Termite

Know Your Texas Termites—Drywood termites

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Subterranean termites get most of the attention from pest control operators in much of Texas, although those that live and work in coastal cities such as Houston, Beaumont, or Corpus Christi are familiar with them and with the damage that they cause. Actually, native and introduced drywood termites are found over a much wider area but are rarely detected, even when present.

Drywood termites belong to the family Kalotermitidae, unlike most subterranean termites which are members of the families Rhinotermitidae or Termitidae. Kalotermitid soldiers can be distinguished by the large "teeth" along the mandibles (Fig. 1). Alates may be distinguished from those of common subterraneans by number of strong veins in the leading edge of the wing (Fig. 2, 3).

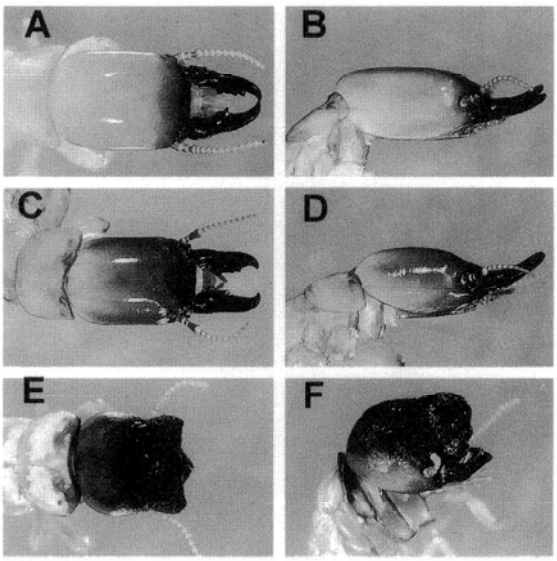

Figure 1. Soldiers of common drywood species. *Incisitermes snyderi* (A, B); *I. minor* (C,D); *Crypotermes brevis* (E.F). Photos courtesy R. Scheffrahn, Univ. Florida.

Unlike most subterranean termites, drywoods are able to survive long periods without direct contact with liquid water. To a large extent they are able to retain water produced by their metabolism of wood. As a consequence their feces are completely dry, hard pellets, typically with 6 visible ridges because all water is removed. These pellets do not crumble when moved between the fingers and are an important diagnostic feature in detecting drywood infestations. Drywoods generally keep the tunnels in which they are actively feeding clean and will expel fecal pellets through "kick-out holes". Often piles of pellets will accumulate in undisturbed nooks and crannies.

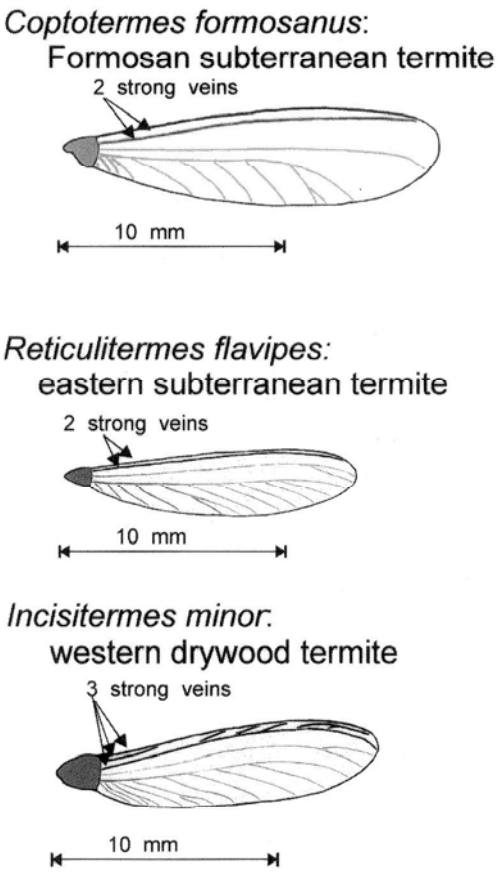

Figure 2. Diagrams of wings of common termite pests. (T.H. Atkinson)

True drywood termites do not make covered tunnels or soil tunnels to reach new cellulose wood sources. They will, however, cross small gaps to pass from one piece of wood to another within a structure. Most colonies are small, seldom exceeding 2,000 individuals. Even though numbers are small, drywood workers are typically 5-10 times more massive than of *Reticulitermes* species and can consume more wood per individual. Most colonies are founded by alate pairs which begin excavations directly on or in a piece of wood. Serious structural damage can occur when numerous infestations of the same structure occur or when infestations go unchecked for long periods.

