



## Goals/Learning Objectives

**Goal:** Develop an understanding of the types of problems insects and related arthropods can pose in the home environment and determine if and how to control them in these situations.

### Learning Objectives

- List at least four reasons why insects and related arthropods are pests in houses and give examples of each.
- List five main groups of urban insect pests and arthropods and give examples of each.
- Describe the habits, signs of damage, and types of prevention/control for each of the groups of urban insects and arthropods named above.
- Recognize urban insect pests and signs of their damage given an image or description.
- Distinguish between a termite and an ant.

### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Insect Pests in the Home

Insects in our kitchen, bathrooms, beds, yard, our walls, and on our bodies.

### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Take Home Messages

- Almost everyone will have insects in their home at some point in their lifetime.
- Both chemical and sensible nonchemical means can be used to reduce these problems.
- Is it necessary to kill every living insect in and around the house?

### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Urban Pests

- Pests that cause allergies, damage things in the urban environment, may spread disease, and because we don't like them.
- [Click here](#) for the Pet Arthropod Page.

### Slide Index

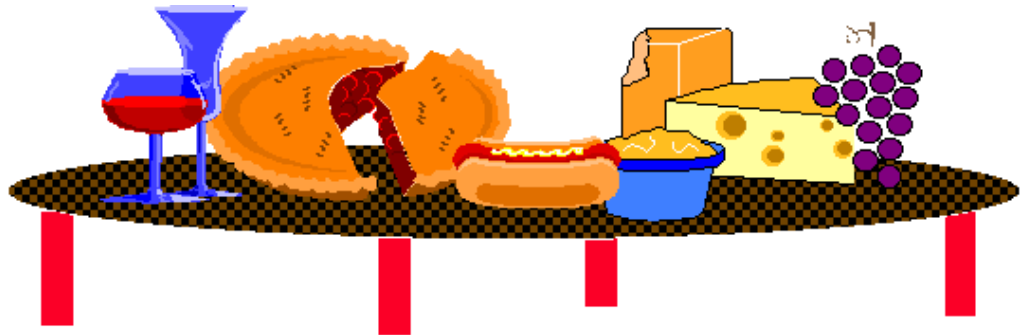
- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Why are Pests in Houses?

- We provide them with food & water.
  - Bits of food on the floor from our eating activities.
  - Ants
  - Flies feed on food
  - Cockroaches
  - Beetles and moths that eat stored products, such as flour.



### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Why are Pests in Houses?

- To feed on shed skin in the carpet.
  - Flea larvae
  - House dust mites- common allergy
  - Major allergy problem.
  - need > 50% humidity to grow.
  - Feces, cast skins, decaying carcasses cause allergic response.
  - Treatment: pick up stuffed toys, vacuum furniture and carpet.
  - If necessary, replace carpet with wood or vinyl flooring.
- You can visit the following URL for more info on dust mite allergy: <http://www.healthline.com/articles/ac920005.htm>

### Slide Index

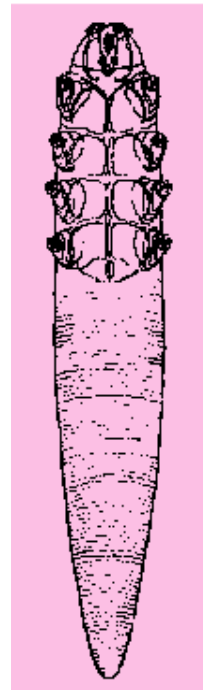
- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Why are Pests in Houses?

- To feed on humans.
  - bedbugs
  - lice
  - mites
  - Follicle mites live mainly in the region of the eyelids, nose, and other facial areas. Found in 10-20% of youngsters and nearly 100% in the aged.
  - Although usually benign, can cause a form of acne.



### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)

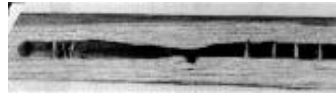


## Why are Pests in Houses?

- Non-food items to us may be food to insects (ex. clothes or the house itself).
- Clothes moths: Actually feed on the natural fibers in clothes and carpets (ex. wool).
- Termites: Gets nutrition from wood. Actually eats and digests it.
- Carpenter ants: looking to build nests in wood from which to forage from.
- Carpenter bees: looking to build nest in wood--window sills, siding, and exposed rafters.

### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)



Pfadt (1985)





## Why are Pests in Houses?

- We provide them with shelter.
  - Spiders, which eat insects and mites in the house.
  - Flies and weevils in the fall.
  - Ladybird beetles overwinter in some houses.



### Slide Index

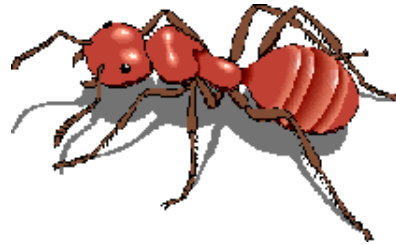
- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Ants

- Order Hymenoptera, ants are related to wasps & bees.
- Ants are social insects that live in a colony.
- Ant colony typically consists of a queen, males, and sterile worker.
- It is the wingless workers that we see in our houses.
- Most ants nest in the ground, so ants in a house are usually entering from outside.
- Nests may be in wall voids in the fall.



### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Can Ants sting?

- More primitive species can sting.
- More advanced forms lost sting, replaced with an acid-squirting system.
  - Ex: Red imported fire ant
  - Formic acid
- Many ants also bite.



Velvet ant

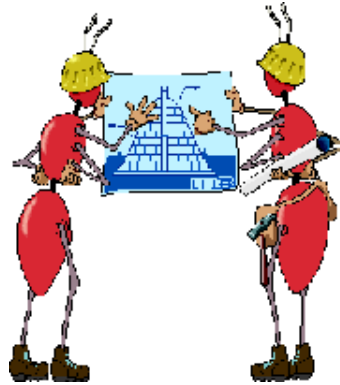
### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)



## Control of Ants

- First, find and destroy nest.
  - This can be done by following the trail of the foraging nests.
  - Argentine and fire ant nests are outside, while pharaoh and carpenter ants are inside.
  - In midsummer, ants will forage a lot in the early morning and evening hours, when it is cooler.
  - In cooler weather, ants may forage during the day when it is warmer.
  - Generally speaking, if it is comfortable for you outside, it is comfortable for ants.



### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)



## Control of Ants

- Nest may be destroyed by pouring an insecticide slowly into the mound.
  - It is important for the solution to soak down to the queen, who may be more than 1 foot in the ground.
- Nest may not be destroyed by digging it up, unless you kill the queen. The mound will relocate.
- Insecticides to use for ants:
  - Diazinon, chlorpyrifos, propoxur, bendiocarb, carbaryl. These are not brand names-read the label.
- Bait formulations also work, such as hydramethylnon (Combat). For fire ants, Amdro.



### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Ants as predators

- Ants are also beneficial insects in that they will destroy many insect pests in the lawn, so you may not want to kill every mound.
- Ants are both good and bad in home gardens
  - They will kill and eat small caterpillars, but they will tend aphids and mealybugs.



### Slide Index

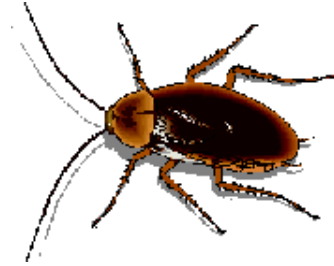
- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Cockroaches

- Sooner or later, almost everyone will have cockroaches in the home, especially if you live in the southern US.
- Cockroaches produce an egg capsule called an ootheca, which is brown, looks segmented, and contains about 10 to 40 eggs.
- Some cockroaches carry these around, and some do not.
- Females can produce up to 7 oothecae, so high reproductive potential.
- [Click here](#) for an interesting site about Roaches from Orkin.com



### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Cockroaches

- Habits:
  - Cockroaches are nocturnal, so they avoid light and well-lit places.
  - They are most often found on vertical surfaces that are dark and moist, such as under a sink, behind a refrigerator, or in a wall void near a toilet.
  - In heavily infested rooms, that may be in the corners of a dark room, especially in the ceiling corners.
    - How do we know they are around?
      - cast skins
      - frass
      - seeing them

### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)







## Control of Cockroaches

- Prevent cockroaches from entering the home.
- They came from somewhere else!
- Check window screens, wood piles, pet food areas, garbage cans, and water meter.
- Don't forget attic, since cockroaches will climb up the side of a house at night.
- [Click here](#) for an interesting site on the Giant Madagascan Hissing Cockroach.



### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Control of Cockroaches

- Remove food sources
- Insure that all food containers are 'bug-proof', vacuuming carpet more regularly, cleaning kitchen sink of debris every night, etc.
- Eliminate harborage (hiding/resting places) by sealing off entrance/exits cockroaches use. So, check all screens, foundation vents, voids behind kitchen and bathroom cabinets, etc.

### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Chemicals for Cockroach Control

### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)

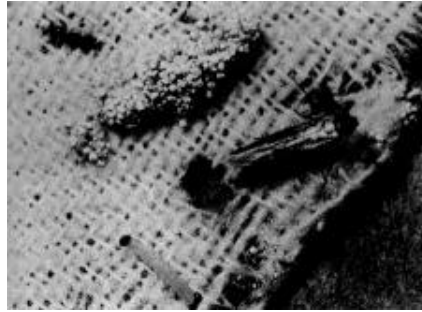
- Use insecticide or insecticidal baits.
- Boric acid is excellent.
- Several chemical treatments are repellents and kill few cockroaches, so be careful about this .
- Use insecticides where cockroaches visit, not everywhere.
  - behind refrigerator
  - in bathroom behind, underneath sink
  - dark, vertical places
  - in kitchen cabinets





## Fabric Pests

- Clothes moths, carpet beetles
- Fabric damage is often the 1st thing that we see.
- Moths or moth larvae can be found on or near clothes, carpet beetles often found crawling up walls.
- Larvae damage clothes, moths do not.
- Attack natural fibers, such as wool and feathers.



### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Control of Fabric Pests

- Vacuum carpet and closet floors as clean as possible for carpet beetles.
- Washing carpet with steam cleaner may help.
- Clothing can be protected with moth balls or cedar wood chips in sealed bags or boxes.
- Dry clean clothes or heat at 130°F for at least 2 hours.
- Freeze clothes

### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Grain & Spice Pests in the Home

### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)

- Could be Lepidoptera, Coleoptera, and Hymenoptera.
  - Grain beetles, weevils, meal moths, ants.
- Before humans, where did these insects find food?
- Adapted to humans since beginning of civilization.
  - Remains of grain beetles found in alabaster vases in Tutankhamen's tomb dating back to 1350 B.C.
- Most stored-product pests are able to tolerate dry, hot conditions. Usually able to obtain moisture from carbohydrates in food.
- Control:
  - Replace all dried grains in home (ie. flour, corn meal, cereals, and infested spices. Store material in seal-proof containers.



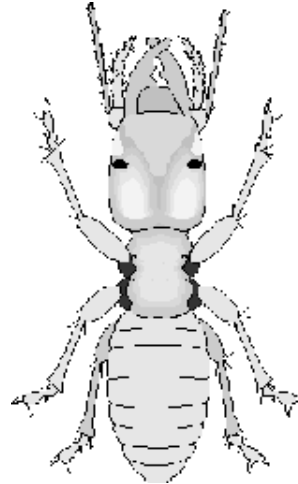


## Wood-Destroying Pests

- Includes termites, carpenter ants, powder post beetles.
- Hidden lifestyle, so the first sign is usually damage.

### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Termites

- Order Isoptera
- Termites are social insects, with winged queens.
- Termite workers are whitish, wingless, soft-bodied insects.
- Queens swarm, and can easily be found on a warm sunny spring morning, or early in the afternoon the day after a rain.
- If you find many queens and kings, be suspicious... a termite colony is nearby.



### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)

