

PHOSPHITE REDUCES THE RATE OF SPREAD OF *PHYTOPHTHORA CINNAMOMI* IN *BANKSIA* WOODLAND, EVEN AFTER FIRE

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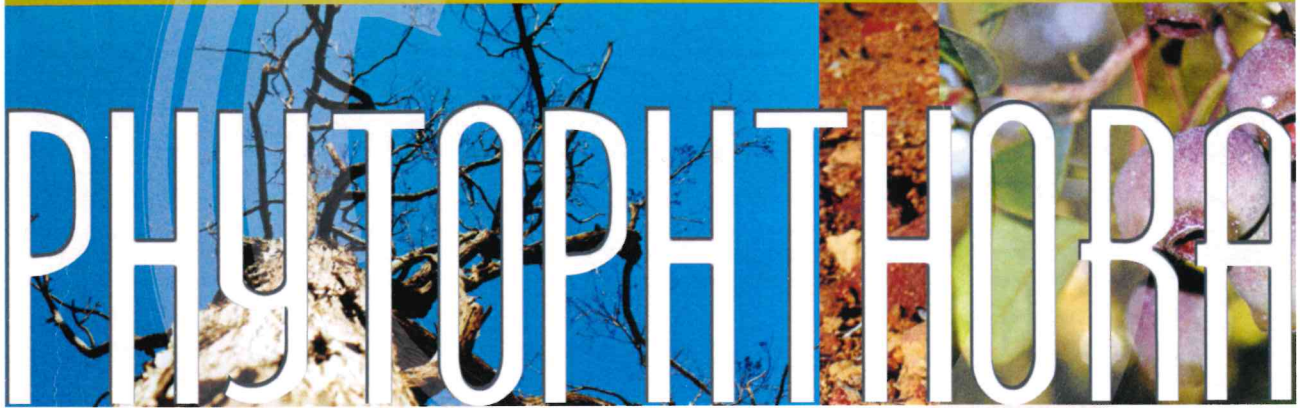
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Within the Department of Conservation and Land Management, phosphite application is an important and effective management tool for the protection of native plant species from infection and death by *Phytophthora cinnamomi*. In 1993, as part of ongoing testing of application strategies, a trial was commenced to test the effect of application of phosphite as a spray of understorey and injection of overstorey species, on the rate of spread of *Phytophthora cinnamomi* along a disease front in *Banksia* woodland. There were 5 treatments: no phosphite, with all the 4 remaining treatments having the overstorey injected with 50 g phosphite/l and the understorey sprayed either once or twice with 2 or 5 g phosphite/l with a backpack sprayer. The treatments were applied in 10 x 15 metre plots along an active disease front in a randomised block design with four replicates. The plots were positioned in healthy vegetation with one edge of the long axis aligned along the disease front. Six months after phosphite application, movement of the disease front was greater in non treated plots than in sprayed and injected plots. The *Banksia* woodland was burnt a year after phosphite application. By 3 years after burning the understorey vegetation had re-established and a disease front was evident. When the disease front was replotted 3 and 4 years after burning and 4 and 5 years after phosphite application, disease extension was least in phosphite treated plots and greatest in the non treated plots. There appears to be some residual effect of phosphite application after fire.

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