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## Diazinon



# Industry News

## EPA establishes new toxic office

EPA Deputy Administrator John R. Quarles has announced the formation of a new office of Toxic Substances, headed by an assistant administrator as authorized by the new Toxic Substances Control Act of 1976.

Quarles said Kenneth L. Johnson, 47, EPA deputy regional administrator in Boston, has been named acting assistant administrator for Toxic Substances.

"We are establishing this office immediately in order to begin a sound and aggressive toxic substances program," Quarles said. He added that the existing Office of Toxic Substances, currently under the assistant administrator for water and hazardous materials, will be transferred to the new assistant administrator's office.

An internal study of the agency will be made to determine if other programs, such as the office of pesticide programs, should be transferred.

## Shell picks name for insecticide

Pydrin has been selected as the name for Shell Chemical Company's new synthetic pyrethroid insecticide.

Formerly designated as SD 43775, the new compound was extensively field tested in all major cotton growing regions of the United States during the 1976 season under an experimental use permit from the Environmental Protection Agency.

This past season, Pydrin (SD 43775) was tested by cooperating cotton growers. Effective control was demonstrated on such important insect pests as the tobacco bud-

worm, cotton bollworm, pink bollworm, cotton leaf perforator and boll weevil.

U.S. patent rights for this pyrethroid compound are held by Sumitomo Chemical Co., LTD. Development in the U.S. is being conducted by Shell under agreements with Sumitomo.

## UC tree book available

"Trees of the Berkeley Campus," one of the most popular publications of the University of California, has been reprinted and is now available to the public.

The publication describes hundreds of trees and shrubs on the Berkeley campus. Latin and common names are given as well as a description and information about each species. It also lists the location of plants by their proximity to buildings and landmarks.

To obtain a copy of "Trees of the Berkeley Campus," send a check or money order for \$5.00 plus sales tax, payable to The Regents of UC, to Agricultural Publications, 1422 South 10th Street, Richmond, California 94804.

## 39 states split forest profits

Checks totaling more than \$49 million have been distributed to 39 states and Puerto Rico as their share of more than \$195 million earned from the sale and use of national forest products and services in the fiscal transition quarter.

The USDA said the \$49,049,338 returned to the states represents 25 percent of the money collected by the forest service from the sale of timber, and from grazing, recreation, minerals, and other land use

charges on national forests between July 1 and Sept. 30 of this year.

## Velsicol continues registration fight

"Despite the disappointing results of Velsicol's appeal to the U.S. Court of Appeal concerning the suspension of certain uses of heptachlor and chlordane, Velsicol intends to continue its efforts to maintain the registrations of these pesticides through further efforts in the courts and the cancellation hearings being held by the EPA," according to Robert M. Morris, company president and chairman.

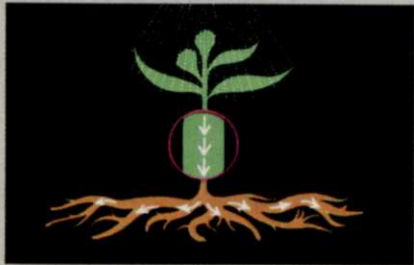
"We believe that the benefits from the proper use of these insecticides far outweigh any risk of exposure to man," said Morris, "and we will continue to support our belief and experience with these products."

## U.S. receives Bonsai trees

Fifty three rare bonsai plants have been presented to the American people by the Japanese government to commemorate the United States Bicentennial. The collection, which includes one specimen 350 years old, was described as an "extraordinary gift" by former Secretary of Agriculture Earl Butz at the dedication ceremony in Washington. The plants were presented by the Nippon Bonsai Association in Tokyo. Some were donated by private sources, including the Japanese Royal Family, and others were purchased by the Japan Foundation.



# There's never been a herbicide like this before.

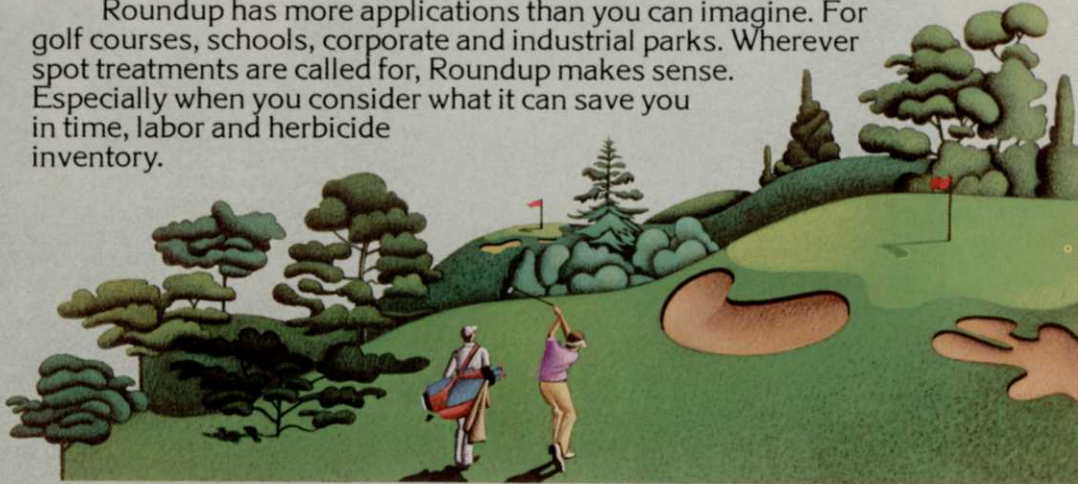


**"Translocation" is the key.**

Roundup is applied to the weed foliage, absorbed through the leaf surface, and "translocated" throughout the entire plant. In this way, Roundup effectively destroys most weeds—roots, rhizomes and all.