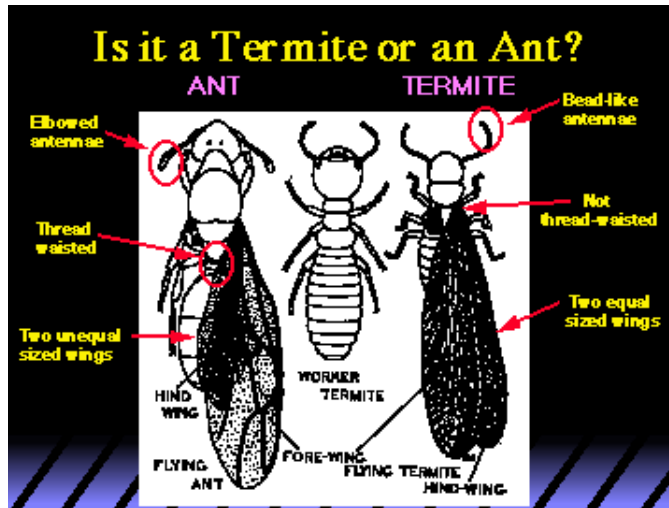






### Slide Index

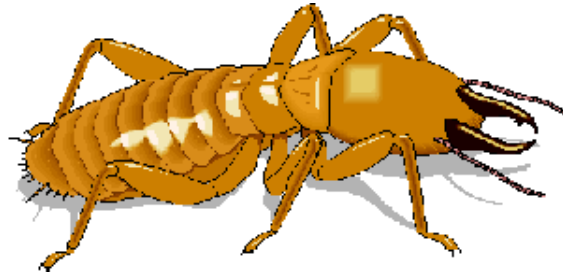
- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)


[lecture topics](#)
[real audio](#)
[next](#)
[previous](#)



## Termite Colonies

- Underground, as much as 10 feet underground.
- May be as far as 30 feet from house.
- Slow growing colony, so huge amount of damage is not done in initial infestation.



### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Termites and Housing Construction

- Extra wood material near or under the house can serve as a good start-off point for a colony.
- The insects can easily move into the structural beams of the house.
- Damage can be extremely expensive, so do not buy a house without a termite inspection. House can be eaten out from under you.



### Slide Index

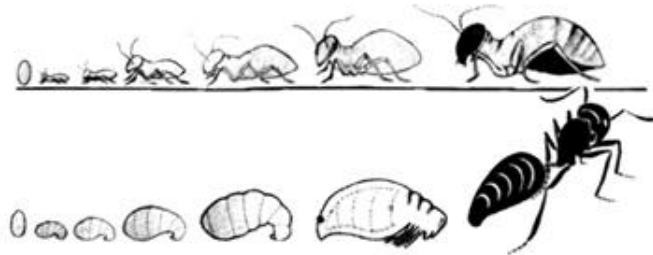
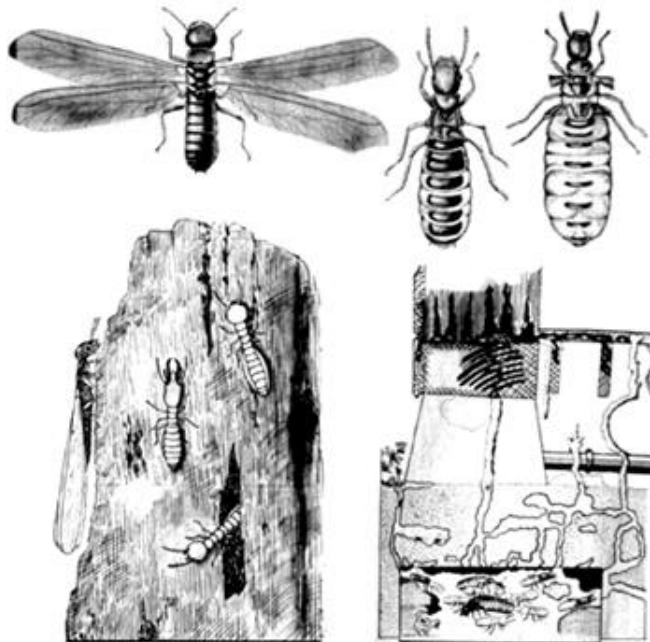
- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Signs of Termite Infestation:

- Mud tubes on walls leading into the house.
- Rotting wood, especially wood close to the ground. Front/back door, porch etc.
- Galleries in wood with frass.



- Slide Index**
- [Goals/Learning Objectives](#)
  - [Insect Pests in the Home](#)
  - [Take Home Messages](#)
  - [Urban Pests](#)
  - [Why are Pests in Houses?](#)
  - [Why are Pests in Houses? II](#)
  - [Why are Pests in Houses? III](#)
  - [Why are Pests in Houses? IV](#)
  - [Why are Pests in Houses? V](#)
  - [Ants](#)
  - [Can Ants sting?](#)
  - [Control of Ants](#)
  - [Control of Ants II](#)
  - [Ants as predators](#)
  - [Cockroaches](#)
  - [Cockroaches II](#)
  - [Control of Cockroaches](#)
  - [Control of Cockroaches II](#)
  - [Chemicals for Cockroach Control](#)
  - [Fabric Pests](#)
  - [Control of Fabric Pests](#)
  - [Grain & Spice Pests in the Home](#)
  - [Wood-Destroying Pests](#)
  - [Termites](#)
  - [Is it a Termite or an Ant?](#)
  - [Termite Colonies](#)
  - [Termites and Housing Construction](#)
  - [Signs of Termite Infestation](#)
  - [Formosan Termite: A New Problem](#)
  - [Termite Control](#)
  - [Chemical Control](#)
  - [New Termite Control Technology](#)
  - [Study Questions](#)



