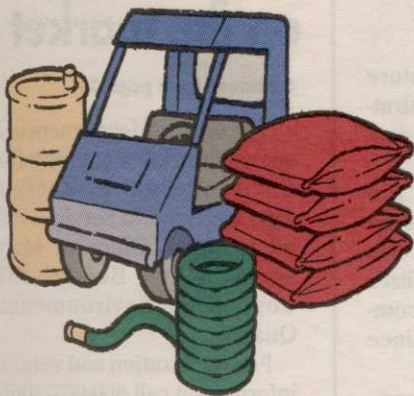


## Briefs



## SENTINEL ON TRIAL THIS SUMMER

DES PLAINES, Ill. — Field trials in 11 states involving a new systemic turf fungicide, Sentinel 40WG, are planned this summer by Sandoz Agro, Inc., under an EPA-approved Experimental Use Permit.

Sentinel GW is a broad-spectrum, long-lasting systemic fungicide for the golf course market. Diseases included in the EUP are summer patch, dollar spot, brown patch, red thread, stripe smut, rust, copper spot, gray leaf spot, gray snow mold, pink snow mold, southern blight and necrotic ring spot.

## SMITHCO APPOINTS MILLER

Emil Miller has been appointed as marketing manager for Smithco's Southeastern region, according to President Ted Smith.

Miller will be responsible for all phases of marketing for Smithco distributors and end users throughout 13 southeastern states and the Caribbean.

Miller, based in Fort Lauderdale, was formerly with DeBra Turf & Industrial Equipment as consultant for the golf industry on Florida's east coast. While at DeBra, he was recognized in each of the past two years for outstanding performance in sales and service.

## FREE PUMP OFFER FROM ROOTSINC.

ROOTSinc. is offering a free Reike model MR60-CPD dispensing pump to all first-time purchasers of the 55-gallon drums of ROOTS, ironROOTS and NoburN.

The pump, normally a \$30 value, offers 360-degree dispensing, while delivering 10 ounces per stroke.

This pump offer is available through 1992. For more information call 203-786-5295.

## DEXTER, FORD NEW HOLLAND TEAM UP

Dexter, MI-Sweepster, Inc. recently reached an agreement with Ford New Holland, Inc. to purchase Ford's model 710 Leaf Loader product line. Financial details were not released.

Calling it a "strategic growth acquisition," Sweepster Vice President Jim Bareden said the move "solidifies our place in the fast-growing waste recycling industry." The deal calls for a purchase of all machines and parts inventory along with all tooling patents and documentation.

The Model 710 Leaf Loader is a diesel-powered machine towed by a dump truck. A beater and brush in combination lift the leaves off the street and feed them to a thrower.

## Ciba-Geigy, biosys enhance marketing relationship

PALO ALTO, Calif. — Ciba-Geigy and biosys, a manufacturer of biological insecticides, have signed a research and development funding and international marketing pact.

Under terms of the agreement, Ciba-Geigy will provide biosys with \$5 million over two years for research and development of beneficial nematode strains and formulations. Ciba-Geigy will also be responsible for the promotion and marketing of biosys' nematode-based products.

In 1991, Ciba-Geigy became the exclusive distributor of biosys products in the United States for the turf and ornamental market. Ciba-Geigy's first biological insecticide product, Exhibit, was developed and manufactured by biosys.

The active components in biosys' range of biological insecticides are beneficial nematodes, microscopic organisms that kill a host of soil-dwelling insect pests. Nematodes are designed to be harmless to humans, plants and animals, leaving no harmful residues in the soil or ground water. In fact, the United States and several European countries exempt nematodes from all registration requirements.

The newly signed, 15-year agreement grants Ciba-Geigy exclusive rights to market and distribute biosys' present and future beneficial nematode-based products for insect control in the agricultural and horticultural crop markets worldwide, except the United States.

