

## West Indian drywood termite

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The West Indian drywood termite *Cryptotermes brevis* (Walker) (Isoptera: Kalotermitidae) (see Fig. 1) is established throughout most tropical and temperate regions of the world, including some parts of Australia. The species causes serious damage to timber structures and will attack softwood and low-density hardwood timber used in furniture, flooring and structural woodwork.

Drywood termites require no contact with the ground, or any other source of moisture, other than that found in the wood in which they are living. A complete colony can exist in a single small piece of dry timber. Because their colonies are completely hidden, these termites may exist undetected for years. The most visible sign of their activity is the sand-grain sized faecal pellets expelled from the colony (see Fig. 2).



Figure 1. West Indian drywood termite soldiers are approximately 4–5 mm long and have dark, heavily sclerotised heads. (Photo: M. Horwood)

*Cryptotermes brevis* was first reported in Australia in Queensland in 1966 and it is now endemic in Brisbane, Maryborough and Rockhampton. A fumigation program initiated by the Queensland

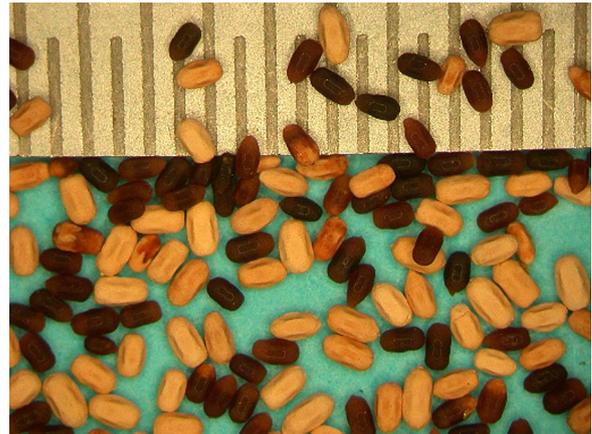


Figure 2. Piles of faecal pellets are frequently the most obvious sign of West Indian drywood termite infestation. Pellets commonly have a 'salt and pepper' appearance (pictured) although a uniformly dark colouration is also encountered (each division = 0.5 mm). (Photo: M. Horwood)

Government in 1976 has resulted in the treatment of almost 600 buildings and many items of furniture. On average 10 buildings are fumigated annually at a cost of around \$500,000.

The termite is also found occasionally in Sydney but it is not established. Most occurrences are in transportable household timber items. Only on two occasions has it been necessary to conduct building fumigations in NSW.

The West Indian drywood termite's habit of infesting timber without establishing contact with the soil renders it immune to conventional barrier techniques installed to protect buildings from subterranean termites. In most cases the termite is spread through the introduction of infested furniture into a building (see Fig. 3). When infested items are left in situ for some time the infestation can spread into adjacent parts of the building. Very little can be done to prevent infestation, other than to restrict the movement of infested timber (especially antiques) into a building. Regular inspections by an experienced pest controller can help reduce the scale of damage resulting from drywood termite attack.



Figure 3. West Indian drywood termite damage. This infestation spread from an imported antique chest of drawers (top) into the floorboards underneath (bottom). (Photos: M. Horwood)

Like many termites, *C. brevis* will leave a thin, superficial veneer of undamaged timber intact in areas where they are feeding. Beneath this veneer the termite excavates clean, smooth-surfaced galleries (see Fig. 4). Unlike subterranean termites, *C. brevis* does not leave longitudinal flutes of timber within its galleries or fill its galleries with mud (see Fig. 4).

When a drywood termite infestation is limited to a piece of furniture or some other moveable item eradication is relatively straight forward. Similarly, removal of parts of timber fixtures (e.g. architraves) may suffice if the full extent of the infestation can be delimited.

It is essential that infested timbers, even those to be discarded, are treated appropriately to ensure that all termites are killed. Fumigation is the accepted eradication method in Australia, although small items of little value may be burned. A number of specialist fumigators generally located near major ports have fumigation facilities suitable for furniture. Where buildings are infested the accepted eradication method is tent fumigation.

Should *C. brevis* become established in NSW, the cost of timber damage and fumigation will be significant and ongoing. The NSW Department of Primary Industries provides advice to the public and to the pest control industry, investigates reports of infestations and ensures the necessary remedial treatments are undertaken. *C. brevis* is a

proclaimable pest under the NSW *Plant Diseases Act (1924)*, making it the legal responsibility of owners and occupiers of land to report its occurrence. If you suspect you have this termite, contact the NSW Department of Primary Industries on 9872 0111.



Figure 4. West Indian drywood termite damage (top) is markedly different to subterranean termite damage (bottom). In both examples the outer layer of undamaged timber was removed. (Photos: P. Sykes and M. Horwood)

## References

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