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earth-wise guide to

Indoor Pests

Subterranean

Termites

description/habits

Native Subterranean Swarmers (adult reproductive termites) are dark-brown to black; 1/4 to 3/8" long; shed wings after emerging from underground tunnels; often confused with ants but termites do not have the "pinched" waist and their wings are of equal length and twice the length of their bodies. Ants have a pinched waist and longer front wings than hind wings. The antennae of termites are straight, while the antennae of ants are elbowed; Subterranean termite swarmers can be found year-round but typical swarms occur between February and March in Austin during the day.

Formosan subterranean Termites: Can rarely occur in the Austin area; Swarmers are brown to gold in color. This species swarms later in the year, typically in May. Swarming occurs in the evening and early night, and swarmers are attracted to lights.

nutrition/needs:

Feed on wood and other materials containing cellulose such as paper, cotton, burlap and other plant products; need moisture, such as that found in soil or near leaky plumbing or near air conditioning condensers, to survive

Worker and soldier termites Mike Merchant

Problem

Though termites are beneficial in nature because they break down cellulose into usable nutrients, they cause billions of dollars in damage to homes nationwide, feeding on the wood in our homes

Signs of Infestation

- Swarmers (including dead termites in windows)
- Mud tubes or shelter tubes extending from the ground to the structure
- Damaged wood and the presence of small, pale worker termites in the wood

Least Toxic Solutions

Prevention

- If you are building a new home or repairing an existing home,
  - Cover crawl space soils with 6 mil polyethylene water barrier under a pier and beam home
  - Remove form stakes, wood scraps or stumps from underneath and around the foundation prior to pouring the concrete foundation
  - Consider using a non-chemical (stainless steel or polyethylene) barrier to prevent termites from entering homes – they can provide excellent termite protection
- Make sure soil slopes away from the house in all directions to provide adequate drainage
- Seal and caulk all foundation openings, such as those for plumbing and service utilities
- Keep soil and debris, such as stacked wood, away from the foundation of your home
- Eliminate all wood-to-soil contact – place fence posts, stair casings, trellises, etc. on masonry blocks or use with "exterior-grade" pressure-treated wood to prevent the lumber chemicals from leaching

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Subterranean Termites (continued)

Detection

- Look for termites on windowsills or near indoor lighting
- Check the foundation of the house, garage and other structures for mud tubes; do this on a regular timetable, such as quarterly
- Check roof eaves and gutters for leakage and wood rot

Least Toxic Treatments

- Spray or immerse structural wood with a borate solution prior to, or during, construction, but realize that this provides only partial protection; borates must also have a sealer coat to prevent leaching
- Avoid using beneficial nematodes -- they have not proven effective in treating termites in structures and cannot be recommended

Risk of exposure to trace amounts of termiticide is less than the exposure to spray treatments for fleas or cockroaches because [it is] the pesticide is directed to the soil below the house, but children and pregnant women should leave the home during application and stay away until the home has been aired out for 1-2 hours

If You Must Use a Termiticide…

- When using a professional, compare warranties or service agreements; you should be offered the chance to extend your warranty beyond the typical one year guarantee; annual warranties should not exceed 20% of the original treatment cost
- Choose a company based on its service, reputation and warranty, rather than just which termiticide it uses
- Ask your professional about non-repellent termiticides (fipronil, imidacloprid, chlorfenpyr) – they have proven to be very effective on subterranean termites and they also appear to work better in heavy clay, alkaline soils

References:

Insects in the City: Commonly Asked Question about Subterranean Termite control, http://citybugs.tamu.edu/FastSheets/Ent-1006.html

Watershed Protection
Development Review
974-2550

AgriLIFE EXTENSION
Texas A&M System
854-9600

04/08