

BIOLOGICAL CONTROL OF *PHYTOPHTHORA CINNAMOMI*: THE POTENTIAL OF FIVE WESTERN AUSTRALIAN NATIVE *ACACIA* SPECIES TO PROTECT *BANKSIA GRANDIS*.

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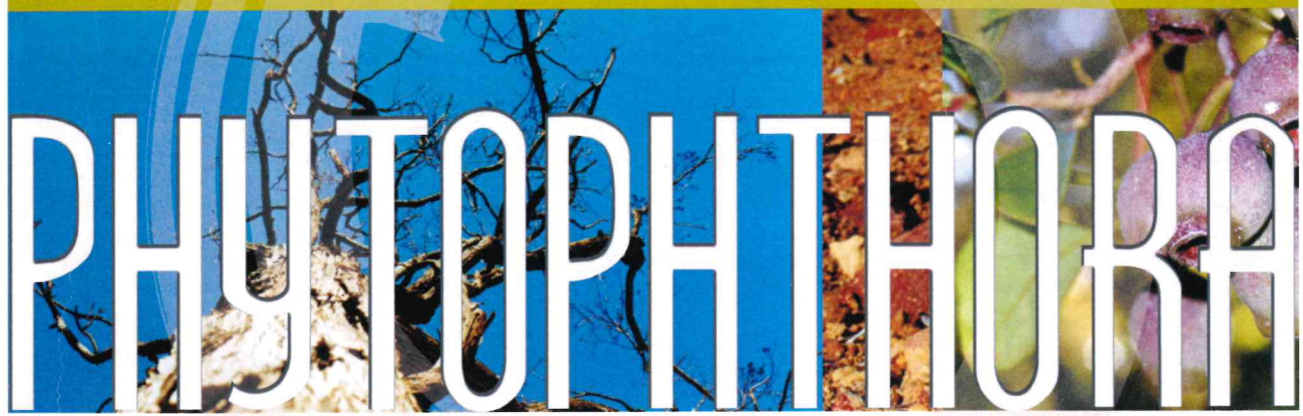
Mortality of *Eucalyptus marginata* seedlings following infection by *Phytophthora cinnamomi* was lower when planted with *Acacia pulchella* than when planted with *Banksia grandis* (1). The protective effects of native legumes other than *A. pulchella* against *P. cinnamomi* have not been determined. Field and glasshouse inoculation trials were set up to investigate the protective potential of five Western Australian native *Acacia* species for *B. grandis*. In the field only *A. pulchella* protected *B. grandis* against *P. cinnamomi* infection. Mortality of *B. grandis* planted with *A. pulchella* was as low as uninoculated *B. grandis* planted alone. Mortality of *B. grandis* planted with *A. urophylla*, *A. extensa*, *A. latericola* or *A. drummondii* was high and similar to inoculated *B. grandis* planted alone. In the glasshouse none of the *Acacia* species definitively protected *B. grandis*. Mean mortality due to infection by *P. cinnamomi* of *B. grandis* planted with *A. pulchella* or *A. latericola* was less than the control. However the remaining *B. grandis* seedlings died following infection by an unidentified fungus, hence protection could not be concluded.

1. Malajczuk, N. (1979). Biological suppression of *Phytophthora cinnamomi* in eucalypts and avocado in Australia. In Soil Borne Plant Pathogens. (eds.) B. Schippers and W. Grams. Academic Press Sydney, pg 635-652.

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