# Fertigation for the residential market

he battle to secure and keep lawn care customers never stops. For a contractor, there's nothing worse than spending money and time to land a new customer, only to

lose others because of employee and/or service problems.

Fertigation systems are the perfect employees. They show up every day and always follow your instructions to the letter. You simply supply the fertilizer and other products you want to deliver. This not only saves you labor on each lawn, it also reduces your labor headaches and the risk of losing customers to poor performance.

Fertigation is the process of delivering small amounts of fertilizer each time you water, creating a consistently nutrient-rich root zone. The water carries the nutrients into the ground. It offers several advantages over the traditional practice of applying significant amounts of liquid or granular fertilizer several times a year, the biggest being that it produces healthier plants that are less likely to be stressed by diseases, insects or drought.

Fertigation was developed for agriculture in the 1960s and began finding widespread use on golf courses in the 1980s. The nursery industry embraced the technology early in its development, and now almost any operation of any significance uses it. More recently, fertigation has been gaining increased favor in providing improved turf quality on athletic fields.

# **Feeding turfgrass and landscape plants** with in-ground sprinkler systems offers hard-to-ignore benefits BY STEVEN KING

Lawn care professionals, whose livelihood depends on caring for residential and smaller commercial properties, have until recently never had an effective and affordable fertigation product available to them. Several manufacturers are now designing products that can provide reliable fertigation to residential properties. They're addressing some of the problems that have slowed the growth of fertigation of residen-

tial properties, including:

Residential properties are complex in design, especially higher-end properties likely to be interested in fertigation that may have grass, gardens, shrubs and occasionally plants like roses that require special treatment. Gardens require different amounts and, sometimes, different types of fertilizer than turf. Grass frequently has a hard time getting established on hillsides. Roses require low flow-rate drip systems.

Water is occasionally diverted from the sprinkler system to serve misting systems or water features, like ponds or waterfalls. One doesn't want fertilizer in misting systems or waterscapes.

Properties are usually undulating, with

creative hills, slopes, valleys and landscaping. They also have large front yards, small side yards and large backyards, shady and sunny areas, sidewalks, driveways, houses, trees and the like that make them different from 40 acres of corn, a golf course or foot-

This system is installed into the in-ground sprinkler system between the backflow preventer and the first zone valve.



ball stadium. Each of these areas has to be cared for properly and, in most cases, differently from the others.

### **Three types**

There are essentially three types of fertiga-



Installation and maintenance of residential fertigation systems is relatively simple.

tion systems: electric pumps, hydraulic pumps and Venturi systems. Each has its advantages, although Venturi systems are falling out of favor.

All of the systems can be installed for the homeowner for a few hundred dollars, and are fairly easy to install, operate and maintain.

The system we use on Lake City College's landscapes and athletic fields is the FertiGator system, and my students have installed and monitored several in residential settings, also. It allows complete control of fertilization by in-ground sprinkler system zone. The results have been excellent.

This particular system's controller allows for precise adjustment of the amount of fertilizer delivered to each zone to account for the differing needs of gardens,

hillsides, shady areas, newly seeded areas, front vards and backvards. It is excellent for drip systems required for a rose garden, and various versions can even allow different products to be delivered to different continued on page 26



# The thing practically crawls up walls.

This may very well be the most versatile tractor line on the globe. To be versatile, you've got to do two things first: be agile and be userfriendly. Lots of old guard tractors are so big and clunky that they're hard to maneuver. Yes, they're durable, but difficult. Options can cost you.

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areas. It can also skip a zone to miss a misting system or other water feature. It is versatile enough to use any liquid fertilizer, although the company sells organically-based fertilizers that work well.



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## **Selling fertigation**

For homeowners who have already bought into the concept of automatic watering, the leap to automatic fertilization is an easy one. There are several benefits of fertigation that justify it to the property owner.

A fertigation system delivers healthy plants that resist disease, weeds, insects and other problems naturally. Grass is one of the most aggressive plants in the yard. If the grass is

healthy, weeds will not be able to get established. No fluctuations, no burning or streaking, no flush of green that results in hay fields; just nice, consistent,

Fertigation systems offer lawn pros a new service to sell.

green growth. Leave those clippings to make the grass even healthier.

Fertigation decreases water use, according to an article in *Irrigation Business and Technology* magazine (January/February 2001 issue, "Using Every Last Drop"). Deeper root systems reach water throughout the root zone rather than only that which remains in the top couple of inches. As a result, less water is required.

Every homeowner that considers a fertilizer injection system has bought into the idea that it's more convenient and productive to automatically water his or her grass. Thus, it's easy to go to the next step of convincing them to automatically feed their lawn.

Today, everything is automated, from the garage door to the television to the dishwasher. Fertigation is the next logical step after irrigation. **LM** 

 The author is Professor of Irrigation Management, Lake City College, Lake City, FL.