Continued on page 48

## PSI delivers 3,000th pump

Dallas-based Pumping Systems Inc. recently delivered its 3,000th pump station to Coosaw Creek, a new golf project currently under construction in Charleston, S.C. Greenwood Development Co., owners of the new project, have chosen Arthur Hills to design the new Coosaw Creek Country Club, while contractors Paul Clute & Associates have been retained to build the course. Jon Malmberg of Watermark Consultants, an irrigation consulting firm based in Charlotte, will provide irrigation design and specifications.

PSI pump station number 3,000 was sold by Smith Turf & Irrigation, PSI distributor for both the North and South Carolina territories. For the past six years, Smith has been PSI's Distributor of the Year.

Coosaw Creek's milestone pump is a 2500 GPM, VFD system featuring PSI's new PumpWatch software package. PumpWatch is now standard on all PSI stations with PLC logic. The VFD drive, as well as all electrical components, will be American-made Allen-Bradley.



Polymer application over a wide area requires heavy, specialized equipment, and has been described as "surface disruptive."

## Pulling more than their weight

### Ongoing experiments prove polymers useful in droughty soils

By Hal Phillips

Cross-linked polyacrylamide is a mouthful, but this granular polymer has impressed industry observers with its ability to soak up free water in soil and store it for the plant's use.

Under a microscope, polymers look something like a honeycomb. So it's not surprising the rock-salt-like substance can hold up to 400 times its weight in water.

While polymers have already been used in producing disposable diapers and cat box filler, several modern cross-linked polyacrylamides have hit the golf course market: Hydrosorb, Terra-Sorb, Water Grabber, Soil Moist, Water Lock and Broadleaf P4, to name just a few.

"Imagine a plate full of spaghetti," suggests Dr. Jeff Nus, an independent consultant and former member of the Horticulture Department at Kansas State University. "The gaps and holes between the strands contract and expand, giving the cross-linked polyacrylamide its wa-



Polymer crystals start out small — but after absorbing several hundred times their weight in water, they grow accordingly.

ter-absorbing capabilities.

"When the individual crystals... are injected into a turf/green situation, the crystals begin to hydrate and absorb the free water and fertilizer picked up by the water molecules. As leaf transpiration creates a demand, both the water and fertilizer held in the soil profile and hy-

Continued on page 45

## Feds display recycled goods June 29-30

By Peter Blais

Buyers representing the U.S. Department of Defense's 250 golf courses will be among those attending the federal government's first trade fair to showcase recycled products in Washington, D.C. on June 29-30.

President Bush ordered federal agencies last October to accelerate their purchases of recycled products. Federal purchases represent the single biggest market for recycled products.

Additionally, representatives from state and local governments are being encouraged to attend, as well as manufacturers, entrepreneurs, investors and corporate procurement specialists.

"The president has required us to promote cost-effective ways of using recycled materials. We are favoring the purchase of such

items," said David Moffett, the U.S. Navy's golf specialist.

Chemicals and fertilizers in recycled containers, benches, signs and other products made from recycled materials are used on golf courses, Moffett noted.

Many golf courses and other government facilities are looking at composting programs, added Nancy Stehle, deputy director of the environment in the Office of the Assistant to the Secretary of the Navy.

The fair is expected to draw 2,000 attendees and 180 exhibitors to the Washington Hilton. Admission and booth space are free.

State officials who have made significant strides in purchasing recycled products will offer training sessions to vendors on how to enter the government marketplace.

Continued on page 44



# Radio waves keep carts off greens, tees

BERWYN, Pa. — Erratic, irresponsible golf cart use accounts for millions of dollars in course damage every year. Many superintendents lie awake at night, dreaming of a futuristic world where carts turn themselves off before maiming an apron or mashing a tee.

Well, the future is now.

Cartrol, a division of the Invisible Fence Company, recently unveiled a system that uses radio frequencies to direct golf cart traffic away from protected greens and fairways,

without altering course appearance with barriers or painted lines.

The Cartrol system consists of a thin boundary wire buried six inches underground and carrying a low-frequency radio signal. When a golf cart equipped with a Cartrol system crosses the radio-controlled boundary line, a receiver, installed in the electrical system of the cart, picks up the signal and causes a temporary electrical failure in the cart's forward gear.

ward gear.