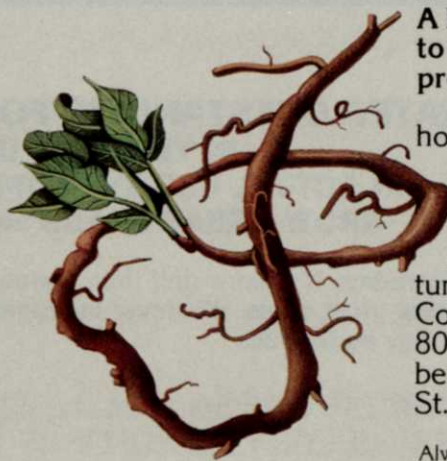
Roundup® herbicide by Monsanto is powerful enough to control many of the toughest annual and perennial weeds in one application. Once, several different herbicides and frequent repeat treatments were needed. Now, one man with a backpack or tank sprayer can handle many of your weed cleanup chores in one treatment with Roundup.

Roundup has more applications than you can imagine. For golf courses, schools, corporate and industrial parks. Wherever spot treatments are called for, Roundup makes sense. Especially when you consider what it can save you in time, labor and herbicide inventory.



**Roundup destroys most emerged annual and perennial grasses and weeds.**

Including bluegrass, bermudagrass, quackgrass, bindweed, johnsongrass, fescues, and vaseygrass.



**Roundup. A herbicide that gets to the root of the problem.**

To find out how to put Roundup at the root of your weed problems, write: Roundup, Monsanto Agricultural Products Company, C3NJ, 800 North Lindbergh Blvd., St. Louis, Mo. 63166.

Always read and carefully follow the Roundup label directions.



**Roundup has no residual soil activity.**

And you know what that can mean for your landscaping program. However, for seedling weed control, simply follow your Roundup treatment with an effective residual herbicide.

**Monsanto**





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"ADELPHI" HAS BEEN CHOSEN by the Plant Variety Protection Office, U.S.D.A., AS A STANDARD FOR DARK GREEN COLOR to which all bluegrasses applying for plant protection will be compared for color classification.

(Use of this statement does not indicate any approval or recommendation of Adelphi by the U.S.D.A.)

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Other International Inquiries: **Northrup, King & Co., Inc.**, Minneapolis, Minn. 55413



## BUYING AUTOMATIC IRRIGATION

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*Greens are lush at Columbus Country Club in Ohio since the installation of a new irrigation system.*

*After 44 years with the same irrigation system, the Columbus Country Club decided to replace it. Here, Superintendent Steven Kennedy tells how he went about doing so and offers some advice to superintendents who plan to replace their systems.*

Once the decision to replace our irrigation system had been made, I took my notepad and camera and began traveling. I visited about 15 courses, studying their systems and asking questions. Generally everyone said they liked their present systems but when I asked about the kinds of problems they had, few would answer.

The difficulty was that very few people will admit to having made a mistake. Nevertheless, an educated eye can spot trouble. I also walked

around the maintenance buildings. If there were sprinkler parts there, it was an indication the system was not quite as good as it could be.

After the visits, I started investigating product lines. I looked at everyone's product carefully. I recommend taking them apart, watching them in operation, timing them to see which ones are accurate. This is the superintendent's job. He is the one who is going to have to live with the system.

Check to see if the system is easy to repair. Compare your replacement part availability and the cost of replacement. If the superintendent is not involved in the decision as to which system to purchase, I believe the club is making a big mistake.

Installation is all important. If the system isn't put in right, you're just kidding yourself. Many superintendents told me equipment is comparable but the installation makes the difference. If an installer won't give you a list of all of the jobs he's

*Continued on Page 18*





# How to protect your turf from the world's toughest critic: the golfer.

**With this formidable array of armament on your side, you have a broad spectrum turf management program that can ward off just about any attack from weeds or fungi or golfers.**

And you can manage it all with surprising economy. Chipco® products protect the green of your turf without straining the green in your budget.

Just try any one of them, and you'll want the entire arsenal. Because once you use a Chipco anything, you'll soon be using Chipco everything else.

**Chipco Bucril®** gives early control of broadleaf weeds in newly planted grasses for sod or seed production.

**Chipco Turf Herbicide MCPP** controls clover, chickweed, knotweed and other surface creeping weeds and is safe and effective for use on most bent grasses.

**Chipco Turf Kleen** is a broad spectrum herbicide that controls broadleaf and surface creeping weeds with a wide margin of safety around trees and shrubs.

