

Class Arachnida, Order Araneae: Spiders



Garden orb weaver (*Argiope coquereli*).
Photo: Whitney Cranshaw, bugwood.org



Daring jumping spider (*Phidippus audax*).
Photo: Joseph Berger, Bugwood.org

Order Araneae

The class Arachnida includes spiders, mites, scorpions, and related 8-legged arthropods that are not insects. The two largest orders of arachnids are spiders and mites. Arachnids have chelicerae that are fang-like or pincher-like mouthparts.

Morphology

Adults

1. **mouthparts:** chelicerae, fangs that inject toxins into prey
2. **antennae:** none
3. **legs:** walking
4. **body segments:** two, cephalothorax and abdomen

Immatures

1. Look similar to adults
2. Feed in same habitat
3. Feed on same food as adults

Development: egg, immature, adult

Life History

Habitats: Adapted to a broad range of habitats: terrestrial, aquatic and semi aquatic.

Feeding: Predators

Importance in landscapes: Generalist predators that capture other insects in webs, ground traps, funnels, and by stalking.

Families

Cobweb weavers (Family Theridiidae) Common house spider, others found in greenhouses.

Sac spiders (Family Clubionidae) Build silken retreats and hunt for prey.

Orb weaving spiders (Family Araneidae) Build vertical orb webs, sit head down in the center. The garden spider weaves a web marked with distinctive zigzag bands of white silk.

Crab Spider (Family Thomisidae) Crab spiders catch their prey by ambush. They lie in wait on flowers, often aided by camouflage, for nectar-feeding insects.

Jumping Spider (Family Salticidae) Jumping spiders actively hunt for food.

Wolf spiders (Family Lycosidae) They do not spin webs but roam at night to hunt for food. Wolf spiders are often confused with the brown recluse, but they lack the unmistakable violin-shaped marking behind the head. The wolf spider is shy and seeks to run away when disturbed.


Trap door spiders (Family Ctenizidae) Trapdoor spiders dig a tunnel in the ground and seal it with a hinged lid. They wait patiently behind this trap door until they sense prey and rush out to capture the prey and drag it down into the tunnel.

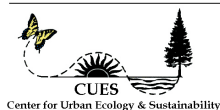
Funnel web spiders (Family Agelenidae) Funnel spiders design their webs in the shape of a funnel with a small opening, or funnel, at the bottom, in which the spider lies in wait. When an insect becomes entangled in the web, the spider emerges from the bottom of the funnel and captures the insect.

In the textbook, *IPM of Midwest Landscapes Pests of trees and shrubs*

Class Arachnida, Spiders and mites
Order Araneae, Spiders
Several families spiders, many species



Krischik Lab 
Dept. of Entomology
Saint Paul, MN 55108



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