



## Pacific Pests, Pathogens & Weeds - Mini Fact Sheet Edition

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### Formosan subterranean termite (440)



Photo 1. Adult worker (above), soldier (below), Formosan subterranean termite, *Coptotermes formosanus*.



Photo 2. Worker (side view), Formosan subterranean termite, *Coptotermes formosanus*.



Photo 3. Soldier (side view), Formosan subterranean termite, *Coptotermes formosanus*.



Photo 4. Workers and soldiers, Formosan subterranean termite, *Coptotermes formosanus*.



Photo 5. Winged reproductives, also known as 'swarmers'.



Photo 6. Carton nest made from frass, soil, chewed wood and saliva, Formosan subterranean termite, *Coptotermes formosanus*.

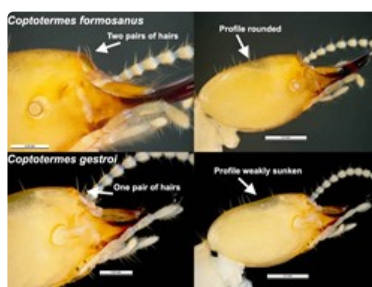


Photo 7. Comparison of features of the Formosan subterranean termite, *Coptotermes formosanus*, with the Asian subterranean termite, *Coptotermes gestroi*.

## Summary

- Widespread. Asia, Africa (South Africa), North America (including Hawaii), the Caribbean (US Virgin Islands), Oceania. In Marshall Islands.
- Serious invasive pest. Large colonies and damage happens quickly. Attacks on living trees and buildings cause loss of native diversity, a need for expensive treatments, and increased pesticide use.
- Colonies contain kings and queens (sexually mature males and females), i.e., ‘reproductives’ (winged, yellow-brown bodies, golden-brown heads, 12-15 mm); soldiers (whitish, 4-5 mm long, orange-brown oval heads - exude defensive glue-like fluid, pincer-like mouthparts); workers (whitish, collect cellulose, build nests, feed larvae).
- Reproductives swarm briefly, females lay eggs in moist holes or crevices, and care for them. Later, more eggs and workers take over. Colony expands, many millions, then 5-7 years later reproductives swarm again. Usual food is living and dead trees; more recently invaded towns and cities to feed on building timbers.
- Spread with wooden cargoes on ships (pallets, telephone poles, rail sleepers, soil, and more).
- Biosecurity: listed by IUCN among 100 of World's Worst Invasive Species. National legislation and awareness is needed to prevent its introduction or further spread.
- Cultural control: restrict movement of wood, plants, soil in infested areas; inspect homes and trees regularly; where practical, allow sunshine into buildings, and free flow of fresh air; practice good hygiene in and around homes; clean drains avoid lingering puddles, and repair any leaks.
- Chemical control: apply building codes to prevent termite infestations; apply toxic insecticides as barriers beneath buildings; use baits (chitin synthesis inhibitors) in monitoring stations around buildings.

## Common Name

Formosan subterranean termite

## Scientific Name

*Coptotermes formosanus*. It is also known as *Coptotermes intrudens*. *Coptotermes gestroi* is similar (see **Fact Sheet no. 384**).

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Information from CABI (2019) *Coptotermes formosanus* (Formosan subterranean termite). Crop Protection Compendium. (<http://www.cabi.org/cpc>); and Su N-Y, Scheffrahn RH (2019) Formosan subterranean termite. Featured Creatures. UF/IFAS University of Florida. ([http://entnemdept.ufl.edu/creatures/urban/termites/formosan\\_termite.htm](http://entnemdept.ufl.edu/creatures/urban/termites/formosan_termite.htm)); and from Formosan subterranean termite. Wikipedia. ([https://en.wikipedia.org/wiki/Formosan\\_subterranean\\_termite](https://en.wikipedia.org/wiki/Formosan_subterranean_termite)). Photo 1 Gerald J. Lenhard, Louisiana State University, Bugwood.org. Photos 2&3 Pest and Diseases Image Library, Bugwood.org. Photos 4&5 Scott Bauer, USDA Agricultural Research Service, Bugwood.org. Photo 6 Wood Product Insect Lab USFS, Gulfport, MS, Bugwood.org. Photo 7. Simon Hinkley & Ken Walker Victorian Museum. In: Walker K (2005) Formosan subterranean termite (*Coptotermes formosanus*). PaDIL - <http://www.padil.gov.au>.

Produced with support from the Australian Centre for International Agricultural Research under project HORT/2016/185: *Responding to emerging pest and disease threats to horticulture in the Pacific islands*, implemented by the University of Queensland and the Secretariat of the Pacific.

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The mobile application is available from the Google Play Store and Apple iTunes.

