# Large 'scale' woes

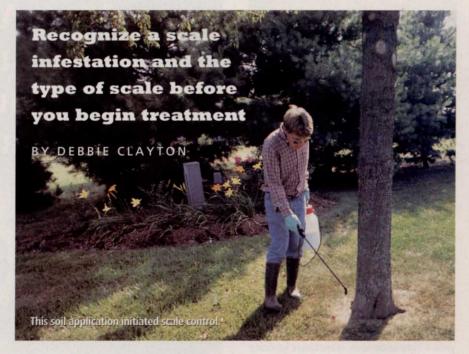
hen a customer called Jeff Hazlett and complained that her family couldn't use the front door due to swarms of bees and flies, he had his suspicions about what was attracting the insects. He inspected the customer's landscape plantings and confirmed that scales had infested three 9-ft. tall star magnolias in her front yard.

"Honeydew produced by the scale insects was dripping on twigs and stems near the front door, and insects were feeding on it," says Hazlett, owner of Ever Green Tree & Lawn Care in Lancaster, PA. "Sooty mold had formed over the honeydew, and whole branches had turned black. It wasn't a pretty sight."

## Sure signs of scale

The presence of honeydew is a telltale sign of scale infestation. Honeydew is a sugary, liquid waste product that covers surrounding areas. This sticky, sweet liquid serves as a growth medium for sooty mold, a black fungus that eventually covers honeydew-laden areas. Another indication of scale is a greater-than-usual number of nuisance insects such as ants, bees, flies, hornets and yellow jackets, which are all attracted to honeydew.

In severe cases of scale infestation, foliage and fruit turn black from sooty mold and drop prematurely. In large enough numbers, scales remove enough sap from plants to starve limbs, branches and leaves.



For his customer with scale-infested magnolia trees, Hazlett soil applied Merit Insecticide in early spring, and followed it with a treatment of dormant oil. Later in spring, he made a foliar application of Merit mixed with a contact insecticide, ensuring that coverage was complete. The problem vanished by mid July.

"The customer was really impressed that the combination controlled scale so quickly," Hazlett says. "I attribute the successful treatment to the systemic properties of Merit combined with the dormant oil spray."

### **Preaching IPM**

With three full-time employees, Hazlett provides landscape maintenance for primarily residential customers in Lancaster County. Though he's been in business for 15 years, he keeps his operation small, offering customized services such as fertilizing, spraying and mulching. He regularly monitors plantings, explaining to his customers the benefits of an integrated pest management (IPM) system.

In spring 2002, after two relatively mild winters in eastern Pennsylvania, an outbreak of cottony camellia scale on yews and hollies erupted in Hazlett's area. "Cottony camellia is a soft scale," he says. "If customers have a lot of evergreens and hollies, I'll make a preventive treatment of Merit for scale."

In addition to applying insecticides and dormant oils, Hazlett often prunes out damaged branches and foliage, and fertilizes beds or trees to restore vitality. Because pachysandra is easily affected by scale, he often applies dormant oil in spring to prevent infestations. **LM** 

— The author is a freelance writer and frequently writes about the Green Industry from her home in Horsham, PA.



# Two scales, two treatments

Not all scale species ingest sap and produce honeydew. Two general types of scales commonly appear on U.S. ornamental trees and shrubs: soft scale and armored scale. Learn to identify the two since control strategies are different for armored (hard) and soft scale.

# Soft scale characteristics:

- ➤ Bodies are exposed and immature stages are "soft"; mature adult females have a hardened shell to protect the young
- ➤ Females are oval-shaped and usually conspicuous about 1/10-in. long
- ▶ One generation per year
- Produce honeydew, attracting nuisance insects
- Overwinter as immature females
- ► Relatively prolific, producing more than 600 eggs at a time

Soft scales damage plants and make

them unsightly by sapping juices, making sooty mold grow on honeydew. This substance is difficult to remove from parked cars, houses, porches and sidewalks.

# Armored scale characteristics:

- ➤ Produce detached wax shell or "armor" over their bodies
- ➤ Females are usually elongated or circular and about 1/10-in. long
- Don't produce honeydew
- ► Two or more generations per year
- Overwinter as eggs, immatures or adults
- > Produce fewer than 50 eggs at a time

Armored scales also damage plants by inserting long, straw-like mouthparts into plant tissue. Damage may appear as chlorotic areas of the leaves or yellowing of entire leaves or needles, resulting in leaf drop or dieback.



Walk the Hill with the Convertible mower. For steep hills, roadside ditches and low limb trees. The Convertible can be utilized as a hydro walk behind. Then as easy as flipping a lever, the Convertible transforms into a rugged dependable "I" so you can Ride the Distance!

New Foot Assist Deck Lift

|                    | Distributors:          |              |
|--------------------|------------------------|--------------|
| New England States | Beta Power Products    | 508-393-1924 |
| PA-NJ-DE           | Canns Bilco            | 800-811-0285 |
| VA-WV-MD-NC        | UTECO                  | 888-368-8326 |
| TX-OK-             | Kretchmar              | 580-395-2606 |
| NY                 | Stiefvater Distributor | 315-853-5581 |
| KS-MO- S.IL        | AES                    | 800-843-3546 |
| GA-SC-AL-FL        | Southeast Equipment    | 800-241-4384 |
| TN                 | Southern Lawn          | 877-204-6873 |
| IA-NE              | Scott-Hourigan Co.     | 402-362-7711 |
|                    |                        |              |

Distributor inquiries welcome for open areas.

Rich Mfg., Inc. • P.O. Box 145 • Thorntown, Indiana 46071 www.convertiblemower.com • 765-436-2744