

Maryland U. Entomologist Tells of Hemlock Scale Control

The range of *Fiorinia externa* Ferries in Maryland is restricted to the city of Baltimore and certain adjacent sections of Baltimore county. It is a serious insect pest of the hemlock. Waxy secretions produced by the scales of this insect give heavily infested trees a whitewashed appearance. The feeding of the insects causes needles to turn pale.

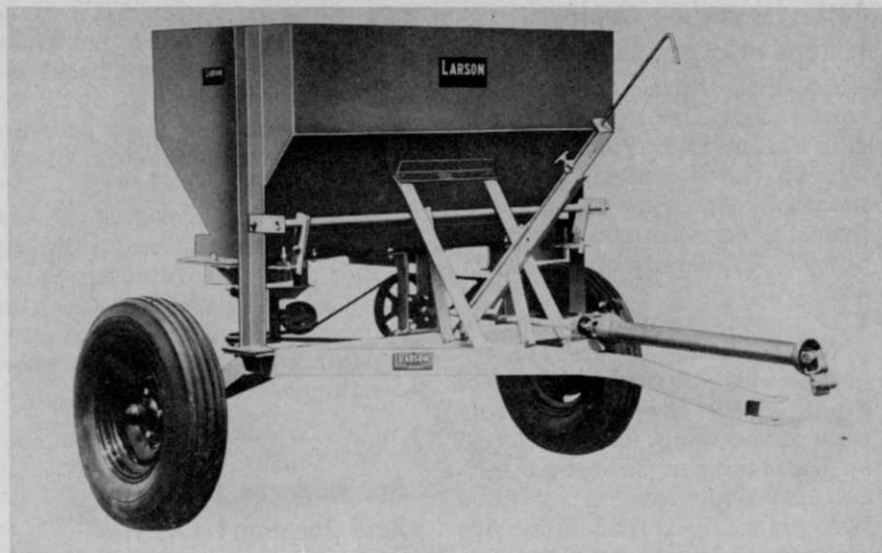
The adult female lives within the cast skin of the last immature molt. She is further protected by the hard outer covering which is typical of all armored scales, explains Charles W. McComb, University of Maryland Entomology Department. After the last molt, she begins to lay eggs and eventually fills the posterior portion of the scale with eggs.

Young scale, known as crawlers, hatch from the eggs and escape from under the female covering. These are active insects with legs and antennae which can be seen clearly only with the aid of a magnifying glass. After spreading over the tree, they settle down, insert their mouthparts into the plant, and begin to feed on the plant juices. After molting, the insects lose their legs and antennae and become fixed in one place. Crawlers occur in greatest numbers in the spring and fall.

The insecticide Dimethoate has been found to give excellent control of this pest, killing not only by contact, but by penetrating the foliage and killing by systemic action. When the spray is applied all parts of the trees, especially the underside of the needles, should be drenched with the spray, but do not apply beyond point of runoff, McComb says.

Spray should be applied in late May and if trees are heavily infested a second spray should be applied 30 days after the first. In heavily infested areas treatment should be repeated each year to prevent reestablishment of the scale.

In applying the insecticide, read the label on the container carefully and be sure to follow all directions. An alternate spray



A new blade design has proved highly effective for positive spread under the most difficult and variable field conditions, reports L. L. Larson Machine, Inc., Princeville, Illinois. Exhaustive testing of numerous blade designs has resulted in a new prototype for the Larson BroadCaster spreader-seeder, shown here. Another advancement is a telescoping on-off feed control which is adjustable to fit the most convenient position for the operator. Details are available from Larson.

schedule, using oil and DDT-malathion sprays, is also available. For information on this alternate schedule, write to the Department of Entomology, University of Maryland, College Park, Md.

New Brochure on Urox

How to destroy unwanted vegetation on industrial, railroad, highway, and noncrop farmland sites is explained in a new brochure from Allied Chemical's General Chemical Div.

Titled "How to Use Urox Weed Killers," the brochure discusses risks involved in letting unwanted vegetation flourish. It also describes which of the seven Urox herbicides are most effective against particular weeds. Application rates are included. Applicators may obtain a copy by writing General Chemical Div., P.O. Box 70, Morristown, N. J.

Soil Steaming Data Offered

Technical information on methods of heat treatment of soil through the use of mobile steam boilers is available in a large booklet from the Clayton Mfg. Co., El Monte, Calif.

The booklet, titled "Low Cost Soil Sterilization," illustrates methods of steam application to

soil areas. Much of the material, it is said, has been prepared by leading authorities in this field, and should be of value to private companies offering soil sterilization services, as well as nurserymen, and vegetation maintenance supervisors.

The booklet, Form No. C-1459, is available from the company at the address above.

Crabgrass "Cane" Marketed

Spot eradication of crabgrass is facilitated for homeowners with a new "cane" crabgrass killer, according to the manufacturer, Judd Ringer Corp.

Operating on the same principle as the pill-shaped "Karttridges" that have been used for eradication of dandelions, plantain, and other broad-leaved weeds, the dry, capsule-like "Karttridge" is placed in a "Killer Kane" tube which is then filled with water.

"Dissolving rapidly, this capsule produces an effective herbicide which is released in measured squirts when weeds are touched with the spray tip of the cane," a company spokesman claims.

For more information on the crabgrass killer, designed for resale to do-it-yourselfers, write the Judd Ringer Corp., 3355 Republic Ave., Minneapolis 26, Minn.