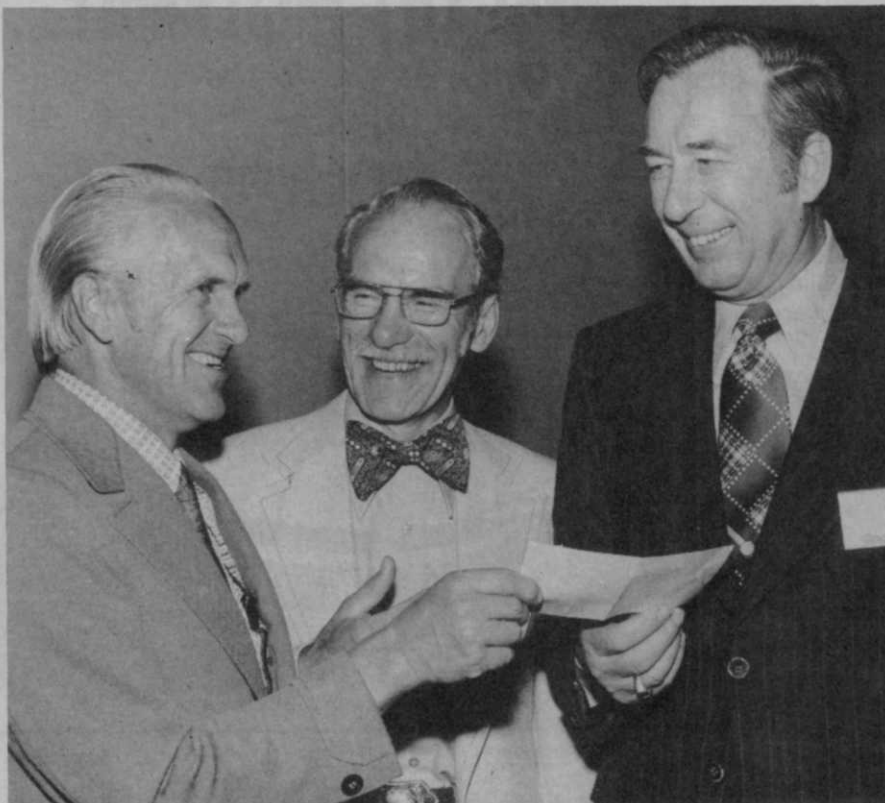


industry news and newsmakers



Robert Davidson (right), president of the Southern California Turfgrass Council, presents a \$3,000 check to Dr. Victor B. Younger (left), professor of agronomy at the University of California, Riverside (UCR). The check represented the turf industry's initial grant in support of turf research at UCR. Looking on is John A. Van Dam, Co-operative Extension farm advisor with turfgrass responsibilities. The presentation was made during the banquet program of the 1974 Turf and Landscape Institute Anaheim.

Ohio Names Martin

David P. Martin was named executive secretary for the Ohio Turfgrass Foundation (OTF) at their recent board of trustees meeting. The appointment was necessitated by the resignation of Robert W. Miller.

Miller had been the foundation's only previous executive secretary, having served since 1966. The new secretary's duties include coordinating the 1974 Ohio Turfgrass Conference and Show, publishing several newsletters during 1974 and more clearly defining responsibilities for OTF committees.

San Diego Drip Exhibit Slated for July 11 - 13

One of the newer innovations to appear on the irrigation market has been the drip concept. Little more than a novel idea for watering plants four years ago, it has spawned a highly competitive business among today's irrigation equipment manufacturers.

New drip equipment is appearing on the market almost monthly. A nurseryman or sod grower interested in drip irrigation has some 40 different water emitters from which to choose for his particular drip system operation.

Most of the emitters now being manufactured can be seen in the office of Sterling Davis, agricultural engineer with the U.S. Department of Agriculture — Agricultural Research Service, at the University of California, Riverside.

"There isn't a dripper here that won't work satisfactorily providing its water source is cleaned up and

Foy Resumes Position

Dr. Chester L. Foy, Professor of Plant Physiology at Virginia Tech, has been reappointed as associate editor of **Weed Science**, the official bimonthly professional journal of the Weed Science Society of America (WSSA). Foy has served the society in an editorial capacity intermittently for about 15 years.

Fylking, Official Grass of Expo '74

While Expo '74 World's Fair visitors are admiring the fabulous displays and exhibition centers they will be walking on Fylking Kentucky bluegrass.

Flyking (being unloaded at left) was chosen as the fair's official grass for its beauty and hardiness, two factors necessary to insure pleasant surroundings while withstanding heavy pedestrian traffic from the projected 4.8 million visitors.

The sod was grown by the Rede Turf Sod Farm, Hubbard, Ore., from seed donated by Jacklin Seed Co., Spokane, Washington. The sod is unloaded in preparation for laying throughout the 100-acre site.

The fair, located on two islands and on the banks of the Spokane River in the heart of downtown Spokane, will be transformed to a city park after the exposition.