**Chipco Spot Kleen** is a systemic fungicide for control of dollar spot, Fusarium blight, stripe smut, large brown patch and copper spot.

**Chipco Thiram 75** prevents and controls snow mold, large brown patch and dollar spot. Used with Spot Kleen, it offers a complete disease control program.

**Chipco Microgreen Liquid** prevents chlorosis which results in long lasting deep green color, more root growth and less desiccation.

**Chipco Turf Herbicide D** is a general purpose broadleaf herbicide ideally suited where economical control is desired.

**Chipco Spreader Activator** is a quality adjuvant to increase the efficiency and effectiveness of turf chemicals.

**Chipco Crab Kleen** gives economical and selective post-emergence control of crab grass, chickweed and other grassy weeds in established turf.



Rhodia Inc., Agricultural Division, Monmouth Junction, New Jersey 08852



# BUYING AUTOMATIC IRRIGATION

Continued from Page 15

done or won't take you to see jobs he has done, don't use him. Always check his reputation.

Another recommendation is to check your mains. Ours are cast iron. I had two engineers verify their condition before installation. Your

new system won't be successful if your mains aren't good.

Once we had made our decision to go with a RainBird system and selected our installer, everyone was pleased with the results. The pipe was pulled about 18 to 24 inches un-

derground with a vibratory plow with no trenching. We played all four rounds of our club championship while the work was being done without a single complaint.

Our greens are small and I decided to go with two heads in front and two in the back for each valve. You can literally do anything you want with automatic irrigation but if you get too complex you are just defeating your purpose.

Also in the new installation consider snap valves. We put in a snap valve at each green. This fall we planted 145 trees. They need water and now it is readily available. The valves are covered with a valve box that can be opened with a special tool quite easily but is otherwise tamper-proof.

Once your system has been customized to suit your needs and installation is completed, you should have a system you can be proud of. And one that makes your job easier.

*Steven Kennedy presented this report at the Ohio Turfgrass Conference and Show Dec. 8, in Columbus. More than 1200 people attended this most successful conference. WEEDS TREES & TURF will be publishing more topics covered at the conference in later editions.*



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ST. LOUIS, MO., Thurs., Feb. 10 Holiday Inn—Riverfront	_____	_____
MILWAUKEE, WISC., Fri., Feb. 25 Hoffman House, 251 N. Mayfair Rd.	_____	_____
ELMHURST, ILL., Tues., March 8 Holiday Inn, 624 N. York Rd.	_____	_____
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They cut the grass and the workload. In one pass. When a Bolens Mulching Mower cuts the grass, it also cuts and recuts the clippings into tiny particles that are blown down into the turf. There, they disappear and quickly decompose. No clippings. No clean-up. No thatch build-up. The fine mulch actually feeds the turf while the crew moves on to other jobs.\*

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\*For a free copy of a University study on nitrogen return, contact FMC Corporation, Port Washington, Wisconsin 53074.

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*The author, Don Davison, is an irrigation contractor in Cleveland, Ohio.*

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**T**oo much — too little — too late — These are the three big moisture problems which must be solved to acquire healthy plants through proper root structure.

As an irrigation contractor for over 13 years, Irrigation Supply has installed a great number of sprinkling systems to correct the latter two problems in lawns, shrub bed areas, cemeteries, golf courses, baseball and football fields, and wherever the lack of moisture was the basic problem. After some years, it became apparent that the first problem — too much — was far more important and of greater concern than the combination of the other two.

The supplying of adequate moisture to dry areas is purely academic and can be resolved by installing an engineered sprinkling system. However, the residual water from sprinkling, often supplemented by rainfall, will find isolated low areas and proper drainage of those areas must be provided if the plants are to survive.

Through a vast amount of research, plus trial and error with a

large number of differing sizes and styles of drainage systems, we determined that a one inch plastic pipe, with quarter inch holes drilled every 6 inches throughout the length, was part of the answer to this problem. We designed the tools with which to install this pipe and have made a multitude of installations during these past five years.

The vibratory plow, which we designed to pull the pipe through the soil at the desired depth of from 4 to 7 inches, is hydraulically controlled to conform to the contour of the terrain and achieve proper drainage. The right depth is determined by sampling to learn the composition of the soil and root structure.

The plow, attached to the machine by a cutter shaft, is hydraulically inserted into the soil to the desired depth before it is caused

to vibrate. This vibration compacts a one and a half inch tunnel into which the pipe is pulled by a 'Chinese Finger' attached to a hook on the plow, and it also shatters the soil to a radius of several feet from the plow.

On the surface, the only visible evidence of the installation is a small cut, approximately a quarter inch wide which will disappear after several waterings. But if immediate use without visible evidence of the installation is desired, the small slit can be dressed with coarse silica sand or other material.

One installation of interest might be the 13th green on the golf course of the Chagrin Valley Country Club. This green is in front of and at the base of a cliff-like rock area from which water would weep for several days following a heavy rainfall. During such periods, the green was either out of play or used only by those who were seriously devoted to the pleasures of golf.

Many plans to correct the problem were considered and discarded, since trenching and installation of conventional drain tile

## **A PULLED PIPE SYSTEM FOR DRAINAGE**