

# Texas Agricultural Extension Service

The Texas A&M University System

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## Control of Brown Recluse Spiders

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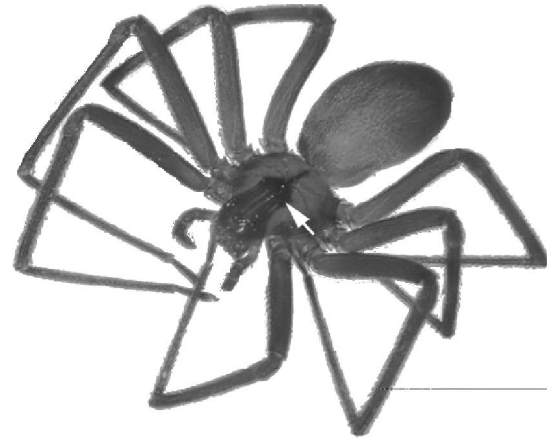
One of the most dreaded household pests in Texas is the brown recluse spider. Unfortunately, the bad reputation of this spider is well deserved, for the bite of brown recluse can be painful and may result in disfiguring skin ulcers, severe pain, and, occasionally, life-threatening complications.

As its name implies, the brown recluse is shy and not naturally aggressive. It is most often found in sites that are rarely disturbed, such as under old boards, in piles of discarded junk, and in seldom-disturbed storage spaces in houses and outbuildings. Indoors, they are most common in cluttered closets, garages, crawl-spaces, and attics.

Brown recluse spiders are hunting spiders and do not seem to spend a great deal of time on webs. When nests are constructed, they are large, irregular webs with thick, sticky threads. Nests serve as a site to lay eggs and as a retreat. They are usually constructed in dark, out-of-the-way corners. Brown recluse spiders are primarily nocturnal, coming out at night to hunt for their insect prey.

It's possible for the non-expert to identify the brown recluse spider. Look for a light brown spider, with slender legs extending over an area about the size of a quarter to a half-dollar. Two characteristics that help distinguish this spider from other similar species include the dark violin-shaped marking on the back of the front portion of the body, and the semicircular, paired arrangement of the six eyes (see Figure).

Adult brown recluse spiders are most frequently seen during the spring months. Mating season in Oklahoma, Arkansas, and Texas, lasts from April to early July, during which time female spiders produce up to five egg sacs, containing about 50 eggs each. The length of time required for development to the adult stage is slightly less



*The brown recluse is sometimes called the violin spider because of the dark brown, violin-shaped marking on the back of its cephalothorax (see arrow). The leg span of a fully-grown brown recluse is about the size of a half-dollar (this picture about 3X lifesize).*



*Brown recluse egg sacs are usually found attached to rough surfaces near where brown recluse spiders are active.*

than a year, and in the laboratory, spiders have been observed to live for up to two and a half years.

**A Four Step Management Program.** Because of the seriousness of a brown recluse bite,

the best solution to a household infestation of these spiders is to hire a professional pest control company.

The brown recluse is hard to control. Look for a reputable company that is willing to take the time to work with you to eliminate these spiders. A combination of chemical treatments and vigorous sanitation measures are usually required to significantly reduce or eliminate a well-entrenched brown recluse infestation.

Brown recluse spiders should be controlled using a four step integrated pest management approach:

## Step 1: Sanitation

Unnecessary clutter should be eliminated, webs removed from interior and exterior areas, and a thorough vacuuming should be undertaken around, under, and behind furniture. This should preferably be done before your pest control operator comes to treat.

## Step 2: Residual sprays

Liquid insecticide sprays should be applied to the exterior foundation, eaves, closets, storage areas, and rugs, if necessary. Sprays with residual killing activity should be selected.

## Step 3: Residual dusts

Insecticidal dusts should be applied in wall voids, attics, and inaccessible crawl spaces. Dusts

penetrate places that cannot be reached by sprays, and often provide longer control. Avoid contaminating belongings in storage areas by covering them with a plastic tarp before you treat.

## Step 4: ULV or Aerosol sprays

An ultra-low volume (ULV) or aerosol treatment with pyrethrins or resmethrin is the final step in a complete spider control program. Alone, ULV treatments are not very effective in controlling spiders; however they will kill any exposed spiders and encourage others to move and contact surfaces treated with residual sprays and dusts.

## Tips for Professionals:

Research conducted at Oklahoma State and Texas A&M Universities has confirmed that brown recluse spiders are very difficult to kill with most insecticides. Under laboratory conditions wettable powder formulations of pyrethroid insecticides (e.g., Commodore®, Tempo®, and Demon®) appear to give the best control, compared to Ficam®, Dursban® and Safrotin®.

Among dust formulations, Dursban® gave the best control compared to Drione®, Ficam® and diazinon dusts. Residual effectiveness of most dust formulations was generally less than two weeks.

The surface to which sprays are applied affects how long the sprays last. Spray treatments applied to wood and masonite surfaces controlled spiders only up to seven days. Residues on vinyl surfaces provided good control up to 60 days after treatment.

Tempo® 1D, a pyrethroid dust, recently has been evaluated by Texas A&M University. This product provides rapid knockdown and kill of brown recluse spiders under laboratory conditions.

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