

A NEW PRODUCT

THURICIDE

Like human beings, insects are subject to a variety of illnesses. Many of these diseases are specific for certain types of insects . . . and are, at the same time, harmless to other forms of life. *Bacillus thuringiensis* Berliner is one of the bacteria which causes disease in the larvae of some 110 species of moths and butterflies. While lethal to these worms, it represents no hazard to man, animals, fish, birds, bees, or beneficial insects such as lady beetles.

Using pure culture techniques, IMC pioneered the development of a method to grow this specific disease organism in mass quantities. The live spores are then suspended in a protective liquid formulation that aids application and sticking. This commercial product has been marketed for several years under the tradename THURICIDE.

THURICIDE is Federally registered for use on a wide variety of vegetable crops . . . as well as forest and shade trees, and ornamentals. It effectively controls many leaf-chewing worms, including: Spring and Fall Cankerworm (Inchworms), Gypsy Moth larvae, Linden Looper, Fall Webworm, and Tent Caterpillar.

THURICIDE, being an insect disease, works inside the worm. A lethal dose must be eaten. It works by disrupting the insect gut within a few hours after feeding. The insect may appear to be healthy and continue to move around, but it generally will not feed. Death will occur in 3 to 5 days (or at times longer), depending on amount of spray deposit, temperature, and insect species. Dead worms dry up and fall off the tree . . . or may be eaten by birds or fish (with no harm to them).

THURICIDE is safe to use at any time of year, with no fear of harmful residue or drift hazard. THURICIDE leaves no lingering odor or visible residue on treated leaves. There have been no indications of foliage burn from proper use of THURICIDE.

INSTRUCTIONS FOR USE

1. THURICIDE should be applied at the beginning of worm hatch. The larger the worm, the harder it is to kill. Cankerworm eggs normally begin hatching soon after tree leaves begin expanding in early May.
2. Foliage should be thoroughly wetted by the spray, but not to the point of excessive run-off. Thorough coverage of all foliage subject to worm attack is essential.
3. THURICIDE must remain on the leaves (and be eaten by worms) to be effective. If the spray dries thoroughly before a rainfall, a light rain will not appreciably reduce the deposit. If a heavy rain follows the spraying, another application should be made after the storm. Under average weather conditions, THURICIDE should remain effective on foliage for 7 to 10 days.
4. If a few larvae survive the first application, or if egg hatch occurs over a long period, a second application should be made about 10 days after the first.
5. Shake the THURICIDE container thoroughly to make sure the active ingredient is well mixed, before adding to spray tank.
6. Pour the recommended amount of THURICIDE into a nearly filled spray tank. Be sure mixture is well agitated before spraying.
7. THURICIDE is compatible with all commonly used spreaders and spreader stickers. With high-gallonage applications it is recommended that a spreader be added at the rate of about 1 pint per 100 gallons.
8. Combinations with fungicides and chemical insecticides in the tank are generally not deleterious to THURICIDE if used promptly.
9. Store THURICIDE in a cool place. Insect activity may be impaired by exposure to temperatures above 90 degrees F.

RECOMMENDED RATES

For control of Spring and Fall Cankerworm, Tent Caterpillar, Fall Webworm, and Linden Looper, the following rates of THURICIDE will generally be adequate. If worms are large, or daytime temperatures above 90 degree at time of treatment, increase rate by 25 %.

High-Pressure, High-Gallonage Sprayers

- 3 pints THURICIDE per 100 gallons of water. Apply 4 to 8 gallons of finished spray per tree, depending upon size of tree and quantity of vegetation.

Mist Blowers

- 3 pints THURICIDE per 25 gallons of water. Apply 1 to 3 gallons of finished spray per tree. Thorough coverage of all leaves is essential.

Hand Sprayer

- 4 fluid ounces ($\frac{1}{4}$ cup) THURICIDE per 2 gallons of water.

the name of the game is "turf"

Here's how to get the kind that
supports the heaviest play!

1.

Consult the IMC Turf Counselors.

2.

Let the laboratories of IMC's Growth Sciences
Center test the soil of each green and
fairway—without charge.

3.

Apply Gold Cup or Premium Thrive fertilizers
as needed.



Contact your IMC Distributor.
Or call either
Bud Camp or Frank Ross
at 312-757-7217.

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