



In micro-injection systems, tiny holes are drilled near the base of the tree to accommodate a feeder tube. A pressurized capsule, filled with treatment fluid, is placed directly onto the tube.

Many companies are discovering new opportunities for higher profits and lower liabilities in today's micro-injection systems.

The cost, hazards and limitations of a spray-only program tend to adversely affect the bottom line. While there is little question about the effectiveness of a spray-only program, many companies are missing the opportunities of caring for larger trees and shrubs. With micro-injection, problems that previously had no treatment are easily controlled and prevented.

Tiny holes drilled near the base of the tree accommodate a feeder tube. The tube is inserted in the hole and a pressurized capsule, filled with treatment fluid, is placed directly onto the tube. In a few minutes, the tree drinks the fluid up. After about one season, the hole is completely callused over.

Cortese Tree Specialists of Knoxville, Tenn., sells injection only, largely to avoid liability risks.

"We just don't have much need for spray equipment any more because the liabilities are too high," says Jim Cortese. "Most of my headaches disappeared when we switched from sprays to micro-injection. Not only that, but it separates us from our competitors. Using the proper technique, we get better results with an injection than any spray program ever could."

A small fiberglass spray rig costs approximately \$2,500. Add repair, maintenance and material costs, and the cost rises to at

Tree injection a neat, clean method

Micro-injection of trees is flexible, unique and brings high earnings for a small investment.

by MARTY SHAW

least \$3,000 a year to provide this basic service to 100 customers.

There was early reluctance to micro-injections because of Bidrin, a restricted-use pesticide that is slow to be taken up by the tree. With the newer materials, not only can you leave the capsules unattended, but they come with user-friendly "warning" and "caution" labels that are not restricted. New materials also last longer: Imicide (containing Merit) works for up to two years while the longest spray residual is only about four weeks.

Other benefits of micro-injection are:

- It only kills active pests. This can be an important selling point to some clients.
- All the material is used. None is lost to evaporation, dripping and drift, nearly eliminating the threat of legal liability for chemical trespass.
- Applicator error is almost non-existent. Micro-injection materials are clearly labeled and color-coded. All materials are pre-mixed, so that no illness, injury or catastrophic damage is likely to occur.

Product choices

J.J. Mauget sells insecticides, fungicides, antibiotics and fertilizers for a multitude of problems. Mauget makes the smallest wound of all other capsule-type systems ($\frac{1}{16}$ -inch) and has been used throughout the country for more than 30 years. Cost starts as low at \$1.60 per unit. For more information, contact Nate Dodds at (800) 873-3779.

The Wedgle system uses a wedge-shaped insertion needle and a high-pressure



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injection unit to inject a pocket of material below the bark. Less damage is done to the surface of the tree, yet little is known about the wounding under the bark. According to Wedgle literature, some problems with leaking and premature failure of the needle may also occur. The cost of the injector system itself is \$375. Wedgle injectable insecticides cost \$2.08 per insertion and injectable iron is 58 cents per treatment. Contact Chip Dolittle at (800) 475-8163.

Alamo, by Ciba Turf & Ornamental, is a fungicide product that uses a capsule with an $\frac{1}{16}$ -inch diameter feeder tube to accommodate the larger volume of propiconazole. The cost per injection is \$6.60. Call American Arborist at (610) 430-1214. **LM**

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