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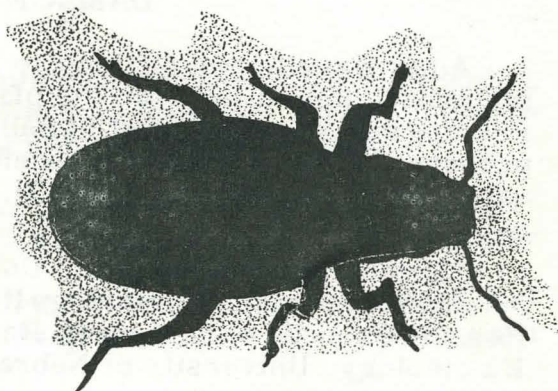
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Control

Sweetclover Weevils

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Control Sweetclover Weevils

Robert E. Roselle¹ and R. V. Connin²

The sweetclover weevil is probably the most serious pest of sweetclover in Nebraska. Originally a European insect, the weevil was discovered in North America in 1924. In 1946 it was found in Cass County, Nebraska, and is now distributed over the entire state.

DESCRIPTION AND LIFE HISTORY

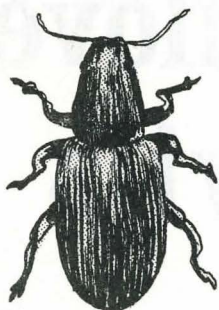


Figure 1.

Adult sweetclover weevils (figure 1) are dark brownish-gray snout beetles about $\frac{3}{16}$ to $\frac{1}{4}$ inch long. They pass the winter under debris in and near sweetclover fields. When the first warm days of spring arrive, these overwintered adults come out of hibernation, move about extensively, and begin feeding on emerging sweetclover. The females drop their eggs on the soil surface. Each female

is capable of laying several hundred eggs. The eggs which are white at first turn shining black after about 24 hours. The larvae burrow into the soil and feed on the roots of sweetclover until fully grown. They pupate in the soil. The adults emerge in mid-summer and feed on sweetclover and, to some extent, on alfalfa until winter.

DAMAGE

Adult weevils are difficult to detect because, when disturbed, they drop from the plants and remain quiet. Feeding signs are the most reliable indications of their presence. Characteristic crescent-shaped notches are eaten out of the leaves (figure 2). Greatest damage is

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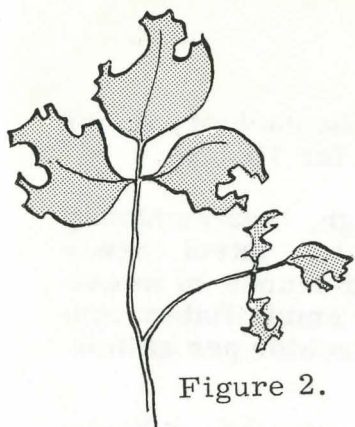


Figure 2.

caused by adult weevils feeding on sweetclover seedlings in early spring. A very few notches on newly emerged seedlings may kill the plant. Entire seedling stands may be destroyed when large numbers of overwintering adults invade newly seeded fields.

Adults feeding on second-year sweetclover may eat the new shoots, but under favorable growing conditions the plants are able to outgrow this damage.

Larvae feeding on the roots of sweetclover apparently cause little damage.

CONTROL

Sweetclover should not be planted close to an old stand if it can be avoided. Overwintering and newly emerged adults migrate from these old stands to new seedings.

A number of insecticides are effective against adult sweetclover weevils. For best results application must be made early in the spring to new stands to protect them from invasion by overwintering adults. Close observation is required during the two-leaf seedling stage, or young plants may be destroyed before damage is noticed.

Insecticides recommended on seedlings in the spring and amounts per acre are as follows. An emulsifiable concentrate of the chemicals should be used.

Aldrin or heptachlor,	2 pounds per gallon...	1 quart
Dieldrin,	1 1/2 pounds per gallon.....	1 1/2 pints

Caution: If you use aldrin or dieldrin for this treatment do not allow livestock to graze on the sweetclover until

after the first cutting. If you use heptachlor, do not allow livestock to graze on the field for 10 days.

If populations of the weevil are high, treatment may be required again in mid-summer to control newly emerged adults migrating from old stands of sweetclover. Use 1 quart per acre of an emulsifiable concentrate containing 2 pounds of heptachlor per gallon.

Caution: Allow 10 days after the application of heptachlor before cutting or pasturing.

Sprays may be applied by ground or air equipment. If ground equipment is used, apply the insecticide in about 10 gallons of water per acre. If air equipment is used, apply it in 3 to 5 gallons of water. If the equipment has been used for weed control, care should be taken to clean thoroughly all traces of 2, 4-D from tanks, hoses, and boom. Sweetclover is very sensitive to 2, 4-D and may be injured by small amounts of this chemical.