TalstarOne™ MULTI–INSECTICIDE

FMC

It's Really Going Places.

Best Management Practices

Brown Recluse Spiders *(Loxosceles reclusa)*

Biology: Brown Recluse Spiders *Loxosceles reclusa* belong to the group of spiders known by several names: "brown" spiders, "violin" spiders, "recluse" spiders, and "fiddle" back spiders. There are, depending upon who you ask about a dozen species of "recluse" spiders in the US all belonging to the genus *Loxosceles*. The name recluse comes from the reclusive nature of this spider. It prefers undisturbed and protected habitats. Outdoors, it can be found living in treeholes, under loose bark, stones, logs, or any sheltered area, but is rarely found living in vegetation. Indoors, the spider is found in closet corners, under objects, and in some cases in clothing and shoes. Brown recluse spiders have been identified in the central-south and midwest states. They may, however, be encountered anywhere because they can be transported inside boxes and furniture from states where the spider is common. Spiders in the genus Loxosceles have venom that is potentially dangerous to humans. "Recluse" spiders have a necrotic poison that causes a sloughing off of tissue around the bite site. The wounds can be difficult to heal with a scar forming in most cases. The venom may also cause a systemic reaction. These spiders only bite people when they are crushed. They are not blood feeders and biting is their only defense. These spiders while generally not lethal are considered a health hazard.

Identification: Brown recluse spiders have a body approximately 3/8 inch in length. These spiders are most commonly identified by a dark marking on the dorsal portion of the cephalothorax. This marking resembles a violin, hence the name "violin" spiders. The neck of the violin points toward the abdomen. The marking may be difficult to see in fully mature adult spiders and a flashlight may be needed. The second identifying characteristic is the eyes. Most spiders have eight eyes arranged in some fashion. Loxosceles have six eyes arranged in pairs or dyads with one pair in the front and one pair on each side of the head. Both sexes construct small and irregularly shaped, whitish-grey webs. Females are passive hunters, using their webs to catch prey. Males, however, may leave their webs in search of nearby prey. Infestations are comprised of approximately equal numbers of females and males, and include all stages of developing spiders.

Recommended Control Strategies

Interior of Structure

Inspection: Look for egg sacs, webbing, cast skins or live spiders. Remove or kill spiders and egg sacs. Inspect cracks, crevices, under edges of carpets or baseboards, under objects such as furniture, appliances or boxes, or any undisturbed areas.

Treatment:

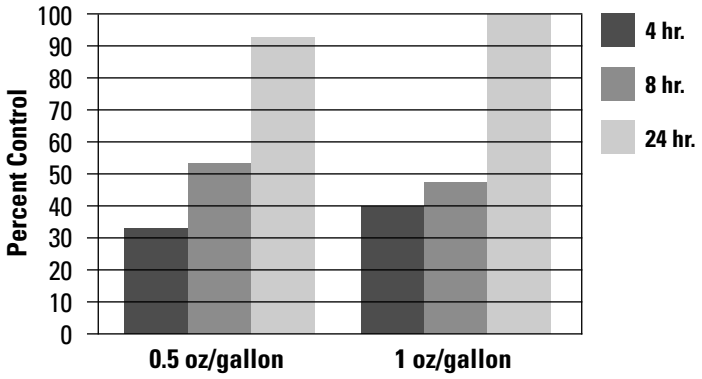
- Treatment of attics and crawlspaces with appropriately labeled dust or fogger. Dust will tend to have better residual. This will reduce spider populations and other pests such as silverfish believed to be a favorite food for *Loxosceles spp.* Sometimes the spiders will be underneath the insulation and are somewhat protected from treatment. IN SEVERE CASES OF INFESTATION FUMIGATION MAY BE REQUIRED.

- Treatment of voids. Remove outlet covers and treat wall voids with labeled dust or aerosol equipped with a plastic tip. Always use caution and be careful to avoid shock.
- Crack and crevice with labeled materials under baseboards (where applicable), under edges of carpets, under furniture (spiders will commonly infest furniture: chairs, couches, dressers etc.)
- Set out glue traps as both monitoring and control devices.
- Spot treating indoors- Spot treat corners of rooms under furniture or behind items along walls other places spiders may infest with a course, low pressure spray mix using a compressed air sprayer. Treatment should be directed toward floor/wall junctures where these spiders are likely to crawl. Spot treatments should be combined with crack and void treatments. Use one ounce of TalstarOne™ multi-insecticide per gallon in spray mix.
- Educate customers that spider may infest shoes and clothing. Recommend that all clothing and shoes should be shaken out before wearing.

Exterior:

- Perimeter treatment: Treat a 6 to 10 foot band on exterior perimeter of structure using TalstarOne™ multi-insecticide in sufficient water (up to 10 gallons per 1000 square feet) to insure 1 fluid ounce per 1000 square feet. Focus on entry points: around windows and doors, along the foundation, along eaves, under facia board, and other potential points of entry. Spiders will lay eggs near or under edges of facia board. Treat soil adjacent to structure in a 6 to 10 foot band around the house. With heavy infestations or difficult populations to control, the entire yard should be treated with TalstarOne™ multi-insecticide at the same rate. A surfactant added to the spray solution can greatly increase coverage improve chances of penetration into egg sacs and can help in control.
- Incorporate exclusion techniques: caulk entry points, weather strip around doors and windows, and use copper wool in weep holes.
- Treat exterior with a band of Talstar® PL granular insecticide or Talstar® EZ granular insecticide at a rate of 2.3 pounds per 1000 square feet. Focus treatment on flowerbeds and areas conducive to moisture and organic matter. This will have a twofold effect. First, crawling spiders seeking to enter the structure will contact the non-repellent barrier treatment. Second, the treatment will reduce populations of insects and other arachnids that may serve as prey. If infestations are severe, the whole yard should be treated with 2.3 pounds per 1000 square feet.

Control of Brown Recluse Spiders with TalstarOne™ Multi-insecticide



Trial conducted by Mike Merchant, Texas A&M, 2000

Always read and follow label directions.

P3215R 11/03