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THE SUCKFLY *on* TOBACCO

Suggestions
for
Control

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[The suckfly shown on the cover
is greatly enlarged.]

THE SUCKFLY ON TOBACCO

Suggestions for Control

The suckfly is an important pest of tobacco grown for flue-curing in many areas of the South. This insect attacks growing tobacco shortly before harvest and may cause one or more of the following types of injury: (1) The deposition of unsightly specks of insect excrement upon the under surfaces of the leaves; (2) a reduction in the weight and thickness of the cured leaves; and (3) an abnormal change in the condition of the leaves, which prevents proper coloration and curing, with a consequent loss in quality.

Habits and Status as a Pest

The suckfly is believed to overwinter in wooded areas adjacent to or near tobacco fields. It usually appears in tobacco fields about a month or 6 weeks prior to the harvest of the crop. Although tomato and horsenettle are also fed upon by the suckfly and may aid to a slight extent in the increase of this pest, these plants occur in comparatively limited numbers in areas where tobacco is grown for flue-curing, and hence tobacco is considered to be the principal host plant in these areas. Unless controlled by timely applications of insecticides, the suckfly reproduces rapidly in tobacco fields, and in some fields several thousand have been observed on a single plant. Such an intense infestation results in serious damage to the crop.

Damage by the suckfly to tobacco has been observed in parts of North Carolina at intervals during the past 10 years. During 1948 the degree of damage and loss caused by this insect in that State was very heavy, particularly in fields of late-planted tobacco. In 1948 there were 14 counties in North Carolina where the suckfly was sufficiently numerous to cause serious losses to the tobacco crop, amounting to nearly 50 percent of the crop value in some fields. In two of these counties the average crop loss was estimated at approximately 5 percent, which, at prevailing prices for tobacco, was equivalent to a loss of approximately \$1,000,000. It is estimated that during 1948 the suckfly caused a total loss of not less than \$5,000,000 to the growers of tobacco for flue-curing in the States of North Carolina, Virginia, South Carolina, and Georgia.

Control

Dust mixtures containing parathion or toxaphene and sprays containing parathion or tetraethyl pyrophosphate have recently been found effective in the control of the suckfly on tobacco. Read the Precautions (p.6) before using these insecticides.

Dusts. -- Dust mixtures containing 1 percent of parathion or 20 percent of toxaphene, applied at the rate of 12 to 15 pounds per acre per application, have given good results against the suckfly. These mixtures should be applied in such a manner as to cover thoroughly the entire tobacco plant,

but particularly the lower surface of the leaves since suckflies occur there most abundantly. Dusting can be done to best advantage early in the morning or late in the afternoon, when there is usually little wind movement. Dew on tobacco plants is not a hindrance to the effective application of dusts for suckfly control.

Sprays. -- Tobacco growers who have suitable spray machinery and prefer to treat their crops with sprays can obtain good control of the suckfly by applying a spray consisting of 2 pounds of 15-percent parathion wettable powder or 1 pint of 10-percent tetraethyl pyrophosphate solution in 100 gallons of water, at the rate of 80 gallons per acre. All parts of the tobacco plants should be covered thoroughly by the spray, as by the dust.

Time of Application. -- Since the suckfly usually appears in tobacco fields about a month or 6 weeks prior to harvest, frequent examinations to detect its presence should be made during this period in tobacco fields where this pest is known to occur. One thorough application of the suggested dusts or sprays to all infested tobacco plants as soon as the insects are found in the field is usually sufficient to achieve control. The application may be repeated if later examinations disclose that additional suckflies are entering the field and infesting the tobacco. The grower may sometimes be able to determine the entrance of

the suckflies in only a part of his tobacco fields. Under such circumstances he can often apply the insecticide to the infested part of the field to prevent the spread of the insects to the entire field.

Precautions

All the insecticides discussed in this circular are poisonous to man and animals, but with care they can be handled safely at the strengths suggested for suckfly control.

Keep insecticides containing toxaphene off the skin and away from the eyes and nose. Bathe thoroughly and change to clean clothing daily after using this insecticide. If toxaphene is accidentally swallowed, induce vomiting by taking 1 tablespoonful of salt in a glass of warm water. Repeat if necessary, and call a doctor.

PARATHION AND TETRAETHYL PYROPHOSPHATE ARE EXTREMELY DANGEROUS POISONS AND SHOULD NOT BE USED EXCEPT WHERE TRAINED OPERATORS ARE AVAILABLE TO ASSUME FULL RESPONSIBILITY AND TO ENFORCE PROPER PRECAUTIONS, AS PRESCRIBED BY THE MANUFACTURERS.

The operator should avoid getting any parathion or tetraethyl pyrophosphate on his skin, especially when he is handling the concentrated material. His shirt should be buttoned at the neck and his sleeves rolled down and buttoned at the wrist. He should wear rubber-covered gloves, a protective head covering, and also a serviceable

coverall, smock, or coat of rubberized cloth that can be easily removed and washed after each exposure to the insecticide.

To avoid breathing the insecticide the operator should wear a tightfitting, full-face gas mask equipped with a canister specified for use in handling organic vapors, acid gases, and dusts. He should replace the canister with a new one after use, according to the recommendations of the manufacturer. After each application he should thoroughly wash his hands and face with soap and water. Any insecticide that is spilled on the skin should be washed off without delay. Persons developing symptoms of headache, nausea, impaired vision, or tightness of the chest when using parathion or tetraethyl pyrophosphate should go or be removed immediately to fresh air. An emetic, such as mustard or warm soapy water, should be given immediately and a doctor called. Atropine sulfate is an antidote for parathion and tetraethyl pyrophosphate, but it should be administered only by a physician.

NOTE: The suggested use of the new insecticides mentioned in this circular is based upon limited experiments. Therefore these suggested control measures are subject to change or revocation if substantial evidence is obtained that for any reason they should be.