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managed right," Davis said. "That's the important thing about drip irrigation, of course, cleaning up the water, using an adequate filtering system."

Davis says the emitters can be grouped into these classifications:

(1) **The long passageway.** Water travels around a spiral within each emitter, or a long tube, slowing from friction, to reduce the water head, or pressure.

(2) **The small diameter insert.** A tiny plastic nozzle is inserted into plastic water tubing. Sometimes the tubing has a protective flap to keep dirt from the nozzle.

(3) **Flushing.** The emitter has a ball or other device to control the water. When water first enters from the supply line, it can flow freely, flushing out the opening. As pressure builds up in the line, the ball closes the large opening, leaving only a tiny orifice for water emission.

(4) **Line sources.** The supply line, either of plastic or ceramic material, oozes water through small openings at a set rate according to the pressure within. This system can sometimes be flushed by increasing the water pressure temporarily.

(5) **Adjustable.** The emitter can be individually adjusted for water flow.

(6) **Twin wall.** This system consists of a double tube. The inner tube, about an inch in diameter, carries the main water supply. Water leaks through holes at regular intervals into the smaller passageway in the outer tube. From this outer passageway the water escapes through the outer wall, which has about four times as many holes as the inner wall, under greatly reduced pressure.

Small emitter orifices and low water pressure are common to most systems, Davis noted. All of them require pressure control and filtration systems.

The 2nd International Drip Irrigation Congress in July, meeting at San Diego's Sheraton Harbor Island Hotel, will have the most comprehensive exhibition of drip irrigation equipment of any showing to date, according to Davis. The equipment exhibits will open July 11 and remain on display through July 13.

More than 90 papers will be presented during the Congress program. Researchers from 14 foreign nations and the U.S. will present papers categorized into

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seven subject areas: drip irrigation progress; methods and mechanics; physics and hydraulics; water use; salinity; fertilizing; and crop response.

The Congress program includes A one-day field tour of drip irrigation installations in greenhouses, orchards, vineyards, vegetable fields, and nurseries. The tour will be limited to 250 persons, and preference will be given to out-of-country and out-of-state guests.

The Congress is being co-sponsored by the USDA - ARS and the University of California. Preregistration is \$25 for the Congress participants and \$10 for their spouses. Deadline for preregistration is June 1. Registration fees after June 1 will be \$35 and \$10. Preregistration materials and a preliminary program for the Congress can be obtained by writing to International Drip Irrigation Congress, P.O. Box 2326, Riverside, CA, 92506.

Nitrogen Saving Solution

Many sod growers are looking for ways to conserve the use of nitrogen fertilizers they have available. One fertilizer-saving answer is a new nitrogen management product to be marketed by Dow Chemical.

According to the company's researchers, the key is in inhibiting the action of soil bacteria that rapidly convert ammonium nitrogen to nitrate ions. These ions are readily leached from the soil or converted to nitrogen gas and lost to the atmosphere. The rate of nitrification depends on weather conditions, soil type and condition, time of fertilizer application and other factors. Losses greater than 25 to 30 per cent

fall-applied nitrogen fertilizer are not uncommon.

With the use of N-SERVE, Dow's new product, the ammonium nitrogen is slowly converted into nitrates and is more readily available for plant growth in a controlled amount over a long period of time. Plant losses can be reduced and yields increased because the nitrogen is available longer in the plant root zone.

Waterhyacinth Clearance Announced by Rhodia

The Environmental Protection Agency recently accepted two products manufactured by Chipman Division of Rhodia, Inc., for control of waterhyacinth. The products are Visko-Rhap Oil-Soluble Amine A-3D and Chipman 2,4-D Amine No. 4.

Visko-Rhap is a controlled drift formulation product for use where susceptible crops are growing nearby or in areas where drift may harm ornamental trees and shrubs. 2,4-D Amine No. 4 can be used in areas such as marshes where drift will not cause problems.

Both products can be applied by air, boat or ground sprayer. However, the company advises that you consult your state game and fish or water control agency prior to application.

Swift Forms Trade Unit

Worldwide shortages of fertilizers, fertilizer raw materials and other basic chemicals have necessitated the formation of international trade units by many U.S. companies. Swiftchem International, one of the newer overseas trade units, was established to place Swift in a position to deal directly

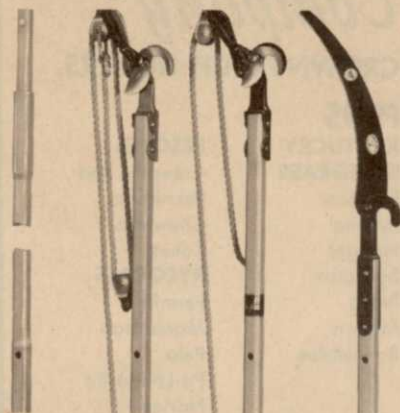
with key material sources in other countries.

The new overseas trading organization will be a division of Swift Chemical and will headquarter in Chicago.

