae (Koch de Brotos *et al.*, 1981), and in recent years has been observed by the senior author on *Psidium guajava* and *Eucalyptus grandis*. The rust has been reported on other *Eucalyptus* species in South and Central America, including *E. grandis* and *E. urophylla* but this is the first report of *Puccinia psidii* occurring on the economically important *E. globulus*. This species is being widely planted in South America, and the disease poses a particular threat to Chile and a potential risk to countries such as Portugal, which has extensive plantings of *E. globulus*. This fact, together with the wide host range of the fungus, makes it a pathogen of considerable global importance (Coutinho *et al.*, 1998). Countries such as South Africa and Australia, which have a number of native species of Myrtaceae, are particularly at risk.

References

- Coutinho TA, Wingfield MJ, Alfenas AC, Crous PW, 1998. Eucalyptus rust: a disease with the potential for serious international implications. *Plant Disease* 82, 819–25.
- Ferreira FA, 1983. Ferrugem do eucalipto. Revue Árvore 7, 91–109.
- Koch de Brotos L, Boasso O, Riccio de Machado C, Gandolfo Antunez C, 1981. *Enfermedades de las Plantas Hongos Superiores y Saprofitas en Uruguay*. Montevideo, Uruguay: Departamento de Comunicaciones, Direccion de Sanidad Vegetal, Ministerio de Agricultura y Pesca.

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