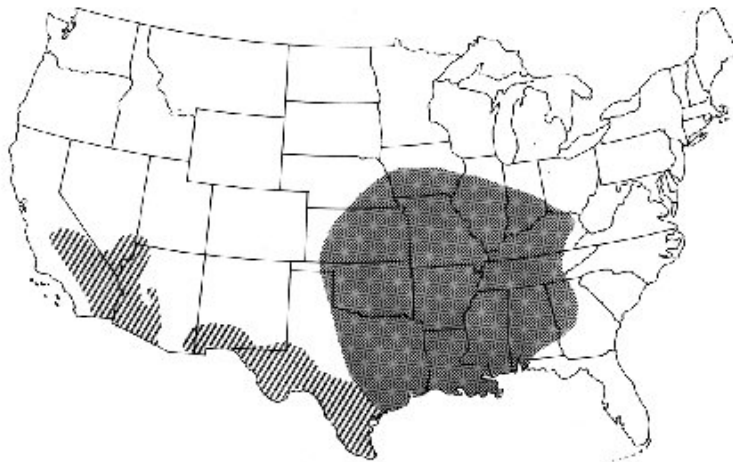


Brown Recluse Spider

William F. Lyon

Common Name	Scientific Name
Brown Recluse Spider	<i>Loxosceles reclusa</i> Gertsch & Malaik
Brown Spider	<i>Loxosceles rufescens</i> DuFour

The brown recluse spider is found mainly in the southern and Midwestern states especially Arkansas, Oklahoma and Missouri. The brown recluse spider is not aggressive. Most bitten people have directly contacted the spider when putting on clothing or shoes not used for long periods of time. They usually occur in houses on the floor or behind furniture (undisturbed areas). Some have been bitten after sleeping in an unused bed after rolling over onto the spider or others after accidentally touching the spider when cleaning out undisturbed storage areas. Fatalities are rare, but bites are most dangerous to children, elderly and those in poor physical condition.



Range Map of the Brown Recluse Spider

Identification

Adult brown recluse spiders are soft-bodied, yellowish-tan to dark brown, about 1/4 to 1/2 inch long and have long, delicate grayish to dark brown legs covered with short, dark hairs. The leg span is about the size of a half dollar. Distinguishing characteristics are the presence of three pairs of eyes arranged in a semicircle on the forepart of the head and a violin-shaped, dark marking immediately behind the semicircle of eyes with the neck of the violin pointing towards the bulbous abdomen.

The eight legs and violin marking appear on the flattened-like cephalothorax (combined area of the head and thorax). Both the male and female brown recluse spiders are similar in appearance and equally toxic. The immature stages closely resemble the adults except for size and a slightly lighter color.



Typical Brown Recluse



Close up showing violin pattern and eye pattern

Life Cycle and Habits

These spiders spin small, loose, white to off-white webs with irregular strands. The female lays eggs from May through August in off-white silken cases (sacs) about 1/3-inch in diameter. Sacs containing 40 or more eggs each are found hung in the web, overwinter in sheltered, dark areas and are guarded by the female until her death. Each female may lay as many as 300 eggs during her lifetime. Spiderlings emerge in 24 to 36 days leaving the egg case with slow development (10 to 12 months), and are influenced by weather conditions and food availability. Spiders can survive long periods of time without food or water and may live as long as two years.

This spider is most active at night when it comes out in search of food consisting of cockroaches and other small insects. During the day, time is spent in quiet, undisturbed places such as bathrooms, bedrooms, closets, basements and cellars. The spiders sometimes take shelter under furniture, appliances and carpets, behind baseboards and door facings, or in corners and crevices. Some have been found in stored clothing, old shoes, on the undersides of tables and chairs, and in folded bedding and undisturbed towels stored for long periods of time. Outdoors, the spider may be found in sheltered corners among debris, in wood piles, under loose bark and stones, in old barns, storage sheds and garages. These spiders are very adaptable and may be active in temperatures ranging from 45 to 110 deg F.