Edward R. Vrablik, president of Swift, said that "in the near term, growth of domestic fertilizer industry sales volumes will depend upon expanded imports, particularly nitrogen materials and possibly potash and selected grades of complete fertilizers."

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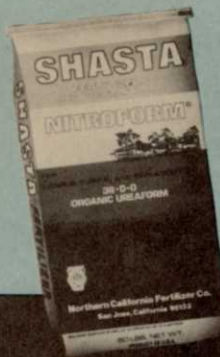
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Toro, Spartan Fund Study

In an effort to ensure the continuation of research into the mysteries of turfgrass shade adaptation, the Toro Co., of Minneapolis, and Spartan Distributors, Sparta, Mich., presented Prof. James B. Beard, of the Dept. of Soil and Crop Science at Michigan State University, with a \$4,000 grant.

Beard hopes to discover how grass adapts to shade or what can be done to breed grass best suited to growing in the shade.

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A piece of cake it ain't. But these signs were designed to celebrate the Westchester Tree Protective Association (New York) on its 40th anniversary. From left: H. Palmer Starnier, Harrison, N.Y.; Jack Flanagan, Elmsford, N.Y., current president and John Crockett, who designed and made the signs.

Experimental Insecticide Controls Japanese Beetle

Fensulfothion, approved for control of nematodes, proved the best of 15 insecticides tested last year at the USDA Station in Wooster, Ohio for control of Japanese beetles resistant to approved insecticides.

There are increasing reports of Japanese beetle populations developing resistance to cyclodiene insecticides like chlordane, dieldrin and heptachlor. Fensulfothion has not been approved for control of Japanese beetles.

Kenneth O. Lawrence, USDA entomologist in the Agricultural Re-

search Service, recently reported on work conducted in cooperation with Harry D. Niemczyk, entomologist at the Ohio Agricultural Research and Development Center in Wooster. Lawrence spoke at the 1974 meeting of the North Central Branch of the Entomological Society of America.

Ten insecticides were applied on the golf course at Wooster on August 24, 1972. Fensulfothion applied at the rate of 10 pounds per acre gave 100 percent control by October 16. Diazinon was next best with 79 percent control.



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Fifteen insecticides were tried against resistant grubs at three locations in April and May 1973, when most of the larvae were in the third stage. Fensulfothion at 10 and 6.4 pounds per acre gave excellent control.

"Aside from three other experimental compounds," Lawrence said, "nothing approached the activity of fensulfothion where the thatch layer was a half inch or more thick.

In other 1973 tests on golf courses, fairways were treated with 1, 2.5, and 5 pounds of fensulfothion per acre. "We consistently obtained excellent and rapid kill," Lawrence said. We showed that spring applications retain efficacy through the summer and will control the new generation.

After one calendar year the 10-pound rate showed evidence of breaking down and killed only 63 percent of the new generation. Furthermore, granules applied at the 1 and 2.5-pound rates at one golf course remained on the surface for periods of 7, 11, and 15 days during the heat of August before rainfall washed the toxicant into the soil.

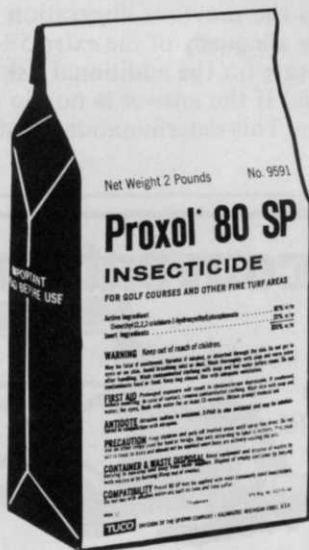


It was back to school for the distributorship personnel of Hahn, Inc. A recent series of service schools was conducted to train its representatives in the maintenance and servicing of its turfgrass equipment. Hopefully the trainees will use the expertise gained from this advanced course to instruct individual groups of golf course superintendents and other key maintenance people in the care of Hahn equipment.

Take the guesswork out of turf insect control

Diagnostic Aid from **TUCO**

Many turf insect larvae are night feeders, so the first evidence of their activity frequently is damaged turf. Diagnostic Aid, applied to turf as directed, causes insects to emerge to the surface within 10 minutes. They can be identified and counted to determine the level of infestation and whether an insecticide should be applied. It also can be used after insecticide application to measure the control obtained.



Proxol* 80 SP Insecticide from **TUCO**

Proxol is the one insecticide developed especially for use on fine turf and ornamentals. Sod webworms and cutworms are two major groups of turf insects controlled by Proxol. It is estimated that each sod webworm larva can chew up 20 square inches of turf in its average life span of 20 to 40 days; the cutworm larva can devour up to 36 square inches. With 300 to 500 larvae generated from each adult in a period of 10 to 21 days, it becomes apparent why early detection and control are desirable. Using Diagnostic Aid and Proxol together lets you program insect control.

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One bottle of Diagnostic Aid FREE in each case of Proxol 80 SP.



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