

Gardening Basics

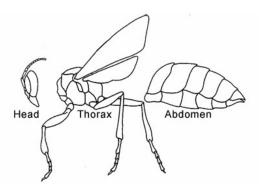
How to Identify Bugs

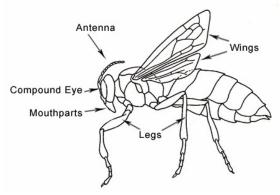
This guide can help you with identifying adult or mature 'bugs', but it is pretty difficult to identify immature ones. Let's briefly review the **basic identifying characteristics** of what we commonly call 'bugs' - **insects, spiders, centipedes, and millipedes** - all of which are common around our homes and gardens.

Insects

Class: Insecta

- Have 3 distinct body regions: head, thorax (chest), and abdomen
- Have 6 jointed legs that come from the thorax
- Many have wings but not all
- Most have two compound eyes
- Most have antennae or feelers



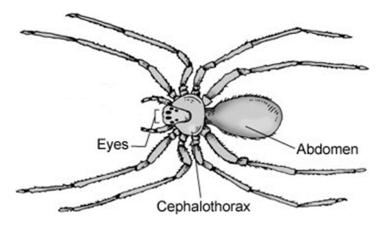


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Spiders

Class: Arachnida

- Have 2 regions of the body: the front called the cephalothorax, and abdomen
- Have four pairs of walking legs on each side of the cephalothorax in adult arachnids
- Most have eight eyes
- Have no wings or antennae



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Centipedes

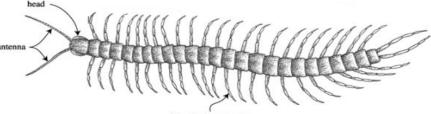
Class: Chilopoda

- Have a distinct head
- The body is a series of segments, relatively flat in shape in cross-section
- Each segment generally has 1 pair of walking legs
- Have antennae and a pair of poison fangs
- Generally found in out of the way places such as under logs or rocks

Millipedes

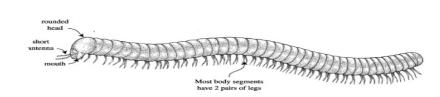
Class: Diplopoda

- Have a distinct head
- The body is a series of segments, relatively *round* in shape in cross-section
- Each segment generally has 2 pairs of walking legs
- Have antennae but *no fangs*



Most body segments have 1 pair of legs

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Keeping these basic characteristics in mind,

here is a **checklist of information the DCMGA Help Desk needs**, to assist you in identifying common garden pests. **Email us** the information and photos to: **master.gardener@dentoncounty.gov**

Photos that show

- Number of body sections and shape
- Size relative to a common object like a coin if possible
- Top and underside if possible
- How many legs, antennae, or feelers if present?
- Wings if present and color
- Mouthparts/shape, e.g., jaw-like chewing mouth or sucking tube or sword-like structure
- Pictures of any damage done by this pest, e.g. plant leaves, branches, trunk, flowers, clothing Please include when the pictures were taken date, time of day and the weather conditions
- How many of these pests did you see?
- Location of the pests:
 - City or rural location
 - o In a garden, vegetable or ornamental plants? wooded or marshy area? Standing water nearby?
 - Was it on a plant what type and where: on leaves, branches, trunk, flowers, the soil under the plant?
 - o If not on a plant, was it outside or inside your home, where exactly?

Other helpful information:

- Has the soil nearby been disturbed lately, e.g., digging, construction, severe rain?
- Was a possible new habitat brought in such as mulch, topsoil, new plants (what type), or packaging from other products?
- What other evidence of infestation did you find, e.g., castings (insect poop), webbing, mounds, honeydew (sticky, sugar-laden fluid), black sooty mold, foamy spittle, or frass (sawdust-like insect waste)? A picture of this evidence is helpful.
- Why are you interested in identifying the pest damage to plants or property, biting or stinging, control recommendations, etc.

Other Identification Resources Websites

Texas A&M AgriLife Extension "Ask An Entomologist" offers an online form to identify an insect or pest at this link <u>https://askanentomologist.tamu.edu/insect-id-form/</u>. Be prepared to have the answers to all the questions above as well as pictures to upload. This service may require a fee.

Insect Identification for the casual observer

http://texashighplainsinsects.net/ Common Texas Insects ID, Texas A&M AgriLife Extension, Entomology

iNaturalist insect (and other organisms) identification via crowdsourcing with experts

BugGuide.Net Iowa State University, Department of Entomology

Emerald Ash Borer lookalikes University of Nebraska-Lincoln

Asian Giant Hornets Look-alikes 101 USDA, hosted by Texas A&M University Entomology

Social Media

Facebook – please read and abide by their rules before posting to groups Entomology Group

Insect Identification Group

Southern Forest and Tree Health Diagnostics Group

Twitter

@RecluseOrNot (Recluse or not?)

Reddit

https://www.reddit.com/r/whatsthisbug/

Podcast

Unwanted Guests Urban Indoor Insect Pest Management, Texas A&M AgriLife Extension

Sources and Resources

Insects in the City Texas A&M AgriLife Extension "Introduction to arthropods." amentsoc.org, Amateur Entomologists' Society, 1 Jan. 2020, http://www.amentsoc.org/insects/what-bug-is-this/arthropod.

"Insect Identification: Experts and Guides to ID That Bug You Found." entomologytoday.org, Entomological Society of America, 23 July 2018, <u>entomologytoday.org/2018/07/03/insect-identification-experts-guides-bug-spider-arachnid-entomology/</u>

Antman's Hill Facebook group – see the Files in the menu bar https://www.facebook.com/groups/antmans.hill/