

## BROADCAST SEEDING VERSUS DIEBACK

by J. McCormick

If one believes that the presence of Banksia grandis in the forest encourages the spread of dieback and that the existence of dense thickets of acacia plants is detrimental to the same; then herein one may find, in part, a solution to the problem.

Firstly, we examine the plant community structure in a fairly representative area of the northern jarrah forest; in this case, 13 square kilometres in Pindalup block. Levy point sampling gives the graphical result line A in the illustration where plant cover density (plant repetition) is plotted against plant height. Secondly, we look at an area of reclaimed land (1.5 hectares) in Del Park minesite. This area was sampled two and a half years after being seeded with a mixture of acacia and eucalypt seed. The graph produced by Levy point sampling is illustrated by line B.

When we look at the plant species contribution to total ground cover we find:-

Plant Species Area Cover %:

	Mixed acacias	Mixed eucalypts	<u>Banksia grandis</u>	Total ground area cover
Pindalup	Nil	3.5	7.0	39
Del Park	54	4.0	Nil	61

We have in effect created a situation which could prove inhospitable to P. cinnamomi by removing the jarrah stand with its understorey of Banksia grandis re. Photo A; replacing it with a dense ground cover of acacias and mixed eucalypts, including jarrah re. Photo B.

Colonisation of the seeded plot by Banksia grandis is limited to a few seedlings on the extreme outer edge re. Photo C. The establishment of Banksia grandis within the plot is discouraged by dense acacia-eucalypt growth re. Photo D.

The seeding of cleared dieback areas as opposed to conventional planting of same would be cheaper. Such areas could be monitored for the presence, absence or intensity of P. cinnamomi. Furthermore, the establishment of green buffer strips around areas of high quality jarrah within the quarantine area might prove effective; such strips could be seeded and fertilised from the air in one operation.

