LAWN, TREE CARE

Davey to reduce pesticide applications in tree and lawn care by up to 80 percent

The Davey Company of Kent, Ohio, will reduce the use of traditional pesticides by 75 to 80 percent in tree, shrub and lawn care services by 1990.

"We will realize over 30,000 gallons of pesticides that will not be applied in 1988," says Roger Funk, Ph.D., vice-president of technical and human resources. "We will realize that without reduced control and with no additional cost to the customer."

The company began what it calls its Plant Health Care concept in 1987. In five test territories, use of traditional pesticides on trees and shrubs were reduced by 50 percent. And use of herbicides and insecticides on turf were reduced by 40 and 50 percent, respectively.

"There are alternatives which are acceptable to the American public in terms of pesticide use," says Funk.

Davey surveyed 10,000 customers and found that they want less pesticide use, no more pests and no increase in prices. Funk and other Davey executives believe that the Plant Health Care concept is the answer to customer wishes.

One key development in pesticide reduction resulted when Davey researchers mixed soaps with reduced amounts of pesticides. They found that soaps not only control pests, but also appear to act as an adhesive, adhering the reduced levels of pesticides to leaves longer, providing a residual effect. To achieve further pesticide reductions, Funk and his staff are continuing to test alternative products like mineral, neem and citrus oils; and natural pesticides derived from plants such as rotenone and pyrethrum.

"We're going to increase the use of horticultural oil in summertime," notes Funk. "And I'm extremely im-



The patented "Customizer."



pressed with the results we've seen with neem oil."

Funk is likewise high on soaps for insect control. Says he: "With some insecticides, we've found that we can reduce applications to ¹/₁₆th of the original, mix with soaps and get the same level of control. In a petrie dish, the soaps will control all known species of lawn insects."

Funk adds that nematodes "look extremely promising."

Other techniques being used by Davey to reduce pesticide use are special pesticide timing charts keyed to the host, its "Customizer" spray injection system and low-drift spray equipment.

At presstime, Davey was considering marketing its "Customizer" to the lawn care market. The patented spray unit is specially designed for spot application of pesticides. Pesticides are not tank-mixed, but are secured in a separate reinforced tank and are injected in the fertilizer line only as needed. Another feature of the unit is a no-drift nozzle.

"It's not only the 'Customizer,' but it and the nozzle together that make it unique," Funk told a special press conference last month in Cleveland.

Brian Jeffers of Davey has invented a tree spray gun whose pressure can be adjusted by the technician at the gun without having to return to the truck. Use of this gun makes it easier to go from large trees to small shrubs or vice versa without worry of excessive drift.

The bottom line? Less pesticide use. Look at these figures:

Before implementation of the Plant Health Care program, Davey had projected the use of 27,900 gallons of tree pesticides in 1988. Since the move to PHC, that estimate has been downgraded to 6,900 gallons. Davey had planned, pre-PHC, to use 16,000 gallons of turf herbicides; now, they're figuring on 7,600 gallons. And the company had plans for 3,300 gallons of turf insecticides before PHC; that estimate is now 1,930 gallons.

One of the most important factors in making total Plant Health Care work is educating the customer, Funk believes. "Education is the greatest service we provide to the customer. Beginning in 1988, we will take a more pro-active approach to education." He notes that Davey lawn technicians may even offer to adjust customers' lawn mower cutting heights this summer.

Davey president Dave Cowan concluded the press briefing with this:

"We're not doing this to save money or to make money. We're doing it because we believe in it."



Funk

INDUSTRY

'Get off our duffs,' says Eliot Roberts

Turf is a multi-billion dollar industry. In fact, it is valued nationally at about \$25 billion. That's the good news.

Eliot Roberts, Ph.D., executive director of the Lawn Institute, says the value of the turf industry can be assessed in four ways:

 Facilities—golf courses, parks, cemeteries or home lawns.
Manufacturing—mowers,

fertilizers and chemicals.

3. Services—consulting, USGA specialists or commercial continued on page 14