

Bug of the Month

by Jim Revell

Millipedes / Centipedes

MILLIPEDES	
Kingdom:	Animalia (animals)
Phylum:	Arthropoda (arthropods)
Subphylum:	Myriapoda (myriapods)
Class:	Diplopoda (millipedes)

CENTIPEDES	
Kingdom:	Animalia (animals)
Phylum:	Arthropoda (arthropods)
Subphylum:	Myriapoda (myriapods)
Class:	Chilopoda (centipedes)

Not all “bugs” are insects.

I was composting some of my garden beds and while emptying one of my compost bins, I came across several dark brown/black Millipedes and reddish-brown Centipedes. The Centipedes were too quick to pick up, so I had to trap one to see it “up close and personal.” They do bite, so gloves are highly recommended when handling them. After taking time to observe it, I let the specimen go.

Millipedes are slower, so I was able to pick one up for closer observation. Here again, gloves are highly recommended, in this case, not because they bite (they lack the structure to bite, pinch or sting), but because they excrete an ill-smelling substance that will leave a stain and odor on the skin. After observing this wonderful little creature that is part of the soil food web, I let it go as well.

In studying both specimens, I found they are very different in many ways but, also, have a lot in common. The one thing is -- I wouldn't want to have to buy shoes for either, especially the Millipede! The subphylum “Myriapoda” means “many-footed,” and some members are known to have 400 pairs of legs! There are an estimated 8,000 species of Centipedes globally (with less than 3,000 described) and more than 80,000 species of Millipedes worldwide (with over 10,000 described).

Here is the “down and low” on Millipedes:

- 1) Segmented bodies
- 2) Also known as “1000-legged worms”
- 3) Rounded body and head, short antennae
- 4) 1-2 inches or more in length at maturity
- 5) Light brown to black in color
- 6) Usually sports two pair of legs per segment
- 7) Lays 20-300 eggs in the soil, depending on the species
- 8) Young Millipedes have only the first three pairs of legs and no more than seven segments
- 9) Each molt adds segments and legs
- 10) Usually takes 2-5 years to reach maturity depending on the species
- 11) As scavengers, they feed primarily on decaying vegetation and leaf litter
- 12) Adults overwinter in the soil
- 13) Some species attack roots of living plants
- 14) Do not have waterproof cuticle; must have humid habitat



<http://www.organicgardeninfo.com/millipedes.html>

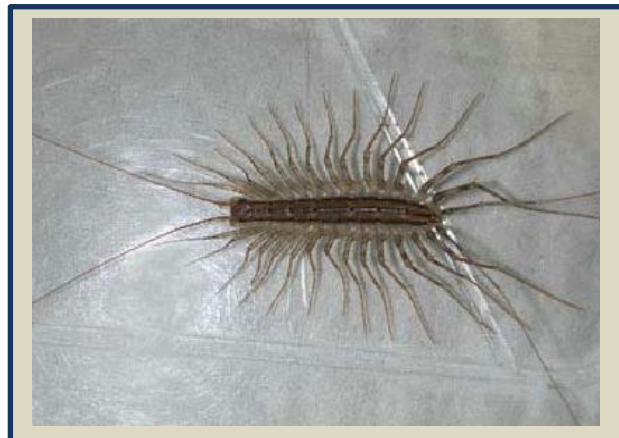
- 15) They have glands that produce defensive chemicals; some species' spray contains HCL (Hydrochloric Acid) which can cause injury if mishandled and may leave a lingering odor on the skin
- 16) Considered a GOOD GUY.

Here is comparative "down and low" on Centipedes:

- 1) Segmented bodies
- 2) Also known as "100-legged worms"
- 3) Flattened body, distinct head with pair of antennae
- 4) 1-2 inches or more in length at maturity
- 5) Vary in color from light yellow to dark brown to reddish-brown
- 6) One pair of legs per segment
- 7) Eggs are laid in soil during Spring and Summer
- 8) Slow development may include 10 instars / molts
- 9) Each molt adds segments with corresponding pair of legs
- 10) Some species are known to live 5-6 years
- 11) They are predatory and feed at night, hunting and capturing small creatures such as insects
- 12) Adults overwinter in soil
- 13) They capture prey in powerful jaws (formed from modified first pair of appendages), injecting venom
- 14) Do not have waterproof cuticle; must have humid habitat
- 15) Venom glands will bite if mishandled resulting in moderate reaction similar to a bee sting
- 16) Considered a GOOD GUY.



Centipede:
<http://healthyhomegardening.com/Creature.php?pid=67>



House Centipede:
<http://www2.ca.uky.edu/entomology/entfacts/ef647.asp>

Other references include:

- The University of Georgia Cooperative Extension: "Millipedes & Centipedes" revised by Elmer W. Gray, Extensive Entomologist; original document produced by Dr. Beverly Sparks
- <http://bugguide.net/node/view/37/?printable=1>
- <http://bugguide.net/node/view/20?printable=1>
- Mini Encyclopedia *Bugs* by Miles Kelly, Kelly Publishing Ltd 2009, edition printed 05/2014