

1. PaDIL Species Factsheet



Scientific Name:

Cryptotermes brevis (Walker)
(Isoptera: Kalotermitidae)

Common Name

West Indian drywood termite

Live link: <http://www.padil.gov.au:80/pests-and-diseases/Pest/Main/136468>

Image Library

Australian Biosecurity

Live link: <http://www.padil.gov.au:80/pests-and-diseases/>

Partners for Australian Biosecurity image library



Museum Victoria
<http://museumvictoria.com.au/>



CRC National Plant Biosecurity
<http://www.crcplantbiosecurity.com.au/>



Plant Health Australia
<http://www.planthealthaustralia.com.au/>



Department of Agriculture, Fisheries and Forestry
<http://www.daff.gov.au/>



Department of Agriculture and Food, Western Australia
<http://www.agric.wa.gov.au/>

2. Species Information

2.1. Details

Specimen Contact: Museum Victoria - discoverycentre@museum.vic.gov.au

Author: Walker, K.

Citation: Walker, K. (2006) West Indian drywood termite (*Cryptotermes brevis*) Updated on 8/2/2012 Available online: PaDIL - <http://www.padil.gov.au>

Image Use: Free for use under the Creative Commons Attribution 3.0 Australia licence

2.2. URL

Live link: <http://www.padil.gov.au:80/pests-and-diseases/Pest/Main/136468>

2.3. Facets

Status: Exotic Species Occurrence in Australia

Group: Termites

Commodity Overview: Forestry

Commodity Type: Timber

Distribution: USA and Canada, Central and South America, Africa, South and South-East Asia, Australasian - Oceanian

Alate wings: Cross veins present

Damage in timber: Damage across grain of wood

Distribution: Exotic, SE Asia, USA, Canada, Central and South America, Africa

Fontanelle: Absent

Frass shape: Six-sided frass pellets

Mud tube: Absent

Nesting site: Within the wood they infest

Pronotum: Pronotum as wide or wider than head for each caste

Soldier antennae: Segments all moniliform or bead shaped

Soldier head dorsal profile: Head leading edge steeply sloping - almost vertical, Wider near mid-point than leading edge, Leading edge V-shaped across entire width

Soldier head side profile: Distal half of head deeply wrinkled

Mandibles: Soldier marginal teeth present, Worker & Alate teeth ratio: 3 and 3

Cerci - Soldier: Short - 2 segmented

Dry- or Damp-wood termite: Wings with cross veins, Across the grain damage, Marginal teeth present on mandibles of soldiers, Pronotum equal to or greater than width of head, Six-sided frass pellets

Fontanelle - Soldier: Absent

Head ocelli - Imago: Absent

Mandibles - Imago or Worker: Left: 3 teeth; Right: 3 teeth

Pronotum - Soldier: Anterior lobe absent

Tarsi - Imago or Soldier: Tarsi 4 segmented

Wings - Imago: Forewing scale twice length of hind wing scale, Forewing reticulate

2.4. Other Names

Cryptotermes piceatus Snyder, 1922

Cryptotermes pseudobrevis Fuller, 1921

Cryptotermes rospigliosi Snyder, 1922

Termes brevis Walker, 1853: 524

Termes indecisus Walker, 1853 Walker, 1853: 524

Tropical Rough-headed drywood termite

2.5. Diagnostic Notes

Soldier body length: 4.2-5.95mm

Soldier can be separated from other species of *Cryptotermes* in Australia by its constricted and strongly rugose head; short, broad and noticeably angled mandibles; and squat, rounded frontal and genal horns. Imago can be separated from other species of *Cryptotermes* in Australia by the complete absence of an arolium between the tarsal claws.

Head strongly phragmotic; noticeably constricted behind the antennal sockets (viewed from above); at least anterior one half of head strongly rugose dorsally and laterally; upper anterior margin of head deeply and angularly V-shaped with conspicuously median depression in anterior one half of dorsal surface; frons deeply excavated, falling steeply to base of mandible; genal horns and frontal horns short and blunt, the latter broader based and more prominent in dorsal view; mandibles less than one half as long as head capsule, broad, strongly angulated with poorly developed teeth; anterior margin of pronotum deeply but narrowly concave, finely and irregular serrate.

