



Insect Diagnostic Laboratory

Cornell University, 4140 Comstock Hall, Ithaca, NY 14853

Spiders

The spiders are a large, distinct and widespread group of Arachnids occurring in many types of habitats. Many people think that all spiders are very poisonous; however, although all spiders have venom glands, they very seldom bite people. Most spiders are beneficial because they feed on insects.

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Description

A spider's body is divided into two sections: the cephalothorax, which bears the eyes, mouthparts, and legs; and the abdomen, which bears the genital structures, spiracles and anus. Unlike insects, spiders have eight legs and no antennae.

Some of the most commonly encountered spiders are:



1. **Jumping spiders:** Small to medium in size, with short legs and stout bodies. The body is hairy and may be brightly colored or iridescent. They are found primarily under stones and in debris.



2. **Crab spiders:** As their name suggests, these medium sized spiders are crab-like in appearance, and walk sideways or backwards. These spiders spin no webs, but forage for their prey or wait in ambush for it. One species can change color depending upon the color of the flower it is resting on.

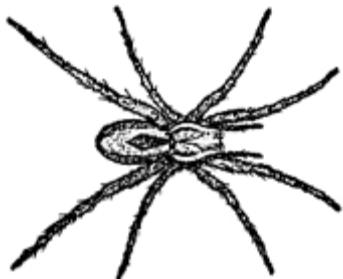


3. **Nursery web and Fishing spiders:** These spiders may be quite large, some having a leg spread of three inches. Many of them live near water, walking over the surface and diving beneath it. They feed on aquatic insects and even small fish. These spiders are rovers, and the female spins a web only for the young. The female carries the egg sac underneath her until the young spiders are ready to hatch, at which time she ties it to a plant and wraps leaves around it.



4. Orb weavers:

Included in this group is the common garden spider. Many are brightly colored, being black and yellow, or black and red. These spiders are usually found resting head downward near the center of their large orb web.



5. Ground Spiders and Wolf Spiders:

Most of these common spiders are quite large, and dark brown in color. They may be found running along the ground chasing their prey. The females carry the egg sac, and when the young hatch, they are carried on the female's back for a few days.

Some spiders considered to be dangerous



TARANTULAS:

These spiders are feared because of their size and formidable appearance. The bodies may get up to 3 to 3½ inches in length. Actually, they are sluggish spiders, and will attack only when they are teased to an extreme. Many are kept for pets. The larger species can inflict a painful wound with their powerful jaws. Tarantulas are desert spiders, and are not found in Northeastern States.

Photo by Ronald F. Billings, Texas Forest Service, Bugwood.org

BLACK WIDOW:

(*Latrodectus* spp.; *L. mactans* is now thought to be 3 species)

The black widow is timid by nature; however, when accidentally squeezed, it will bite in self-defense. The venom is highly toxic. The bite causes extreme pain, which usually extends to the abdominal muscles. The danger exists because the black widow seeks out dark places in which to construct a retreat, often living in close proximity to people. Female black widow spiders are about a half inch long, with 1 1/2 inch leg spread; males are half that size. For additional information see <http://kaston.transy.edu/widow.html>

Photo by Sturgis McKeever, Georgia Southern University, Bugwood.org





BROWN RECLUSE: (*Loxosceles reclusa*)

This spider has a dark violin-shaped marking on its back. Its bite is known to cause sores that are slow to heal. These spiders range from Western Georgia northward into Kentucky and westward to Kansas and Texas. Since these spiders are easily transported, it is wise to check vacation gear when returning from a southern and western vacation. The spiders hide in dark corners and are generally shy. They vary in size, with a body length around 3/8 inch, and leg span about an inch. The brown recluse has 6 eyes (not 8 like many other spiders).

Photo by Lisa Ames, University of Georgia, [Bugwood.org](#)



YELLOW SAC SPIDER: (*Cheiracanthium* spp.; Family Clubionidae)

Several species of sac spiders can be found indoors. They are small, with a body length generally 3/8 inch, and leg span about 1 inch. These spiders have been implicated in causing painful bites. In the past they were also implicated in causing necrotic lesions, but recent information seems to indicate they do not cause these lesions (see:

<http://www.ajtmh.org/cgi/content/abstract/74/6/1043>)

Photo by Joseph Berger; from [Bugwood.org](#)

Management

Although most spiders are beneficial, they can become a nuisance when found in the home. Keep spiders out with proper screening and weather stripping. Remove indoor webs with a broom, and discard outdoors. This may take some time, but eventually spiders will be controlled. Additionally, control insects on which spiders feed.

If necessary, a pesticide labelled for indoor use on spiders can be used for control. Spray in corners of rooms, at both floor and ceiling levels. **BE SURE TO FOLLOW MANUFACTURER'S DIRECTIONS CAREFULLY WHEN USING ANY PESTICIDE.** Pesticides registered for home use in New York State in 2009 include: bifenthrin, cyfluthrin, deltamethrin, lambda-cyhalothrin, and permethrin.

Outdoors, keeping vegetation away from the side of the house can help to discourage spiders from constructing webs. Using yellow light bulbs at night if lights are left on outdoors can also help – they attract fewer insects, therefore there is less food available for spiders. If no food is available they will move elsewhere.

*Revised 9/1995 by: Carolyn Klass, Senior Extension Associate, Dept. of Entomology, Cornell University
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This publication contains pesticide recommendations. Changes in pesticide regulations occur constantly and human errors are still possible. Some materials mentioned may no longer be available and some uses may no longer be legal. All pesticides distributed, sold or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension Specialist or your regional DEC office. READ THE LABEL BEFORE APPLYING ANY PESTICIDE.