

Termites - Typical First Strikes by Housekeeping and Maintenance

Note: In all of the termite inspections the Author has made in his career, where he found evidence of subterranean termite infestations, 99% were located behind the front porch or a step leading outside. When a home is being built, most builders simply sweep the wood debris out one of these door openings and then cover the debris with concrete, making a perfect termite terrarium where it is dark, damp and never freezes. Before they put in the porch or step or slab, remove all of this debris or, better yet, treat it all with sodium borate or borax or incorporate food-grade DE in these areas.

1. Vacuum up all swarmers and/or place containers of water near the swarm area. Check all wood with a moisture meter. Push lollipops into the ground (stick first) wherever you find termite activity. The lollipops will attract ants that will attack and eat the termites.
2. Inject and soak all the damp and/or infested and/or exposed (unfinished) wood with ½ c. Safe Solutions Enzyme Cleaner with Peppermint and 1½ c. borax in 1 gal. hot water at least 3 times to the point of runoff.
3. Remove all earth/wood contacts, roots and foam board insulation. Termites hate sand.
4. Install and properly maintain dehumidifiers, vents, fans, eaves and downspouts.
5. Prebait with rolled cardboard moistened with an ice cube (with no chlorine) or some cold seltzer water that still has its “fizz” and ½% or less borax or sodium borate, or moistened with colloidal copper and Flagyl®.
6. Not Nice to Termites® (but nice to people, homes and pets) bait monitoring stations and termite predator mite stations may be obtained from Get Set, Inc. The monitoring stations should be placed near water sources like downspouts, leaking outdoor faucets and/or air conditioners or swamp coolers or under rotting logs, planters, shingles, rocks and/or stones. Add as many as you need until you get hits. Replace the hit ones with active stations (and transfer the termites). **Don't disturb active stations once feeding begins. Remember, termites forage in the top 4" of soil in the spring. In the summer they go deeper (especially in the South) and may avoid your traps!**
7. Termite workers have been given various cellulose products to eat in laboratory and field situations. We have observed they prefer to eat cardboard with brown rot and CO₂, white paper towels, processed cellulose, plywood, pine, citrus wood, sawdust, wood chips, untreated foam, etc. One of the least preferred soft wood for native species is douglas fir - they will eat oak first.
8. Termite baits can be made to attract termites by applying CO₂ and/or brown rot to them. A simple way to get the (brown rot) attractant is to put wet paper towels over a termite colony and collect the fecal droppings; then dilute in acetone and spray the mix on cardboard. Be sure to use the proper protection for the acetone. Flagyl 250 ml can be diluted and added to the bait station or sprayed directly on infested wood or cardboard (or dust a live mud tube with the powder). 1% sodium borate or borax or ¼% urea, ¼% methylene blue or ½% red food dye can be added to the baits.
9. Treat crawlspace spaces and cracks with diluted urea, borax or salt. Termites will avoid eugenol, myrrh resins, clove oil, cinnamon oil, DE, urea, or salt treated soil, wood, cardboard, etc. You can also use Safe Solutions, Inc. food-grade diatomaceous earth as a barrier through which termites will not dig or inject it into galleries.
10. Before the vapor barrier is put down, apply a generous amount of food grade diatomaceous earth (DE) to the bare soil, especially around the footing and expansion cracks. Once the foundation is poured and set, apply more food grade DE along the outside perimeter, especially under the porches and steps.
11. If you still have visible termite activity, read the entire chapter.
12. Contact a graduate of the Institute of Pest Management, Inc.
13. It is interesting that our “government” tends to “register” poisons that do not work and to attack and/or discredit GRAS or non-toxic products that actually control pests.

Alternative Indian Termite Controls

1. Mixtures of lime and sulphur forked into the soil discourages termite attack.
2. Wood ash heaped around the base of the trunk has been recorded to prevent termite infestation of coffee bushes and date palms.
3. Cattle urine diluted at a rate of 1:6 with water can be poured down termite holes. This treatment should be repeated for a few days since the termites tried to open up.

4. Farmers mix red coloured clay with water to form a sticky paste. This paste is coated on the trunk and large twigs at the onset of monsoon when termite damage is severe. Fresh and young grafts are coated with cattle dung to protect them from termites. Combined use of the two methods effectively prevents infestations in small orchards.

Source : Natural Crop Protection in the Tropics

Boron - One of the most important functions boron serves is to keep the world green. All plants – from fields of cotton to groves of Douglas fir – depend on trace amounts of boron to thrive. Plants get the boron they need from the land and water supply; it's widely distributed throughout the environment as minerals called borates. People get the boron they need from plants; it's part of a healthy diet.

Although boron is essential for plants, and nutritionally important for humans – it also works to control insects and fungi. Boron in the form of sodium borate will also kill bacteria and plants at higher levels.

In treated wood, borates are:

- colorless and odorless so they maintain the physical appearance of wood products,
- non-volatile and robust so they don't evaporate or degrade during service,
- non-corrosive so many of the nails and metal fasteners used with untreated wood can also be used with borate treated wood,
- and will repel or kill cockroaches and other pests.

Borates work by interfering with the basic metabolic processes in wood destroying organisms, similar to their mode of action in controlling other insects such as ants and silverfish. Because the mode of action is fundamental, borate efficacy is broad spectrum, and target organisms do not develop resistance as they can with conventional pesticides. Boron's functionality is based on its ability to form complexes with various sugar alcohol compounds such as vitamins and co-enzymes. Reaction of borates with co-enzymes containing these molecules has been found to diminish the ability of organisms to process food and energy, causing the target organisms to "starve" and eventually die. **The best way to expose target organisms to borates is to treat their food source or immediate environment.**

When timber is exposed to moisture, decay fungi can infest and destroy wood. Using borate preservatives puts the wood destroying organism in constant and direct contact with the borates. As with insects, the borates in the treated wood interfere with the metabolic processes of decay fungi.

The levels used in pest applications pose no risk to people or pets. The fact is, people consume between one to three milligrams of borates as part of a healthy plant-based diet. Our bodies handle borates as they do any nutrient; by using what they need and excreting the rest. Borates do not bioaccumulate in humans or other mammals, and they are not absorbed through intact skin. Even among workers with higher than normal exposure to borates, studies show no negative health impacts over time. Trees need boron to grow.,

To read more on the ability of borate treated wood to provide control of non-wood destroying pests, see: <http://www.borax.com/wood/pdfs/SustainableWood.pdf> and/or <http://www.wolmanizedwood.com/hd/borate.pdf>

***Safe Solutions products may be purchased online at:**

<http://www.safesolutionsinc.com>

or by telephone at:

1-888-443-8738.

