Understanding Spider Habits and Life Cycle

- Spider eggs are laid within a protective silk egg sac; the number of eggs per sac varies widely by species
- Egg hatch occurs in about two weeks, and these first instar spiderlings remain within the sac until undergoing their first molt
- Approximately one month after the eggs are laid, the second instar spiderlings emerge, many by chewing through the sac wall
- Spiderlings disperse through a variety of mechanisms, including clinging to their mother's abdomen or "ballooning" to new destinations
- Most spiders go through several molts before reaching maturity, living one or two years, depending on the species

Control Strategies

- Keep garages, attics and basements clean and clutter-free
- Repair screens and seal cracks and crevices to reduce pest entry points
- Inspect items such as boxes, decorations and grocery bags before bringing them indoors
- Change mercury vapor bulbs to sodium vapor to reduce attractancy
- When possible, mount lights away from building
- Position air curtains on entry points and screens on open loading dock doors, and keep loading dock doors closed when not in use

Spider Protocol

Proper spider control depends on more than just direct measures taken against spiders. A complete program should address the pillars of life: food, shelter and water. Long-term control and reduction of populations can be achieved by attacking conducive conditions. Reduce insects that act as spiders' food source by treating the exterior for occasional invaders. Modify structural conditions such as exterior lighting that attract flying insects to greatly increase the likelihood of your program's success.

Inspection

Inspections should be made on the interior and the exterior of the structure to determine the species of spiders present, along with existing conducive conditions and entry points.

Interior

Place glue board monitors along baseboards and in the corners of rooms with suspected activity. Web-building spiders are easy to detect by looking for visible webs. When inspecting for hunting spiders, move and look under boxes, shelving, wood debris, splash blocks and furniture. Focus efforts on the quiet, undisturbed areas that spiders prefer, such as closets, garages, basements and attics.

Exterior

Walk around the exterior of the building and note harborage areas not only for spiders but for their food sources. Mulch, plants, high grass and debris can all provide protection for spiders and their prey. Other points of interest are entry points and structural deficiencies that allow access to the building. Lighting placed directly on the building may draw flying insects, which will attract spiders to that area. Webbing is a clear indicator of spider activity and may provide clues to insect flight paths and wind patterns around the structure. These patterns can be used later for placing spot treatments of insecticides.
Pre-Treatment

Before treating, remove all visible webbing with a vacuum, broom, telescopic brush or similar device. During the process of removing webbing material, eggs and young spiderlings are also removed. Web removal is one of the few control methods the customer can see, and if not done properly may result in callbacks. By removing spider webs as a part of routine service, new activity can be easily identified and control efforts focused in those areas.

Treatment

Make spot applications in areas identified during the inspection and web removal. Other areas that should be treated on the interior include corners of windows, closets, behind furniture, basements, crawl spaces and near items stored on the floor. On the exterior, make spot treatments around windows, doors, exterior lighting, under decks, under eaves and downspouts. For structures with eaves or harborage areas that are hard to reach with a compressed air sprayer, a backpack mist blower is recommended.

Additional techniques to reduce spiders’ food sources:

- Treat the exterior with an IGR
- Treat dumpsters (if present) with a residual product and an IGR
- Place fly lights out of view of entry points (change bulbs annually)

Application Equipment

<table>
<thead>
<tr>
<th>Exterior</th>
<th>Interior</th>
<th>Commercial Warehousing</th>
<th>Food Warehousing &amp; Manufacturing</th>
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<tbody>
<tr>
<td>Backpack Mist Blower</td>
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<tr>
<td>Handheld sprayer</td>
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<tr>
<td>Power sprayer</td>
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<td>Duster</td>
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<td>ULV machine</td>
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<td>Thermal fogger</td>
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Customer Communication

- Encourage customers to reduce conducive conditions around the structure
- Change exterior lights by installing yellow or sodium vapor light bulbs, or reduce the amount of exterior lighting used
- Eliminate potential harborage areas by moving firewood, building materials and debris away from the foundation
- Reduce clutter in basements, attics and garages
- Install tight-fitting window screens and door sweeps to exclude spiders and insects
- Inspect and clean behind outdoor window shutters

Post-Treatment

- Inspect every 7-14 days and determine if a retreatment is necessary
  - Retreat with Onslaught FastCap at 0.5 to 1.0 fl oz per gallon depending on infestation levels
  - Refer to product label for minimum retreatment intervals on specific use sites
- Once every 60-90 days, remove webs as necessary
- Speak with customers at regular intervals to make sure they are satisfied with control levels and that the service is meeting their expectations
COMMON HARBORAGE SITES

Inside structures:
- Corners of floor/wall junctures
- Behind and under furniture
- Where ceilings meet the wall
- Corners of closets
- Windows and doorways
- Behind toilets
- Garages, crawlspaces & basements
- Undisturbed boxes
- Damp, poorly ventilated attics

Outside structures:
- Windows and doorways
- Behind gutters
- Under railings of decks
- Where fences adjoin the home
- Around light fixtures
- Piles of debris or firewood
- Under stones or landscape timbers
- Around building foundation
  - Within thick ground cover and leaf litter
  - Gardens
  - Garden plants
  - Sheds
Onslaught® FastCap
TARGET:
Spiders
RATE:
Pump or power sprayer:
1 fl oz per gallon of water
 treats 1,000 sq ft

NyGuard® IGR
TARGET:
Food Sources
RATE:
Pump or power sprayer:
4-12 ml per gallon of water
 treats 1,500 sq ft
ULV machine:
1 ml treats 1,000 cubic ft

Shockwave®*
TARGET:
Spiders and Food Sources
RATE:
ULV and Thermal Fogger:
0.5 fl oz undiluted treats
1,000 cubic ft

EverGreen®
Pyrethrum Dust
TARGET:
Food Sources
RATE:
Building perimeter treatments:
16-24 oz per 1,000 sq ft

Contact Your Local Distributor Rep for More Information

*Shockwave may only be applied as a space spray in food areas of food handling establishments, including commercial food warehousing and manufacturing.