Bite Symptoms

The severity of a person's reaction to the bite depends on the amount of venom injected and individual sensitivity to it. Bite effects may be nothing at all, immediate or delayed. Some may not be aware of the bite for 2 to 8 hours, whereas others feel a stinging sensation usually followed by intense pain if there is a severe reaction. A small white blister usually rises at the bite site surrounded by a large congested and swollen area. Within 24 to 36 hours, a systemic reaction may occur with the victim characterized by restlessness, fever, chills, nausea, weakness and joint pain. The affected area enlarges, becomes inflamed and the tissue is hard to the touch. The spider's venom contains an enzyme that destroys cell membranes in the wound area with affected tissue gradually sloughing away, exposing underlying tissues. Within 24 hours, the bite site can erupt into a "volcano lesion" (a hole in the flesh due to damaged, gangrenous tissue).

The open wound may range from the size of an adult's thumbnail to the span of a hand. The sunken, ulcerating sore may heal slowly up to 6 to 8 weeks. Full recovery may take several months and scarring may remain. Plastic surgery and skin grafts are sometimes required.



Day 3 post-bite



Day 4 post-bite



Day 5 post-bite



Day 6 post-bite



Day 9 post-bite



Day 10 post-bite

First Aid

If bitten, remain calm, collect the spider, if possible, for positive identification and get medical attention immediately (contact your physician, hospital and/or Poison Information Center). Apply antiseptic solution to prevent infection and ice packs to relieve local swelling and pain directly to the bite area.

An effective antivenom is not generally available. The physician will usually administer high doses of cortisone-type hormones to combat hemolysis and other systemic complications. A report suggests that treatment with dapsone (a drug used mainly for leprosy) may reduce the degree of tissue damage.

Control Measures

The brown recluse spider is not aggressive and normally bites only when crushed, handled or disturbed. It is aptly named since it is a reclusive creature seeking and preferring seclusion.

Prevention

Shake out clothing and shoes before dressing, and inspect bedding and towels before using. People are most often bitten when putting on clothing that has hung undisturbed or shoes seldom worn, into which a spider has moved. Do not go barefoot or handle firewood without gloves.

Remove trash, old boxes, piles of lumber, old clothing and other unwanted items. Eliminate cluttered areas in basements, closets, attics and other outbuildings.

Dust and vacuum thoroughly and more frequently around windows, corners in rooms, under furniture, in storage areas and normally undisturbed places to eliminate spiders, webs and egg sacs. Use a dust mop, broom and dust pan, if needed.

Install screens on doors and windows to prevent entry. Seal or caulk cracks and crevices where spiders can enter the house. Wash off the outside of the house and roof eaves.

Insecticides

Adult spiders spend little time in direct contact with surfaces. Instead, they are found in or on webbing. Thorough applications of fine particles of insecticides such as ULV, aerosols or fogs contact spiders in their webs causing quicker population reduction. Use space sprays of pyrethrins or resmethrin for useful clean outs, especially attics and crawl spaces.

Thoroughly treat cracks and crevices of decorative molding, window and door trim and undersides of tables, chairs and shelves with residual pesticides. Use Diazinon, or propoxur (Baygon) as a long-lasting residual treatment.

Outdoors, spray around the perimeter of buildings using formulations that will not damage plants. Treat under eaves, patios and decks if the house is of pier and beam construction. Baygon, Diazinon and permethrin are frequently used.

There are many other labeled pesticides for spider control. Some are labeled for homeowner use, while others are labeled only for the licensed, certified, pesticide applicator or pest control operator. Homeowners can use amorphous silica gel (Drione, Tri-Die), some formulations of bendiocarb (Ficam), chlorpyrifos (Dursban), and permethrin (Astro, Dagnet, Flee, Prelude, Torpedo); diazinon, esfenvalerate (Conquer), propoxur (Baygon), pyrethrin (Exciter, Kicker, Microcare, Pyrethrum, Safer, Synerold, Uld, X-Clude) plus resmethrin (Vectrin). In addition, the licensed pesticide applicator can use bendiocarb + pyrethrins (Ficam Plus), clyfluthrin (Optem, Tempo), cypermethrin (Cyper-Active, Cynoff, Demon, Vikor), deltamethrin (Delta Dust, Suspend), lambda-cyhalothrin (Commodore), propetamphos (Safrotin) and tralmoethrin (Saga).

Before using any pesticide, always read the label and follow directions and safety precautions.

This publication contains pesticide recommendations that are subject to change at any time. These recommendations are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. Due to constantly changing labels and product registration, some of the recommendations given in this writing may no longer be legal by the time you read them. If any information in these recommendations disagrees with the label, the recommendation must be disregarded. No endorsement is intended for products mentioned, nor is criticism meant for products not mentioned.