## Formosan Termite: A New Problem

- New termite in the southern U.S.
- Does not need contact with soil, as eastern subterranean termite does.
- Aggressive colonizer
- May infest your house from neighbor's house.

### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Termite Control

- Prevention is very important.
  - Remove wood piles from against the house, remove stumps and wooden debris.
  - Make sure gutters do not leak and cause wet spots, or if there are no gutters then eliminate wet spots.
  - Termites can easily enter small cracks in foundations and concrete floors.
  - Keep foundation vents open, to decrease moisture under house.
  - Do not allow large shrubs against house to shade wooden part of house.

### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## Chemical Control

- Put chemical barrier between termites and house.
- We want insecticide to last for many years.
  - A problem? What if house is destroyed so something else can be put there?
- Chemical control should be done by a certified pest control operator who has a solid reputation.
- Chemicals safe and effective, but are not perfect.

### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)





## New Termite Control Technology

- Baited Stakes
  - Being developed by several companies.
  - Used to determine if termites are present.
  - May eventually be used for termite control.



### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)







## Study Questions

### Slide Index

- [Goals/Learning Objectives](#)
- [Insect Pests in the Home](#)
- [Take Home Messages](#)
- [Urban Pests](#)
- [Why are Pests in Houses?](#)
- [Why are Pests in Houses? II](#)
- [Why are Pests in Houses? III](#)
- [Why are Pests in Houses? IV](#)
- [Why are Pests in Houses? V](#)
- [Ants](#)
- [Can Ants sting?](#)
- [Control of Ants](#)
- [Control of Ants II](#)
- [Ants as predators](#)
- [Cockroaches](#)
- [Cockroaches II](#)
- [Control of Cockroaches](#)
- [Control of Cockroaches II](#)
- [Chemicals for Cockroach Control](#)
- [Fabric Pests](#)
- [Control of Fabric Pests](#)
- [Grain & Spice Pests in the Home](#)
- [Wood-Destroying Pests](#)
- [Termites](#)
- [Is it a Termite or an Ant?](#)
- [Termite Colonies](#)
- [Termites and Housing Construction](#)
- [Signs of Termite Infestation](#)
- [Formosan Termite: A New Problem](#)
- [Termite Control](#)
- [Chemical Control](#)
- [New Termite Control Technology](#)
- [Study Questions](#)

### Study Questions

- What kind of environment is favorable for house dust mites and what specifically cause allergic reactions in humans?
- What arthropods in the home environment feed on humans?
- How do termites digest wood?
- Name 5 arthropods that seek shelter in houses during cold months.
- What members of an ant colony would you typically see in a house? What must you do to successfully get rid of ants in the house?
- What are the differences between more primitive and more advanced ants in terms of their ability to sting?
- Describe the sting of a red imported fire ant.
- How can one find an ant nest? Once the nest is found, what are three ways to destroy the nest? What is the importance of destroying the queen?
- What are the pros and cons of keeping ants in the home landscape?
- Why are cockroaches important urban pests?
- What is an ootheca?
- Describe some of the habits of cockroaches. What do cockroach feces look like?
- Explain how to prevent and control cockroach infestations.
- Why are some insecticides simply repellents for cockroaches?
- At what life stage do fabric pests damage fabrics? What kind of fabrics do they attack?
- List ways to control fabric pests.
- How do grain and spice pests get moisture from food sources? How do you prevent grain and spice pests?
- Sketch an ant and termite and label the basic parts, showing the differences between the two OR describe differences in their external anatomy. Which Order does each belong to?
- What are some signs of termite infestations and damage?
- Name some ways termites can establish new colonies in or around a house.
- What is the difference between a Formosan termite and an eastern subterranean termite?
- Name some ways to help prevent termite infestations in and around a house and explain what you should when chemicals are involved.

