The Black Widow and Other Spiders

The black widow is found in practically all parts of the United States. Although found in all parts of Oregon, it occurs in greatest abundance east of the Cascade Range. This spider does not enter houses often, but it is frequently found in garages, sheds, outdoor toilets, manholes, culverts, and similar places. It also is found under rocks, in hollow logs, stacked lumber, boxes, woodpiles, and in animal burrows. It feeds on insects and other small creatures.

The black widow spider is the most poisonous spider in the United States. It is the only spider native to Oregon whose bite causes severe poisoning in humans. There are many other kinds of spiders in Oregon. These seldom bite, and if they did would cause only minor irritation. The brown recluse spider, feared in some parts of the United States, is not found in Oregon. There are authentic records of a few deaths resulting from the bite of the black widow spider. Fortunately, this spider is very shy and retiring. Bites usually occur as a result of someone accidentally squeezing a spider when picking up an object to which it is clinging. Bites also occur when you are putting on clothing or shoes in which a spider is hidden. The male does not attack prey and will not bite.

The bite is inflicted by two stout jaws that work sideways. The tip of each jaw is provided with an incurved, needlelike tooth, through which the poison is injected. Poison glands are located in the head near the base of the jaw. The spider often has difficulty piercing tough skin. The bite usually causes a stinging sensation at the point of puncture which is marked by a tiny red spot, sometimes surrounded by a whitish wheal. Within a few minutes to an hour or more, sharp pains develop in the region of the bite and there may be swelling. If the bite is on a finger, the aching pain progresses up the arm to the shoulder and finally reaches the chest in cases of acute poisoning. The pain may even extend to the hips and the abdomen may become rigid. Breathing may be forced and irregular, accompanied by muscular contractions. The venom has a retarding effect on the heart, sometimes markedly slowing its action. If bitten by a black widow spider, see a doctor. If possible, the spider involved should be collected and referred to an entomologist or other qualified biologist for identification.

The female black widow spider is shiny, black on the upper surface of the body. On the underside is a characteristic red mark shaped like a hourglass. The body of a full-grown female is about 1 inch in length, with an overall spread, including the legs, of approximately 1 1/2 inches. The male usually has light streaks on his abdomen and is recognized easily by the knoblike appendages he carries in front of his head. The male is always considerably smaller than the mature female, and has an overall length of about 1 inch. After mating, the female frequently ensnares and eats her mate; hence the "widow.

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four hundred eggs usually are laid at one time and placed inside a dense, whitish, silken ball the size of a large pea. The eggs hatch in 3 to 4 weeks, and the tiny spiders scatter over the web. The species is cannibalistic, and most of the young are devoured before they reach maturity. The life cycle from egg to maturity requires at least 4 months. Overwintering in the immature stage prolongs the time for completion of the life cycle. Mature spiders may be present throughout most of the year, but they are most abundant in the late summer and fall months.

**Indoor Control Measures**

Pressurized spray cans containing phenol methylcarbamate (Baygon), diazinon, or dichlorvos (Vapona) are available ready to use and may be applied in areas of the home, garage, basement, and attic. The effectiveness of aerosols containing pyrethrins depends on direct contact of spiders with the insecticide mist.

The brand name of these pressurized sprays does not identify the active ingredient nor ensure that all pests may be controlled. Look elsewhere on the label for the name of the chemical insecticide and the pests controlled.

Space treatment with Vapona resin strips is effective in rooms and storage areas with minimal air circulation.

Ficam 1 percent dust may be available in Oregon in 1981. Apply the dust along and behind baseboards, to window and door frames, near pipes, and in corners, storage localities, attics, crawl spaces, and other areas over which these pests may crawl.

**Outdoor Control Measures**

1. Wear gloves when working where black widow spiders may be present.
2. Remove loose brick, tile, wood, boards, and trash where spiders may live or hide.
3. Use a spray containing diazinon or malathion. Repeated sprays may be necessary in order to kill a hatch of new spiderlings. Follow label instructions for correct dilution.

Thoroughly spray areas outside the house where black widow spiders or other spiders are troublesome or abundant. Avoid wetting vegetation. The sprays also help control other undesirable insects, including boxelder bugs, grass bugs, root weevils, and sowbugs, that sometimes enter homes during the fall.

**Use Pesticides Safely**

Follow the manufacturer's directions, restrictions, and precautions on the pesticide label. Safe use is intelligent use.

- Never apply more pesticide than recommended. Too much pesticide may be dangerous and is certain to be wasteful.
- Avoid inhalation, eye or skin contact with pesticides. Should accidental exposure occur, wash affected skin or eyes with liberal quantities of cool, running water.
- Do not eat, drink, or smoke while using pesticide.
- Avoid pesticide contact with food, cooking utensils, and dishes.
- Store pesticides and applicator equipment out of reach of pets and children.
- Always keep pesticides in the original labeled container. Storing pesticides in food or beverage containers increases the possibility of serious accidents.
- Rinse "empty" pesticide container thoroughly with water and use the rinse water in the spray operation. Wrap the empty pressurized container in newspaper and dispose of in the garbage can. Never puncture or incinerate pressurized cans.
- If a pesticide is swallowed accidentally, contact a physician at once. Be prepared to tell him the active ingredients of the pesticide swallowed or take the container itself to the physician.

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