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EC64-1599 Entomology - Lawn Insect Control

Robert E. Roselle

University of Nebraska-Lincoln, rroselle1@unl.edu

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Lawn Insect Control

BY ROBERT E. ROSELLE
EXTENSION ENTOMOLOGIST

SOD WEBWORMS (LAWN MOTHS)

Adult sod webworms are small, greyish-tan millers about 1/2 to 3/4 inch long. At rest they fold their wings around the body like a cylinder. Projections from the head give them a snout-like appearance. Adults hide in lawns and shrubbery during the day. At night they fly over the grass in a zig-zag fashion, scattering eggs over the lawn.

The mature larvae are about 3/4 inch long, greyish-brown in color with small, dark spots. The larvae feed at night on the leaves near the ground level. They spin silken webs, and, as they grow, may form silken tunnels close to the soil surface.

The first sign of damage is usually irregular brown spots. If infestations are severe, areas of the lawn may become completely brown. Continued feeding can kill spots of lawns.

To find webworms in lawns, mix 1 tablespoon of 1% pyrethrum extract in 2 gallons of water and sprinkle over 1 square yard of lawn. This will usually bring larvae

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to the surface in 10 to 20 minutes. If there are 15 or more larvae per square yard, control may be desirable.

The following materials are suggested for control:

MATERIAL	AMOUNT FOR 1000 SQUARE FEET
DDT, 10% granules	1 1/2 pounds
Diazinon, 2% granules	6 pounds
Dieldrin, 5% granules*	2 pounds
DDT, 25% emulsion concentrate	1 pint in 5 gallons water
Diazinon, 25% emulsion concentrate	1/2 pint in 5 gallons water
Sevin, 50% wettable powder	2 cups in 10-15 gallons water

Mow the lawn, then water thoroughly before making the insecticide application. If used as a spray do not water after application. If granules are used, water lightly to remove residues from grass blades. Keep children and pets off treated lawns until residues have been watered off and the lawn is completely dry.

WHITE GRUBS (GRUBWORMS)

White grubs are the larvae of several kinds of June beetles. Some species have a one year life cycle, others have life cycles extending over 3 years. Both kinds occur in Nebraska.

The larvae hatch from eggs deposited in the ground by the female beetles. The grubs feed on the roots of

*Dieldrin sprays are not recommended for home use, as the liquid form is highly toxic. Granules should be used with great caution.

grasses, killing the entire plant. The grubs are white with brown heads and are curled in a crescent shape.

To examine for grubs, dig a square foot sample of sod about 4 inches deep and carefully examine the soil for the presence of grubs. Do this at the edge of dead areas, and several places in the lawn. If there are 4 to 6 grubs per square foot of lawn, apply an insecticide.

The following materials are suggested:

MATERIAL	AMOUNT ACTUAL TO 1000 SQ. FT.
Aldrin, 20% granules	1 - 2 lbs.
Dieldrin, 5% granules	2 lbs.
Heptachlor, 20% granules	1 - 2 lbs.

Mow lawn before application, catching or raking clippings. When granules, dusts, or fertilizer combinations are used, water at least 1 inch immediately after application. It is necessary to water the insecticide into the soil before control will result. Often control will be very slow. Do not allow children or pets on treated lawns until insecticides have been watered into the soil and the grass is dry. Do not pasture treated fields with any class of livestock.

CUTWORMS AND ARMYWORMS

Cutworms and armyworms are usually not of great importance in Nebraska lawns. Occasionally armyworms may cause some damage to lawns. They are normally easy to find, as they chew the grass leaving brown areas, and are present in large numbers. They are greyish-green, striped worms about 1 to 1 1/2 inches long. The bronzed cutworm may cause minor damage to grass in isolated areas.

To control cutworms in lawns use the same materials suggested for control of sod webworms. Apply in the late evening as sprays.

ANTS

Where ants are a nuisance in lawns, almost any of the insecticides suggested for control of sod webworms can be used. Chlordane is very effective against ants. It is applied as a spray, using 2 tablespoons of the 45% emulsifiable concentrate or 40% wettable powder to 1 gallon of water.

BILLBUGS

Billbug larvae are small, curved, legless white larvae with brown heads. They feed on grass roots, injuring the grass. The damage is similar to that caused by white grubs. The adults are snout beetles. Damage has been present in Lincoln. They have not been reported or observed in other areas to date.

For control of billbugs one of the following is suggested:

MATERIAL	AMOUNT ACTUAL TO 1000 SQ. FT.
Chlordane, 5% granules or dust	10 lbs.
Dichloroethyl ether	Use 1 part of dichloroethyl ether (beta, beta prime form) to 200 parts water plus emulsifier. Apply at 1 gallon per square yard.

LEAFHOPPERS

Leafhoppers are small, active insects that suck plant juices from grasses and ornamental plants. In lawns they can be detected by walking through grass and observing if small jumping insects are present in large numbers. It is not known that they cause serious injury to grasses, but some species are important as carriers of plant virus diseases such as aster yellows. To control leafhoppers use a spray of DDT at the rate of 3 ounces

25% emulsifiable concentrate; or 1 ounce of 57% malathion; or 1 ounce of 25% diazinon in 5 gallons of water to 1000 square feet.

FLEAS

Fleas often breed in lawns from eggs that are dropped by fleas on pets. The flea larvae develop in lawns and, after changing into adults, readily bite humans. They may be severe nuisances. For control in lawns, one of the following is suggested:

MATERIAL	AMOUNT TO 1000 SQUARE FEET
Sevin	2 cups 50% wettable powder to 20 gallons water.
Malathion	5 tablespoons of 57% emulsifiable concentrate to 15 gallons water.

CHIGGERS

Chiggers are small mites which pass the winter in protected areas in the adult stage. In the spring they lay eggs in lawns and other sheltered areas. These eggs hatch into the first stage of development called larvae. It is this stage that bites humans and animals by attaching themselves to the skin and inserting their mouth parts. A fluid injected into the skin causes severe itching and welts. Often secondary infection occurs when chigger bites are scratched. Where chiggers are numerous, repellents applied to the skin and clothing may reduce the numbers that bite. In lawns chiggers can be reduced by spraying with one of the following materials:

MATERIAL	AMOUNT TO 1000 SQUARE FEET
Malathion, 57% emulsifiable concentrate	5 tablespoons in 5 gallons water
Diazinon, 25% emulsifiable concentrate	5 tablespoons in 5 gallons water
Chlordane, 45% emulsifiable concentrate	2 cups in 5 gallons of water applied at the rate of 3 quarts to 1000 square feet.
Toxaphene, 45% emulsifiable concentrate	2 cups in 5 gallons of water applied at the rate of 3 quarts to 1000 square feet.
Lindane, 20% emulsifiable concentrate	1/2 cup to 5 gallons water applied at the rate of 3 quarts to 1000 square feet.

CAUTIONS

Insecticides are poisons and must be handled with great care to avoid accidental poisoning to children and pets. Always use them according to the label directions, and always store unused insecticides in the original container with the label intact, out of the reach of children.

When using insecticides, ALWAYS avoid skin contact, clothing contact, and breathing of dust or fumes. Always wash thoroughly immediately after use, and at once if materials are spilled on the skin. Never smoke or eat while using insecticides or before washing. Change clothes after application has been completed, or at once if clothes become contaminated.

Insecticides can be used safely ONLY if used with the care that is outlined on the labels.