THE DILUTION OF PHOSPHITE IN RAPIDLY GROWING PLANTS AND HOW SOIL AND PLANT PHOSPHATE LEVELS INTERACT WITH PHOSPHITE AND ITS ABILITY TO INDUCE HOST-RESISTANT RESPONSES WHEN CHALLENGED BY *PHYTOPHTHORA CINNAMOMI*.

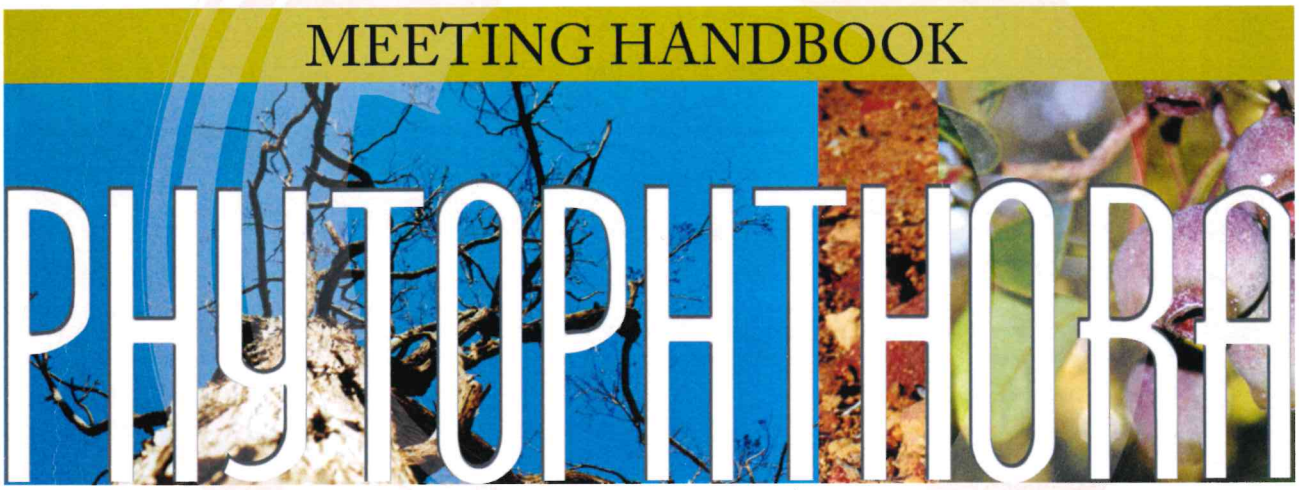
C . Auckland[1], B .L . Shearer[1,2] and G .E .St .J . Hardy[1]

[1]Biology and Biotechnology, Murdoch University, Murdoch 6150 Western Australia,
[2]CALMScience, Department of Conservation and Land Management 50 Hayman Rd, Como 6152, Western Australia..

The soil borne plant pathogen *Phytophthora cinnamomi* has irreversibly altered the make-up and diversity of the plant communities found in Australia. Recently, the fungicide phosphite has been used to

effectively reduce the impact of this pathogen in natural plant communities. However, little is known (a) about how rapidly phosphite is diluted in the tissues of rapidly growing plants and (b) how soil and plant phosphate levels interact with phosphite and its ability to induce host-resistant responses when challenged by *P.cinnamomi.* This study examines the effects of phosphite dilution in different size classes of *Banksia grandis* and *B. hookeriana.* It also examines the effects of different soil phosphate levels on *in planta* phosphite and phosphate status in *B.hookeriana,* and its subsequent control of *P.cinnamomi,* and in the glasshouse and *Eucalyptus marginata* forest of Western Australia.

MEETING HANDBOOK



PHYTOPHTHORA

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