### LEVY POINT SAMPLING

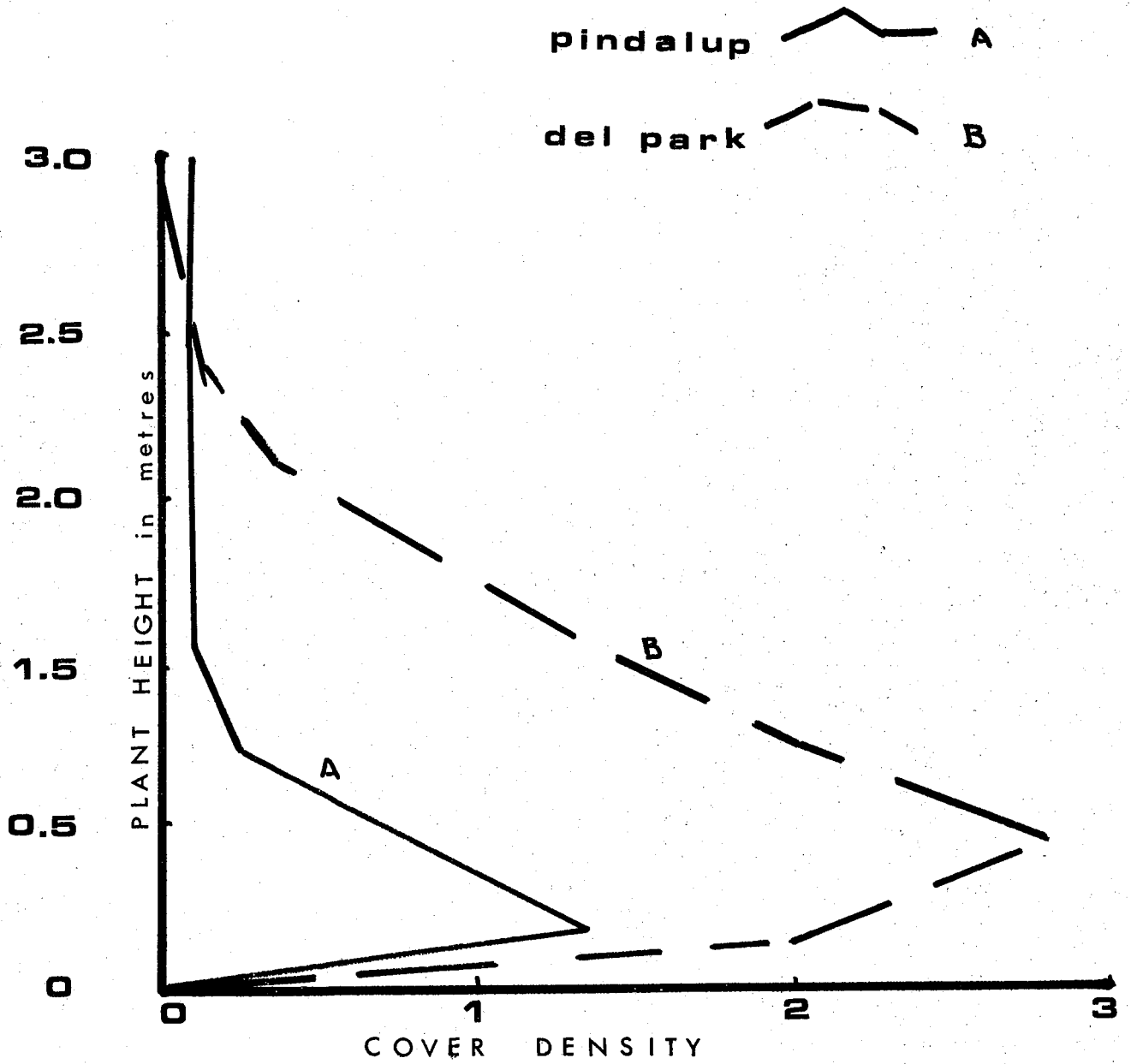




PHOTO A: Jarrah with understorey Banksia grandis





PHOTO B: Eucalypt-Acacia seeding trial - Del Park





PHOTO C: Banksia grandis seedlings on flat edge - Del Park



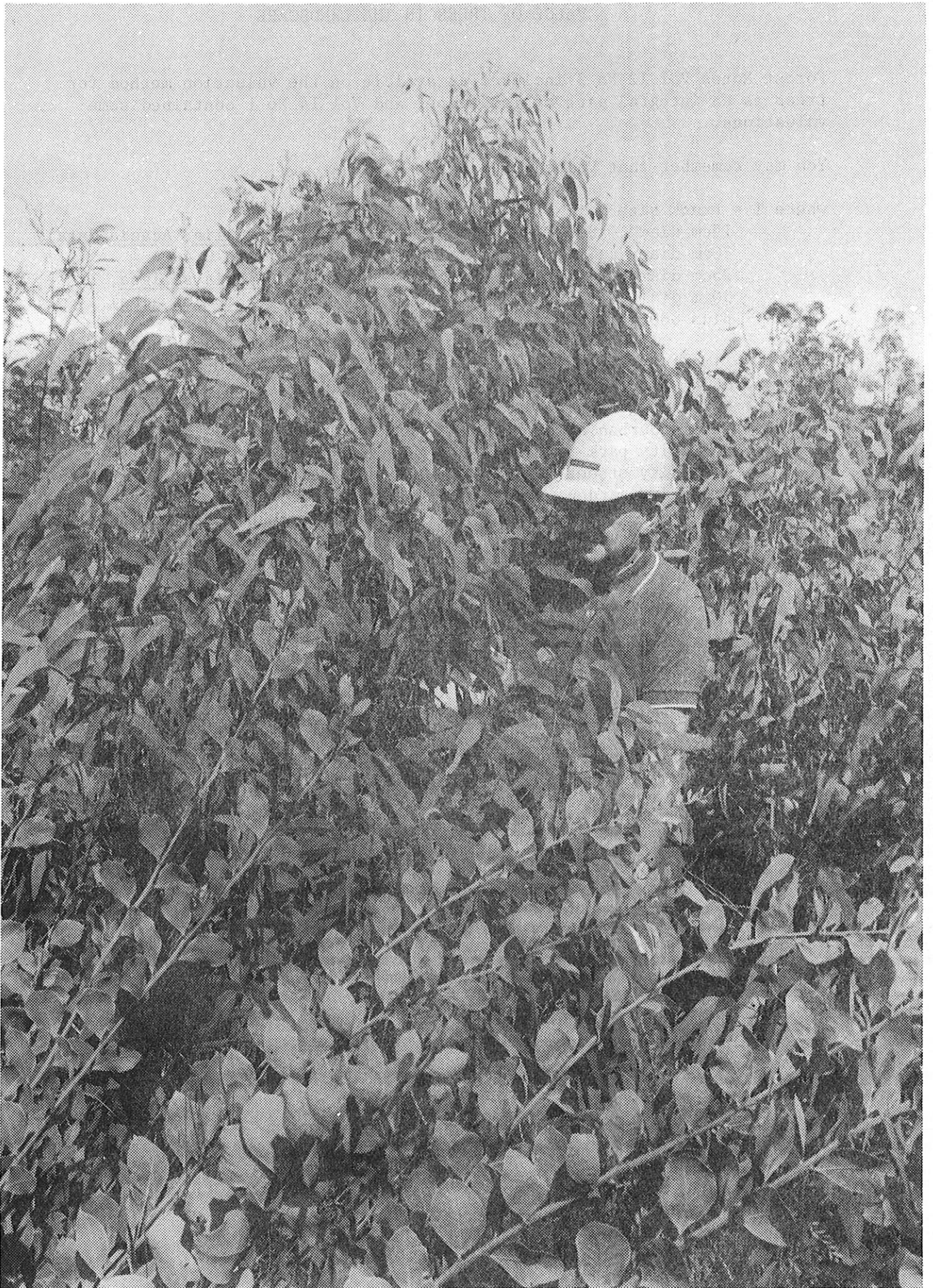


PHOTO D: Eucalypt-Acacia seeding - two and a half years old - Del Park