

***POROTERMES ADAMSONI* (Froggatt)**

A Dampwood Termite (White Ant)

by J. Beesley

Understandably, and quite justifiably, householders become alarmed when they discover termite damage in their property. The presence of numerous creamy coloured insects moving freely within the damaged wood only serves to confirm that the attack is still active. Unless some remedial action is taken, the attack is likely to continue until the structure has been seriously damaged. Fortunately, with one particular species of termite (or white ant, as they are often called) *Porotermes adamsoni*, effective control can usually be achieved without resorting to difficult or costly treatments.

Although a specialist will have little difficulty in identifying the different species of termites – of which there are about 300 in Australia – to the layperson they all look much alike and more or less automatically become the target for eradication treatments. The control measures suggested in this sheet apply only to *Porotermes adamsoni* – or Porotermes, for short – and not to any of the other species often found attacking timber and other building materials. Therefore, correct identification is essential.

Porotermes is most at home in the forest where it is generally found in decaying logs and standing trees, living or dead but, in Victoria at least, it is sometimes found invading damp and decaying wood in buildings. Records show that its main distribution is in the timbered parts of eastern New South Wales, including the Australian Capital Territory, and in the southern and eastern parts of Victoria as far west as about Castlemaine. It is also found in south-eastern Queensland, as well as in Tasmania and limited parts of South Australia. Outside these areas, the possibility of Porotermes being responsible for termite attack in a building is remote. Even within these areas, Porotermes tends to be far less common than some of the other species found in buildings.

Within the regions where it occurs, Porotermes is larger than most of the other termite species likely to be found in timber in service. The insects attain a length of about 15 mm – whether winged or otherwise. Often their presence will not be discovered until the colony is well established and the winged form has been added to the

soldier and worker castes. The workers are generally fairly uniformly coloured, 'fattish' creamy insects which move sluggishly in galleries in infested wood. The soldiers, which are about the same length as the workers, may be distinguished by their dark, reddish-brown heads with well developed, black mandibles or jaws. Their bite is harmless. The head is flattened, longer than it is wide with either rounded or nearly parallel sides and, in the majority of individuals, equal to between one-third and one-half the total length of the insect. The colour of the abdomen, or body, is much the same as that of the worker.

Occasionally, the first evidence of the presence of termite attack, by Porotermes or any other species, is the discovery of a swarm of 'flying ants' emerging from a floorboard, skirting or architrave. Often, the evidence of such a swarming flight having occurred is a heap of cast wings near a window or other bright light. Correct identification of a termite species from the winged form is best left to a specialist but the slits or openings from which these insects have emerged are useful in tracing the source of the infestation, as they are normally fairly close to the nest or centre of the colony. When such openings can be found, the source of the infestation is likely to be in the nearest stump, bearer or joist if Porotermes is responsible.

The third criterion by which Porotermes attack might be recognised is the nature and condition of the attacked wood. Porotermes attack always starts in damp, decayed wood. Hence, it is rare to find it in houses less than 15-20 years old. In the older houses the first, and often worst, attack is in the red gum or jarrah stumps or half buried plinth boards which are damp, rotted and soft. Often, too, the sub-floor ventilation is restricted and storm-water drainage is defective, accentuating the dampness. After becoming established in the rotted wood, Porotermes may extend its feeding into nearby, undecayed hardwood or softwood bearers, joists or flooring. Such timbers may be extensively damaged, but it is not usual for this species to tunnel extensively in the solid, undecayed portions of the durable timbers used as house stumps or plinths. When compared with other termite species which attack timber in buildings, Porotermes colonies are relatively small, damage spreads

slowly from one piece of timber to the next with little evidence of external plastering or mud-covered shelter tubes. If winged forms are present, the colony is certainly well established, even if not large.

CONTROL: Whenever *Porotermes* attack is discovered in a building sub-floor ventilation and drainage become suspect. The basic requirement for good sub-floor ventilation is a free flow of air under all parts of all suspended timber floors. Plumbing wastes should be free from leaks and stormwater drains should carry storm waters away from beneath the building. On some sites special provision may need to be made for controlling sub-surface ground water, for example, by the installation of a system of agricultural drains.

As a rule, the termite problem can be solved by removing the damp, decayed wood in which the colony is centred and replacing it with concrete or masonry, preservative-

treated wood * or a timber that is naturally durable. The disturbance associated with the removal and replacement of a stump infested with *Porotermes* is usually sufficient to destroy the colony without resorting to any other chemical treatment. Of course, replacement of other seriously damaged timbers should be regarded as an integral part of the re-stumping operation, together with the correction of any sub-floor ventilation and drainage defects.

Where the hazard from termites is fairly low, and the risk of an invasion by other species is negligible, little is to be gained by installing a barrier of treated soil to prevent re-infestation by *Porotermes*, and it is only necessary to replace the decayed stumps and plinths in which the attack was found.

* See Australian Standard AS 1604 – 1974: Preservative-treated sawn timber, veneer and plywood.