

TERMITES - ATTACKING SOUND HEALTHY TREES

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The Department often receives reports of attacks by termites on healthy growing trees, both young and old. Wherever it has been possible to investigate these reports it has invariably been found that the attack is confined to wood which has been changed or altered by some other agent, and very rarely apparently is sound live wood subjected to attack by these insects in the South-West part of the State.

Many cases of newly planted young trees being killed by termites have been reported, but when it has been possible to investigate these reports, here again it has generally been found that the tree had either been damaged by fungal attack

or mechanically, or was dying from drought or other cause. The termite attack, in other words, was a secondary cause of damage.

Recently, however, a number of young and apparently vigorous trees died suddenly in the Department's arboretum at Dryandra. Upon digging them up it was found that the root systems had been severed quite close to the base of the little trees, and whole sections eaten or removed. Examination failed to show the presence of any insect pest until recently when a sugar gum, *Eucalyptus cladocalyx*, was noticed to be showing symptoms of wilting. This tree was 19 inches high, healthy and vigorous, and was planted in June, 1960. When removed from the soil it was found that all the main roots had been severed and sections eaten, the damage being very similar to that which had caused a number of deaths of other young trees in the vicinity. Fortunately, in this case, the insect causing the trouble was present and actively engaged in devouring the root tissue, and has been identified as a species of termite, *Microceretermes distinctus*. Both worker and soldier casts were present making identification positive. Thus we have the first authentic recorded attack by termites on a young and perfectly healthy tree.

Microceretermes distinctus has not previously been recorded as having much economic importance, its attacks generally being confined to weathered and decaying wood and debris lying on the ground.

Following the deaths in the 1959 planting in the Dryandra arboretum, action was taken to test the protective capacity of an insecticide applied to the soil around the root systems of the newly planted trees. 2% Dieldrin powder was the chemical used, and a small quantity was dusted into the soil back filled when planting the trees. The protection afforded by this treatment has up to the present proved 100% effective whilst 9% of the untreated trees have been killed.