While all termite species are more abundant in warmer climates, drywood termites are further restricted in their distribution. Native subterranean termites (*Reticulitermes* species) are able to survive in natural settings into the Midwest because they remain below the soil surface where warmer temperatures prevail. Drywoods, on the other hand, restricted to pieces of wood above ground, are exposed to ambient air temperatures.

Six species of Kalotermitidae are reported from Texas, although only three of these are of economic consequence. In fact, most drywood termite damage in the state is caused by the native, Gulf Coast drywood termite, *Incisitermes snyderi*. This species is found throughout the Gulf Coast region from Mexico to Florida. Alates are yellowish brown and swarm in evenings in June and July (Fig. 3). Because of their color and swarming time, they are sometimes mistaken for Formosan subterranean termites, but can be easily distinguished by their smaller size and wing venation (Fig. 2).

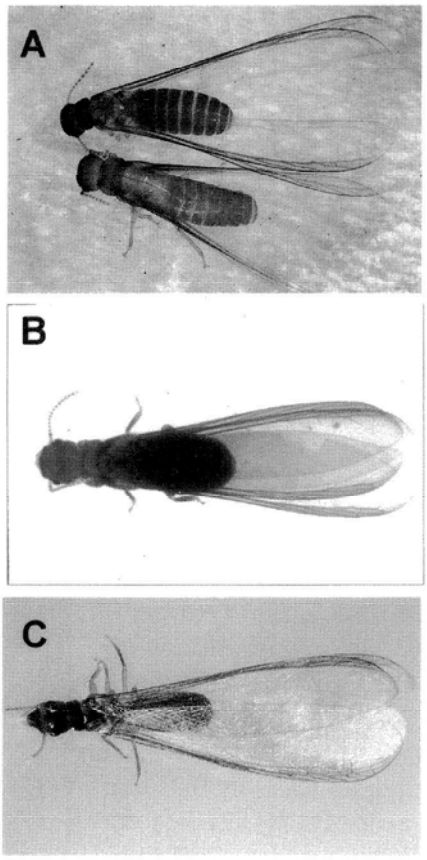

Figure 3. Alates of common drywood termites. *Incisitermes snyderi* (A); *I. minor* (B); *Crptotermes brevis* (C). Photos A and C, courtesy R. Scheffrahn, Univ. Florida; B, T.H. Atkinson.

Another species, *I. minor*, the western drywood termite is found naturally throughout lower elevations of California, Arizona, and western Mexico where it is a major structural pest. It may occur naturally in the El Paso-Las Cruces region. Because drywood colonies are found totally within pieces of wood, colonies are frequently transported. This species has been reported on numerous occasions from Texas, Louisiana, and Florida. Recently, active colonies infesting non-structural wood were found in New Orleans, indicating that it has become established in some areas outside of its original territory. I personally have seen this species infesting furniture (brought from California) and in the substructure of a residence in Dallas, probably due to infestation of douglasfir lumber during transportation through California. The western drywood termite appears to be tolerate colder temperatures and lower ambient humidity than does the Gulf Coast drywood termite. *Incisitermes minor* adults swarm on hot clear days from July-September. They are easily distinguished from alates of other species by the combination of a dark body and reddish brown head and prothorax (Fig. 3).

A third species, the West Indian powderpost termite, *Cryptotermes brevis* is occasionally found in Texas, usually in furniture. *C. brevis* occurs widely in Hawaii, southern Florida, the Caribbean, tropical parts of Mexico and other tropical areas of the world. Alates warm in evenings in late spring or early summer (Fig 3). Soldier heads (Fig. 1) are specially modified to "plug" kickout holes.

References:

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