Morphological and Molecular Relatedness of Geographically Diverse Isolates of *Coniothyrium zuluense* from South Africa and Thailand¹

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Abstract

Coniothyrium canker, caused by Coniothyrium zuluense, is a serious stem canker disease of Eucalyptus in subtropical parts of South Africa. A Coniothyrium associated with similar symptoms to those in South Africa was observed on E. camaldulensis in 1996 in Thailand. It was previously thought that C. zuluense was restricted to South Africa. This study compares South African isolates of C. zuluense with isolates of the Coniothyrium from Thailand. Results of morphological comparisons indicate that the South African and Thailand isolates are the same. This was further confirmed when all Coniothyrium isolates associated with stem cankers on Eucalyptus spp. grouped together in a single major clade for both rDNA sequence data and AFLP analysis. This clade was distant from isolates of other Coniothyrium spp. included for comparative purposes. Although the Coniothyrium isolates from South Africa and Thailand resided in two separate clades, these were closely related and, we believe that the isolates from Thailand represent C. zuluense. This is the first record of the important Eucalyptus stem canker pathogen outside South Africa.

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