Gay, F. and Watson, T. (1982). The Genus *Cryptotermes* in Australia (Isoptera: Kalotermitidae). Australian Journal of Zoology Supp. Series 88: 1-64.

****Description:****

Imago: Generally pale brown, wings pale brown with Sc, R and Rs veins much darker; pronotum slightly darker than head; tibiae much darker than other segments of legs. Head with parallel sides, truncately rounded behind, cranial sutures distinct; eyes oval; ocelli elongate-oval, very close to or contiguous with eyes; antennae of 14-18 segments (usually 15 or 16). Pronotum a little more than twice as wide as long; anterior margin shallowly concave and thickened, lateral margins convex and widest just posterior to middle, posterior margin slightly concave or straight. Forewing with only Sc, R and Rs sclerotised; Rs with 5-7 branches; M joining radial sector clearly distal to middle of wing. Arolium absent.

Soldier: Head with dorsal and lateral surfaces of anterior 2/3 rugose and very undulating; has rounded front prominences and is strongly constricted behind the front lobes at about the level of the antennal sockets; widest at posterior 1/3 and conspicuously depressed in mid-vertex; frontal flange prominent and produced forward, broadly and shallowly V-shaped with median notch and recurved above antennal bases; frons falling almost vertically; frontal and genal horns stubby and rounded; mandibles short, very broad and strongly angled, basal half externally rugose; antennae of 10-14 segments, usually 11-13, number may differ on each side. Pronotum usually narrower than head, width ~ twice length, anterior margin upturned and thickened, widely and obtusely angled or widely and deeply concave, antero-lateral margins finely but unevenly serrate; sides convex, posterior margin almost straight. Head and pronotum with sparse pale-golden hairs.

- Exotic. A native of northern South America, *C. brevis* (known as the West Indian Drywood Termite) is now spread throughout the world. It was first recorded in Australia in the 1960s and is established in Brisbane, Maryborough, Bundaberg and Rockhampton; it has also been found in Sydney and Canberra.

- Colonies may last for more than 10 years. They are small – usually no more than 1,000 specimens - but a large number of these colonies may co-exist adjacent to one another in the same building or in the same

piece of timber: 20 colonies have been recorded from a single wooden door.

- One of the world's most destructive termites, its presence is usually not noticed until the timber it is infesting collapses. In Australia, it attacks structural timber only - furniture, house stumps etc. – but has not been recorded from dead trees or shrubs. The species has only relatively recently been found attacking such resources – in northern South America.

This species may be distinguished from other Australian *Cryptot*

2.6. References

http://creatures.ifas.ufl.edu/urban/termites/west_indian_drywood_termite.htm Gay, F.J. & Watson, J.A.L. (1982). The genus *Cryptotermes* in Australia (Isoptera: Kalotermitidae). *Aust. J. Zool. Suppl. Ser.* 88: 1-64
Bacchus, S. (1987). A taxonomic and biometric study of the genus *Cryptotermes* (Isoptera: Kalotermitidae). *Trop. Pest Bull.* 7: iv 1-91 [41]
Watson, J.A.L. & Abbey, H.M. (1993). *Atlas of Australian Termites*. Melbourne & Canberra: Commonwealth Scientific and Industrial Research Organisation 158 pp.

2.7. Web Links

Featured Creatures: http://creatures.ifas.ufl.edu/urban/termites/west_indian_drywood_termite.htm

Generic review: <http://www.unb.br/ib/zoo/docente/constant/catal/gen/crypto.htm>

Queensland Forestry: <http://www.forests.qld.gov.au/library/tn24.pdf#search=%22Cryptotermes%20brevis%22>

3. Diagnostic Images



Australia: Queensland, Brisbane, Oct 2005, in Hoop Pine timber.

