AgriLIFE EXTENSION
Texas A&M System

April 2008

TEXAS IPM

Urban Pest News

Termite Inspections

Termite inspections are important to determine if there is an active infestation on a structure. You should look for termite reproductives, and/or wings, mud tubes and wood damage.

Where to look outside*:

- foundation of stucture
- garage or any out buildings
- crawl space (if not slab construction)
- sills & floor joists
- planter boxes, fences, trellises
- porches, patios, sidewalks that create hard to see areas
- windows & doors
- where pipes & wires enter the structure
- around the air conditioner unit
- behind shrubs & foliage
- facia boards, eaves & gutters
- electrical or fuse boxes attached to structure
- shingles of roof (look for weak or sagging areas)
- wood siding

Where to look inside*:

- door & window facings
- baseboards, hardwood floors
- look for blistering of paint, cracks or stains from water damage on walls & ceilings
- plumbing areas; if no bath trap, cut an access with a removable hatch to periodically inspect
- attic
- light fixtures, spider webs & window sills (for wings & swarmers)

*Inspection areas for subterraneans & drywoods.

Earwigs

Earwigs, while mostly a nuisance, often scare homeowners with the enlarged pincers on their abdomen. Their name comes from a wive's tale that they would enter the ear while a person was sleeping and tunnel into the brain.

Earwigs are somewhat flattened, brown to black in color with large forcep-like pincers coming off the tip of the abdomen. Adults have a pair of shortened, leathery forewings that cover the membranous hindwings.

Photo by Drees.

Earwigs feed on other insects that are alive or dead. They will also feed on decaying organic matter, lichen, moss, fungi or greasy foods.

When earwigs are found indoors, they are moving in from outside as an accidental invader. The insects can be removed with a vacuum or broom. If large numbers are found indoors, you may need to treat with a residual insecticide outdoors. It may also help your management program to encourage your customer to:

- replace old weather stripping around doors & windows
- seal pipe penetrations and cracks & crevices with caulk or expanding foam
- keep grass & foliage trimmed around structure
- eliminate damp areas in crawl spaces or around the foundation
- reduce lighting around doors & windows

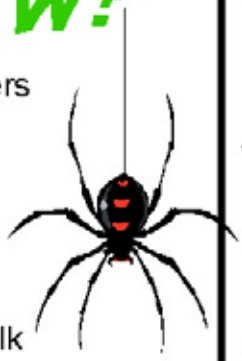
RESISTANCE VS. AVERSION

There is much confusion about what might be going on with cockroach baits and why they don't seem to work as well as they once did. First of all, baits cannot be your only tactic to cockroach management. Diversify and use other strategies such as vacuuming, residual sprays, dusts, traps or exclusion techniques.

It is possible for resistance or aversion, or both to occur with a bait. Resistance is when the active ingredient no longer works to kill the cockroaches, so the roaches eat the bait, but they don't die. Aversion is when there is something wrong with the carrier (food item) and the cockroaches will not eat the bait.

How can you avoid resistance and aversion? Do not use the same bait over and over at an account. When you change baits, make sure to use a bait in a different chemical class (so that you are using a different active ingredient). Try to create an IPM plan for managing the cockroaches, including sanitation and exclusion.

DID YOU KNOW?



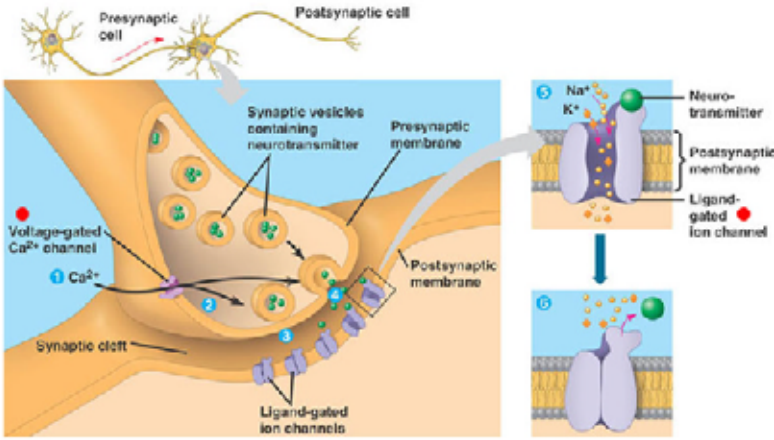
- there are over 35,000 species of spiders
- hairs on a spider's body can alert it to food or predators being nearby, taste food items or feel movement of air
- spiders, especially young ones, will drift on air currents using strands of silk to find new places to live; it's called ballooning
- spitting spiders have venom and glue in their poison glands; they spit the sticky glue into two zig-zag strands to capture the prey and then they bite the prey before eating

Sign up to receive my new blog at:

http://urban-ipm.blogspot.com/

SPOTLIGHT ON MOAS FIPRONIL

Fipronil is in the insecticide class phenylpyrazoles. It is a broad-spectrum insecticide that acts as a contact and stomach poison. Fipronil binds to the GABA- gated chloride channel that normally blocks reactions of nerves and prevents excessive stimulation of the nervous system. Fipronil blocks the chloride channel causing the nerve to become over stimulated, leading to death.



Above is a diagram of a nerve synapse (U. of Miami). Normally a nerve impulse will travel through the neuron, but it has to "jump" the cleft between neurons. To do this, a neurotransmitter is released into the cleft causing receptors to open on the next neuron. The neurotransmitter breaks down in the cleft essentially "turning off" the nerve impulse once the impulse has traveled to the next neuron. When fipronil is used, the receptor on the second neuron is blocked open causing the neuron to be constantly stimulated because it cannot close. This leads to death of the insect.

For more information contact:

Wizzie Brown

512.854.9600

ebrown@ag.tamu.edu