A warning light on the dashboard tells the driver the cart will move only in reverse. Once away from the boundary line, the forward gear is restored to normal function.

Unlike some electronic add-on devices for individual carts, Cartrol is a complete system that can be used to create boundaries anywhere on the course. Without altering the configuration of buried wires, the radio field can be increased or decreased to change cart traffic patterns.

Cartrol has test-marketed the new cart system at Phoenixville Country Club in Valley Forge, Pa. During 1992, the firm plans to make the system available in the Philadelphia area only, according to company spokesperson Karen Rakoczy.

The system carries an estimated price tag of \$1,500 to \$2,000 per green or tee. However, Rakoczy said the cost is determined only after design has been finalized.

For more information call 215-651-0999.

**Daconate® 6. The first word in grassy weed control. Bahiagrass. Barnyardgrass. Crabgrass. Chickweed. Dallisgrass. Nutsedge. Sandbur. Woodsorrel. Goosegrass. Cocklebur. Johnsongrass. Buckhorn. Clover. Common Chickweed. Curly dock. Dandelion. English daisy. Ground ivy. Knotweed. Lambsquarters. Mallow. Mouseear chickweed. Morning glory. Pigweed. Plantain. Purslane. Ragweed. Red clover. Red sorrel. Speedwell. Stitchwort. White clover. Wild garlic. Wild onion. Yarrow. 2 Plus 2. The last word in broadleaf weed control.**

Two proven postemergence performers. Broad-spectrum. Effective. Cost efficient. It adds up to more for your herbicide dollar.

Daconate 6 gives you economy and convenience, with an excellent built-in surfactant for first-rate control of tough grassy weeds. It's the ideal warm weather postemergence herbicide.

2 Plus 2 (MCP + 2, 4-D Amine) delivers superior control of hard-to-control broadleaf weeds on a wide variety of turfgrasses.

And 2 Plus 2 contains no dicamba. So it can be used in turf areas which include trees and shrubs without risk of root pruning on the ornamentals. A major worry with some other products.

For real value in grassy and broadleaf weed control, make your postemergence herbicides Daconate 6 and 2 Plus 2. That's the word.

ISK Biotech Corporation, 5966 Heisley Road, P.O. Box 8000, Mentor, OH 44061-8000



Always follow label directions carefully when using turf chemicals. Daconate® 6 is a registered trademark of ISK Biotech Corporation.

## Flow control for micro sprinklers

A barbed coupler flow, new from Hendrickson Bros., is designed to optimize performance of micro sprinklers.

Model FC77 is now available in eight flow levels: 6, 8, 10, 12, 14, 17, 20, and 25 GPH. Each complements the type and pattern of the individual micro sprinklers.

The new coupler uses the same patented flow-control system proven on other Hendrickson products. For quick installation, a barbed fitting connects either in-line or at the base connection of 1/4-inch tubing.

To assure long-term service, with minimal maintenance, the FC77 features high-strength plastic housing for chemical and impact resistance.

For more information, call 714-737-6822.

## Ciba-Geigy, biosys pact

Continued from page 43

The U.S. market for professional turf and ornamental is covered by the separate 1991 agreement between biosys and the U.S. subsidiary of Ciba-Geigy Ltd. The new agreement excludes sale of biosys products in the professional turf insect-control segment in Japan.

biosys products are marketed in the U.S. and Europe under the brand names BioVector and BioSafe-N (insecticides for a broad range of agricultural applications) and Exhibit Biological Larvicide, for control of turf and ornamental insect pests.

BioSafe products became available in the United States this year through retail distribution by the Ortho Consumer Products Division, Chevron Chemical Company, as part of the Orthoganics product line.

"This agreement with biosys attests to our strong commitment to commercialize effective biological pesticides that are harmless to the environment," said Dr. Heimo Brunetti, corporate director and head of the Plant Protection Division at Ciba-Geigy Ltd. "The efficiency of biosys products against a wide spectrum of insect pests has been confirmed over the last three years through our joint field development trials."