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HOW ORGANIC PRODUCTS WORK

- **Diatomaceous Earth:**
 - Absorbs the waxy layer on the surface of the insects' skin.
- **Boric Acid:**
 - Disrupts the action of bacteria in the insects' gut, preventing correct digestion which leads to starvation.
- **BT:**
 - A biological insecticide that takes a few days before the poison takes effect and caterpillars stop feeding.
- **Iron Phosphate Snail Bites:**
 - Slugs and snails eat it then go away to die. The iron phosphate destroys their gut so they discontinue feeding. This can take up to 5 days.
- **Sulfur:**
 - Disrupts the metabolic process of fungi and other target pests that absorb it, and try to use it in place of oxygen.*
- **Neem Oil:**
 - Has a complex structure. Its principle active ingredient is Azadirachtin, but it also has 25 other active compounds. These actives serve as repellents, feeding inhibitors, egg-laying deterrents, growth-retardants, sterilents, and direct toxins.**
- **Sulfuramide, Fipronil, Hydramethalnon:**
 - Used in ant and roach baits are slow-acting stomach poisons, allowing the insects to carry bait back to the nest. This may take 7-10 days to take effect.

POINTS TO REMEMBER ABOUT ORGANICS

- Not the instant gratification that comes with traditional pesticide use; most less-toxics take more time.
- Timing of application is more important because many less toxic solutions have shorter residuals.
- Not as broad spectrum so the beneficial and non-target pests are at less risk.
- To be successful you need to understand your target pest and when the application is most effective to achieve optimum results.
- Insecticidal soaps may burn flowers and foliage. They do not work with hard water because the calcium, magnesium and iron precipitate the fatty acids and render the soap useless against insects.
- When using beneficial insects, it takes time for the beneficial to control the target pest. Remember to refrain from spraying pesticides so you do not damage beneficial populations.
- If you apply pesticides, remember to spot treat. It is not necessary to spray the whole plant.

*Common Sense Pest Control. William Olkowski, Sheila Daar, Helga Olkowski. Publisher: Taunton Press 1991. Page 109

**Common Sense Pest Control. William Olkowski, Sheila Daar, Helga Olkowski. Publisher: Taunton Press 1991. Page 123