



# BUG BIZ

Pest Management and Insect Identification Series



## Drywood Termites

Forest Huval and T.E. Reagan

Termites belong to the order *Blattodea*. They were previously placed in their own order, *Isoptera*, but are now included in the same order as cockroaches based on molecular analyses and other biological attributes. Termites are among the most abundant organisms on the planet and are best known for consuming and destroying wood. Termites have a complex social dynamic and have evolved a eusocial cast system dividing labor into workers, soldiers and a reproductive group. Workers and soldiers are pale tan in color and lack wings. Reproductives possess wings during the reproductive (nuptial) flights but quickly shed them following mating. Termites common in Louisiana are composed of two major types — drywood and subterranean — based on where they make their nests and other environmental requirements. If left unchecked, termites can cause major damage to wood structures.

### Drywood Termites in Louisiana

Species nest above ground in relatively dry wood, such as lumber, utility poles, fences and dead limbs on trees. Drywood termites have the ability to metabolize water from the wood that they eat, absorbing and reabsorbing water from their feces as needed. Some colonies may have more than one reproductive female called a secondary reproductive. Most species excrete frass (feces) with rounded ends and six flattened or concavely depressed sides with ridges on each side. Finding frass is an indicator of an infestation.

**Drywood termites (*Incisitermes spp.*):** Members of this genus are the most widespread drywood termites. Alates are approximately one-half of an inch (12 mm) in length, with dark brown bodies with paler heads and thoraxes and yellowish wings. Swarms occur during May and June.



Adult alate *Reticulitermes spp.*  
Gerald J. Lenhard, Louisiana State University, Bugwood.org

**West Indian drywood termite (*Cryptotermes brevis*):** Members of this species are common in old furniture and similar circumstances.

Alates are dull brown and about one-half of an inch (12 mm) in length. Colonies are smaller than those of subterranean termites, but multiple colonies may inhabit a single piece of wood. The first soldier does not appear until the second or third year and alates develop around year five. A mature colony may contain over a thousand termites and survive up to 10 years. Mature colonies produce swarms during dusk in late June and July.



*Cryptotermies brevis alate*;  
Rudolf H. Scheffrahn, University of Florida, Bugwood.org

**Dark southern drywood termite (*Kaloterme s approximates*):** Members of this species nest, feed and live entirely within a single piece of wood.

Alates are reddish brown to black in coloration and approximately one-third of an inch (8.5 to 10 mm) in length with wings included. Mature colonies swarm during the day from September-November.



*Kaloterme serrulatus alate*  
Pest and Diseases Image Library, Bugwood.org

### Biology and Life History

Alate termites emerge from mature nests in nuptial flights during the spring and summer months. After fertilization, winged termites land and shed their wings and form new colonies. These insects then become the king or queen termites of their newly established colonies. After the fertilized queen lays her eggs, they hatch into pale white nymphs. Throughout several molts, these larvae grow to assume a role in one of the three termite colony

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castes: workers, soldiers and, eventually, alates. After the colony reaches a certain size, reproductive termites, called alates, start to develop. Alate production only occurs in mature colonies, which can take several years. When alates mature, they emerge en masse from the nest as swarms, beginning the life cycle over again. Workers and soldiers live one to two years, while queens can survive over a decade under optimal climate conditions.

## Detection and Control

Termites typically remain hidden except for when they swarm to mate. A colony that produces alates is several years old and capable of severely damaging structures. Finding a small number of alates in or around your home does not indicate an infestation. Having a full swarm of alates within a structure or around a house suggests that a mature colony is nearby. Several measures can be taken to help prevent infestations. Termite-resistant wood, such as heartwood, cedar, redwood and cypress, help prevent infestations. Properly treating exterior wood with sealant or paint will help prevent infestations. Do-it-yourself pesticides for use against termites are generally not effective. Professional pest management services should be used in cases of structural infestations. Regular inspections every three to five years help detect

infestations before they become damaging. Careful inspection is needed to detect termite damage and colonies and make the best use of treatments. If you suspect a termite infestation, contact the LSU AgCenter for any further questions or identifications or contact the nearest pest control agency for professional treatment. Having the actual insect specimen may be necessary for an accurate diagnosis.

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Authors: Forest Huval and T.E. Reagan

William B. Richardson, LSU Vice President for Agriculture  
Louisiana State University Agricultural Center  
Louisiana Agricultural Experiment Station  
Louisiana Cooperative Extension Service  
LSU College of Agriculture

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