

Effects of Leaf Spotting Caused by *Mycosphaerella* Leaf Disease and Eucalyptus Rust on *Eucalyptus globulus* in Uruguay

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Mycosphaerella Leaf Disease (*Mycosphaerella* spp. and *Teratosphaeria* spp.) and Eucalyptus rust (*Puccinia psidii*) are important diseases of eucalypt plantations in Uruguay. *Eucalyptus globulus* is highly susceptible to both diseases; however production losses caused by them have not been properly quantified in this country. In this study, the severity of foliar damage caused by *Mycosphaerella* Leaf Disease and Eucalyptus rust and the long term effects on growth and survival were assessed in a progeny test of *E. globulus* located in Rocha, Uruguay. The severity of leaf spots was quantified eight months after planting and tree growth and mortality were evaluated two, four and six years later. The trial presented a high incidence of spotting (88.2% of trees showed leaf spots), with a mean severity of 28.7%. The greatest impact of foliar damage, both on growth rate and mortality, occurred in the first two years after damage was assessed. During this period, spot severity less than 40% did not affect growth rate, while survival was affected by spot severity of 70% or higher. When spot severity reached 80% or more, a loss of up to 25% in diameter and an accumulated mortality of 71.7% were registered by the sixth year. It is concluded that, under the intensive Uruguayan productive conditions, *E. globulus* trees tolerate a relatively high degree of leaf spotting. However, severe foliar damage in the first months can cause considerable production losses, compromising the success of the plantation.