Alate mandibles: Simon Hinkley & Ken Walker Museum Victoria



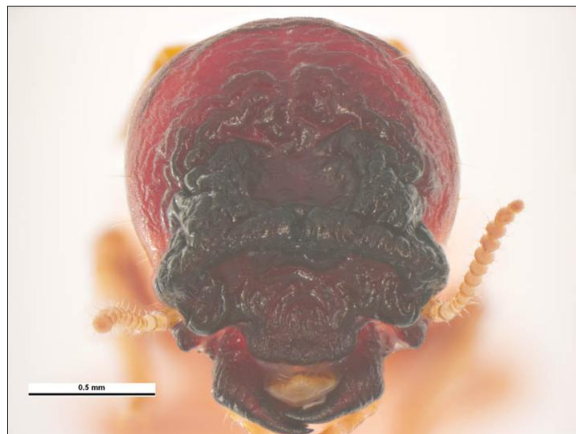
No site data available

Dorsal Image - Alate: Sarah McCaffrey Museum Victoria



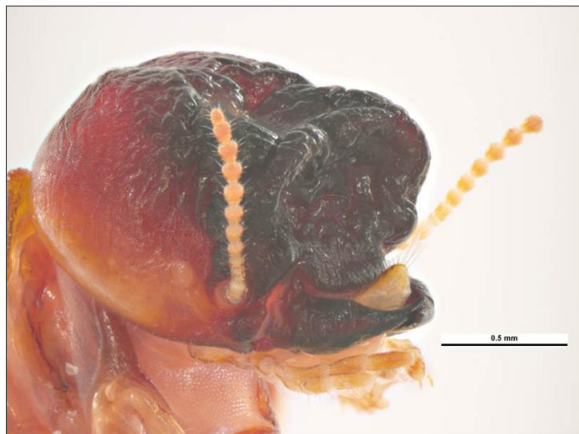
Australia: Queensland, Brisbane, Oct 2005, in Hoop Pine timber.

Dorsal view - soldier: Simon Hinkley & Ken Walker Museum Victoria



Australia: Queensland, Brisbane, Oct 2005, in Hoop Pine timber.

Head front - soldier: Simon Hinkley & Ken Walker Museum Victoria



Australia: Queensland, Brisbane, Oct 2005, in Hoop Pine timber.

Head front - soldier: Simon Hinkley & Ken Walker Museum Victoria



No site data available

Head Front Tangent Image - alate: Sarah McCaffrey Museum Victoria



Australia: Queensland, Brisbane, Oct 2005, in Hoop Pine timber.
Head side - soldier: Simon Hinkley & Ken Walker Museum Victoria



Australia: Queensland, Brisbane, Oct 2005, in Hoop Pine timber.
Head top: Simon Hinkley & Ken Walker Museum Victoria



No site data available
Lateral Image - Alate: Sarah McCaffrey Museum Victoria



Australia: Queensland, Brisbane, Oct 2005, in Hoop Pine timber.
Lateral view - soldier: Simon Hinkley & Ken Walker Museum Victoria

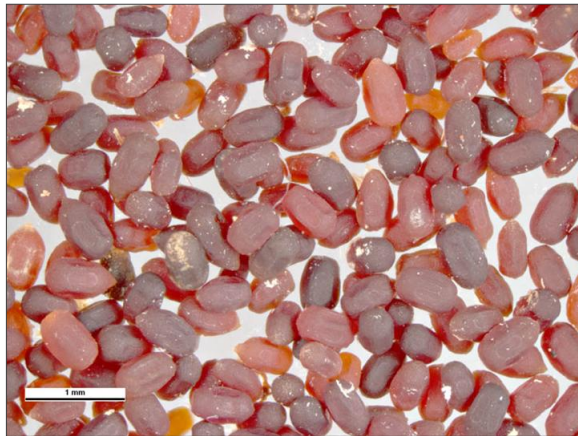
4. Other Images



Australia: Queensland, Brisbane, Oct 2005,
in Hoop Pine timber.
Dealate: Simon Hinkley & Ken Walker
Museum Victoria



Australia: Queensland, Brisbane, Oct 2005,
in Hoop Pine timber.
Frass - close up: Simon Hinkley & Ken
Walker Museum Victoria



Australia: Queensland, Brisbane, Oct 2005,
in Hoop Pine timber.
Frass - overview: Simon Hinkley & Ken
Walker Museum Victoria



Australia: Queensland, Brisbane, Oct 2005,
in Hoop Pine timber.
Nymph: Simon Hinkley & Ken Walker
Museum Victoria

Results Generated:

Monday, February 24, 2020
