

POTASSIUM from page 11

Ph.D. of Nebraska.

With this comes the ability to manipulate irrigation strategies, he says. Watering daily in light amounts lowered root density while watering deeply twice a week helped rooting. Adding potassium increased root density with both watering methods, Shearman says.

Recommendations are to apply potassium at equal rates with nitrogen. "Potassium uptake is proportional to nitrogen application," Shearman says. The lower the nitrogen application, the lower the potassium uptake.

"Potassium remains in the ionic form in the plant cell," says Shearman. He notes that evidence of potassium deficiency include older leaf tip and margin burn, reduced root and foliage growth and lower leaf tensile strength.

In addition, plants show an increased tendency to wilt and higher water use rate, which makes the plant more susceptible to stress. "In the end, it will affect the playability of golf turf," he says.

LM technical advisor Shearman spoke on potassium benefits at the Western Pennsylvania Turf Conference in February.

PESTICIDES

Kelthane returns to the shelves in 1988

Kelthane 35 miticide from Rohm and Haas is returning this year for use on ornamentals, flowers and turf, the company announced. EPA restored registration on Dec. 31, 1987.

EPA originally withdrew registration in 1986 because of DDT-related impurities in the miticide, according to the company. Concern arose over the affects of the miticide on birds. However, after an environmental impact study of Kelthane products, EPA concluded that the miticide posed no unacceptable risk to avian species.

In complying with EPA requirements, Rohm and Haas invested in manufacturing improvements to keep DDT-related impurities in Kelthane production under 2.5 percent, according to the company.

TURF

Is biological disease control imminent?

If research continues at its current

rate, dollar spot might be controlled by a bacterium, not a chemical. "I think there will be a breakthrough soon," says Lee Burpee, Ph.D., at the University of Guelph in Ontario, Canada.

Burpee defines biological control as "the suppression of a plant disease through activity of an organism other than man." Biological control falls into two categories:

1. The application of an organism to a plant, such as a bacteria, fungi or virus.

2. The manipulation of the soil and plant environment to enhance the development of suppressive microbes.

Burpee's research has focused on bacterium control of dollar spot and fungi control of snow mold. Burpee tracked down the fungus by finding what appeared naturally on turf leaves.

"What you may be seeing is suppression in the field," Burpee says. "It could be worse without the fungus."

With the fungus, Burpee got a great deal of disease suppression. "There wasn't a significant difference from the use of a chemical control."

The future of biological control is strong. The two areas for improve-

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ment over current research, according to Burpee, are to select better strains of microbes and to improve formulations.

"If we collect enough strains, we'll probably find some that are better than others," he says. Right now, the fungus is applied through pellets about the size of a sulfur-coated urea pellet. They are moistened, then applied to the plant. The fungus stays alive within the dry pellet.

"We hope to replace some of the materials lost from the market in the past few years.

Burpee spoke at the Canadian Golf Course Superintendents show in Toronto.

INDUSTRY

Law Doctor hosts 500 franchisees

About 500 Lawn Doctor franchisees, employees and their guests started off the 1988 season with three-day seminars designed to boost productivity.

Seminars were held in Las Vegas (Jan. 19-21) at the Golden Nugget and Atlantic City (Feb. 2-4) at the Trump Plaza.



Ewald Alstadt, Lawn Doctor field representative supervisor, conducts a workshop on servicing optional sales, one of the nine different workshops that attracted nearly 1,100 attendees at the Lawn Doctor eastern regional seminar.

"We changed from small meetings throughout the 23 states in which we operate," said Russell

Frith, president and CEO, "to two large meetings."

The meetings, he said, "give our

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