# LONG TERM SURVIVAL OF *PHYTOPHTHORA CINNAMOMI* IN MATURE *BANKSIA GRANDIS* TREES IN REMNANT JARRAH FOREST

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Effective management of *Phytophthora cinnamomi* requires knowledge of its ability to survive adverse conditions in soil and plant tissue. We have assessed the long-term survival of *P. cinnamomi* in *Banksia grandis* trees over 18 months in jarrah forest in the Southwest of Western Australia. Thirty-six *B. grandis* trees were killed by underbark inoculation with *P. cinnamomi* 10cm below ground level. To assess distribution and survival of the pathogen, 4 dead trees were harvested at the time of death and a further 4 at each of 12 and 18 months after death. A further 9 standing dead trees were sampled bi-monthly for 18 months by removing 1 cm diameter cores 10cm and 40cm above and below the soil line. *P. cinnamomi* colonisation of standing dead trees declined over time. The pathogen was isolated from 54% of sample cores 2 months after death, and only 2.4% after 12 months. In the early months after death, there was a higher percentage of recovery of the fungus from cores from above, rather than below ground tissue (eg. after 2 months 61.1% of samples above and 46.4% from below the soil line were colonised), while approximately 12 months later the values were 0.3% of colonised samples above and 4.3% from below the soil.

MEETING HANDBOOK

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