

Formosan Subterranean Termite

Coptotermes formosanus

Order: Isoptera

Family: Rhinotermitidae

Description: The three castes of termites include the Workers, Soldiers and Reproductives. **Workers** are small, white, blind and quick moving. They perform all the tasks required to maintain a colony. The majority of individuals in a colony are workers. **Soldiers** have hard, brown heads with jaws that look like pincers. These jaws are strictly for fighting and are so specialized that they cannot be used to chew food. Some **reproductives** swarm and start new colonies while others take over reproduction when the primary king or queen dies or becomes separated from the main colony.

Special Features:

- **Foraging Tubes** - When these termites invade a house above-ground, foraging tubes of 0.25 to 0.5 inch diameter may be found connecting soil tubes and the infested house.
- **Swarming** - Swarming is the primary way the termite naturally spreads after it has been transported to a new area. Three elements are needed for swarming to be effective: 1) Proper food resources (cellulose and wood), 2) moisture, and 3) a physical niche.

Similar Species: The genus *Coptotermes* contains the largest number of termite pests (28 species) among the >2,500 termite species worldwide. The Formosan subterranean termite (FST) is the most widely distributed.

Range and Habitat: Native to Asia, the distribution of FST in the United States in the year 2000, included Alabama, California (an isolated infestation in San Diego County), Florida, Georgia, Hawaii, Louisiana, Mississippi, North and South

Carolina, Tennessee, and Texas. FST nest in the soil to obtain moisture, but they also nest in wood that is often wet. They easily attack any wood in contact with the ground, and if the wood does not contact the soil, they can build mud tunnels or tubes to reach wood several feet above the ground.

Reproduction:

A single colony may produce over 70,000 workers. After a brief flight, reproductives shed their wings. Females immediately search for nesting sites with males following closely behind. When the pair find a moist crevice with wooden materials, they form the royal chamber and lay approximately 15 to 30 eggs. Within two to four weeks, young termites hatch from the eggs. The reproductives nurse the first group of young termites. One to two months later, the queen lays the second batch of eggs, which will eventually be nursed by termites from the first egg batch.

Notes:

- **How Many?!** - A single colony of FST may contain several million termites (versus several hundred thousand termites for native subterranean termite species) that forage up to 300 ft in soil.
- **Damage** - A single individual of the FST doesn't consume more wood than a single native subterranean termite, however because of its large population size, a FST colony can cause more structural damage in a shorter time.
- **Plants** - Studies also found that FST attack many species of living plants. The FST attacks structural lumbers and living plants because they are sources of cellulose.
- **Pest Status** - Control and repair costs due to FST is estimated at \$300 million annually in New Orleans alone.