

# Just Formosans

## *A Guide for Homeowners, Builders, and Pesticide*



Department of

Pesticide Regulation

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Bulletin 18

***Short of fire, flood, or robbery, a termite invasion can easily be called a homeowner's worst nightmare. But what about Formosan termites?***

### Formosan Termites Defined

Formosan subterranean termites are an extremely aggressive species of termites that form colonies of several million individuals (as opposed to the native eastern subterranean termite, whose colonies rarely exceed 300,000). Formosan subterranean termite colonies produce extremely large numbers of swarmers in the spring of the year, and most swarming occurs within a period of one to two weeks. Swarmers emerge at twilight or in the early evening, and they are strongly attracted to light. Winged swarmers are thus occasionally found inside structures which are not actually infested, having entered through gaps or small openings. (Wingless swarmers are also common, as swarmers typically shed their wings soon after their first contact with a solid object and then explore extensively by walking.)

Formosan subterranean termites, like other subterranean termites, must maintain contact with the ground in order to obtain moisture. However, if an adequate source of moisture is available, Formosan subterranean termites are also able to form colonies in other protected areas (e.g., wall voids below leaking pipes or air conditioning ducts on which moisture condenses). Formosan subterranean termites build a sponge-like material called "carton" in these areas. The carton material may retain moisture for long periods of time, and the colony can survive as long as some source of moisture remains. Even after a treatment, for example, an infestation can persist for some time by surviving on moisture remaining in cartons.

### Formosan Termite Mug Shot

Formosan termites differ from other Eastern subterranean termites in several ways.

The easiest way to tell them apart is by the characteristic oval or pear-shaped head of the Formosan termite soldier.

Eastern subterranean termite soldiers have long, rectangular heads.



Formosan  
Subterranean  
Termite

Eastern  
Subterranean  
Termite

### **Are Formosans “Super-Termite?”**

Formosan termites are voracious and aggressive, indeed. However, you won't find any wearing tiny red and blue capes with a giant golden “S” on the front. Like other termites, Formosan subterranean termites feed on cellulose. Cellulose is the major component in wood and paper products. In addition to feeding on the wood in our homes and other structures, Formosan subterranean termites have also been known to attack (but not eat) non-cellulose material such as thin sheets of soft metal (lead or copper), asphalt, plaster, mortar, creosote, rubber, and plastic in search of food and moisture. However, their highly-publicized ability to chew through concrete in a single bound is a myth. They don't chew through concrete. Formosan subterranean termites are cunning, though. They find small cracks in concrete and use those as foraging routes.

### **What if I Suspect a Formosan Invasion?**

As in the case of any other species of termite invasion, the first thing to do is not to panic. Call a licensed pest control operator. He or she will be able to identify positively whether or not you have Formosans in your house. And **IF** you have a Formosan termite infestation in your house, there is still plenty of time. Take your time, and carefully select a licensed PCO. To learn whether a company is licensed or has a history of violations, contact DPR at **864.646.2150**.

### **How are Formosan Termites Controlled?**

Standard ground treatment methods at the same concentration levels used for other termite species are effective against Formosan subterranean termites, although particular care must be taken to ensure that all secondary colonies and cartons are located and treated. So far, there is no such thing as a termiticide-proof termite.

All sources of moisture must also be eliminated, and all carton material must be removed or treated with an approved insecticide. In cases where colonies may be hidden or inaccessible areas are present, fumigation may be necessary to control termites in above-ground areas. Fumigation does not provide any residual control, and it should not be performed except in conjunction with (and after) a thorough ground treatment.

If a bait system is preferred, it is imperative that all bait stations are meticulously monitored by licensed professionals. It is seldom possible for homeowners to inspect and self-treat their own house for termites without the proper training, equipment, and knowledge of termite behavior and habits. Remember: it is against the law to use certain types of pesticides without being properly trained and licensed.

As part of Regulatory and Public Service Programs at Clemson University, the Department of Pesticide Regulation has been serving the State of South Carolina for over a century. We license pesticide dealers, private and commercial applicators, and pest-control businesses. We register pesticide products for use in the State and perform quality assurance analyses of pesticide formulations. DPR protects farm workers from pesticides by administering the Federal Worker Protection Standard in South Carolina.

The Department of Pesticide Regulation administers the State Groundwater Protection Plan, the Pesticide Container Recycling Program, and the Integrated Pest Management in Schools Initiative. The Federal regulations that protect endangered species from pesticides have also been assigned to the DPR.

We are the enforcement and investigative authority in the State for pesticide use, alleged pesticide misuse, substandard termite treatments, and the Wood Infestation Report required in most real estate transactions.