



Ground Ivy

Oxalis

Wild Violet

# TURFLON D. No weed too tough.

**Stops more than 50 broadleaf weeds.** TURFLON\* D herbicide has the wide spectrum power to control most any broadleaf weed you encounter. From ordinary ones like dandelions and clover to oxalis, spurge, wild violet, ground ivy and the rest of the really stubborn weeds. And that means happy customers...fewer callbacks and more referrals for you.

**Maximum efficacy.** With TURFLON D, you benefit from the proven effectiveness of triclopyr in stopping difficult broadleaves, *plus* the well-known ability of 2,4-D to control the standard portion of the weed spectrum. The low volatile ester formulation of TURFLON D increases its efficacy, without increasing the chance of damage to off-target species when used according to professional standards.

**Control that's under control.** For all its effectiveness against

target weeds, TURFLON D is easily managed. It penetrates the waxy cuticle of weeds to act systemically. Yet it does not move through turf, so there is very little chance of damage to ornamentals. TURFLON D is safe to most established cool-season turf grasses such as tall fescue, bluegrass and perennial rye. And it is exceptionally low in toxicity to humans and pets.

**Reduces callbacks.** TURFLON D delivers superior performance at lower dosage rates than many leading herbicides. And its broad spectrum efficacy can mean a significant reduction in service callbacks...and improved customer retention. Which all adds up to better profits for you.

**TURFLON D.** The broad spectrum herbicide with power to control the toughest broadleaf weeds...and the others, too. Get the full story from your distributor, today.



**TURFLON D**  
The broad spectrum herbicide.



\*Trademark of The Dow Chemical Company

©Copyright 1986 The Dow Chemical Company.

6001

Circle No. 117 on Reader Inquiry Card

# OUR GANG.

## INTRODUCING TORO'S FULL LINE OF REELMASTER™ GANG MOWERS.

Now there's a new breed of gang mower that's tough enough to take on any turf. From golf course to school yard. Park grounds to athletic field.

Our Reelmaster™ 5, 7 and 11 blade gang mowers deliver a superb quality cut and finished look. Whether you need a short, super-formal cut. Or a longer informal cut. Or something in-between.

Yet all three also deliver renowned Toro durability to keep you cutting.

We engineered all three with the bedknife optimally positioned in relation to the center line of the reel.



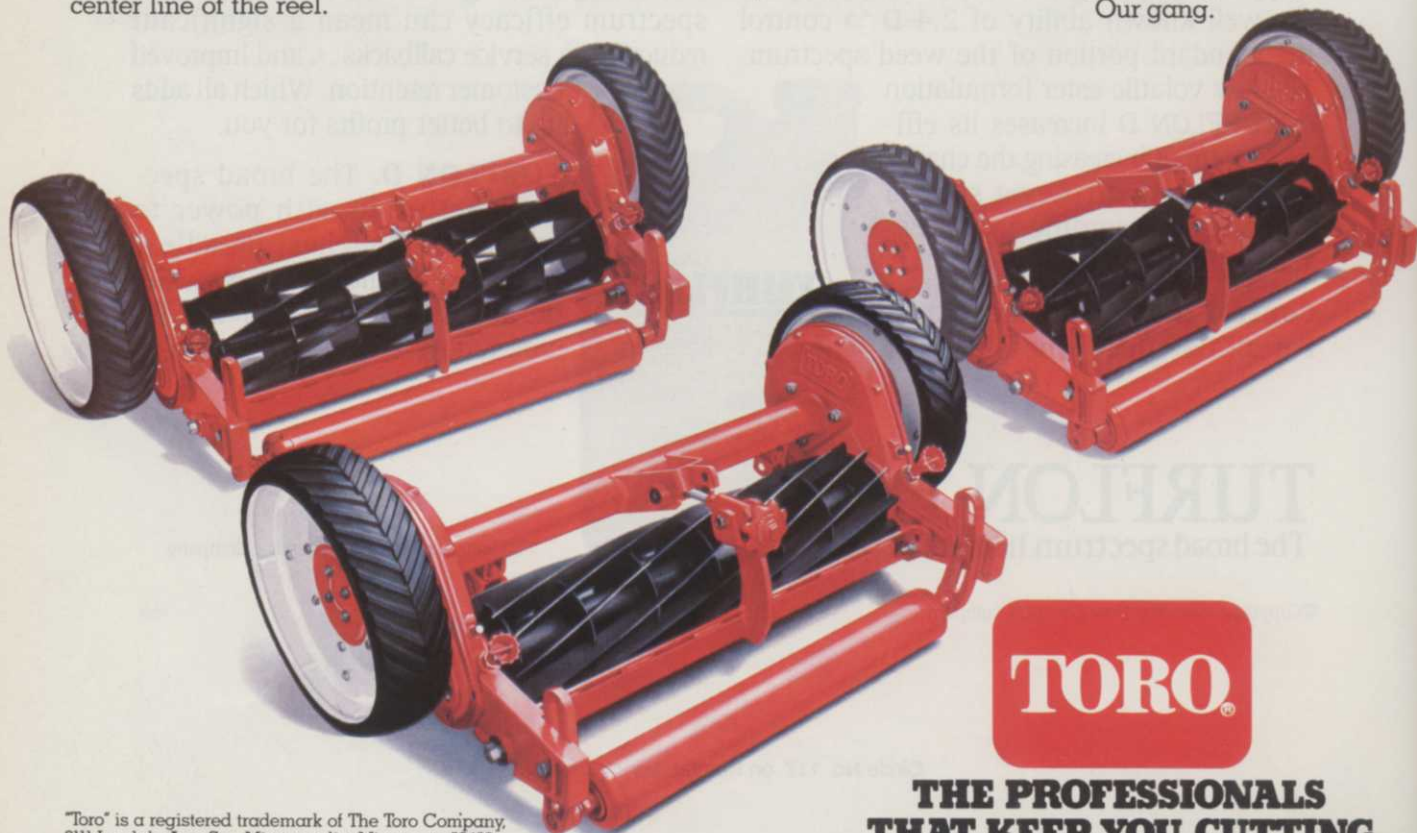
This cuts down on stragglers that can detract from the finished look of your turf.

All three were designed to discharge clippings in a high vertical arc, so they disperse and settle evenly. And all three reduce clippings accumulation and clumping, for the cleanest possible finish, even in wet grass.

In addition, we incorporated other great Toro features. Like our exclusive single knob bedknife-to-reel adjustment to maintain the quality of the cut. And seven spiders for increased durability. As well as Toro's proven gear drive for less downtime and fewer repairs.

Want to know more? Call your Toro distributor today. Ask him to tell you about the toughest gang on any turf:

Our gang.



**TORO**

**THE PROFESSIONALS  
THAT KEEP YOU CUTTING.**

Toro is a registered trademark of The Toro Company, 8111 Lyndale Ave. So., Minneapolis, Minnesota 55420.

Circle No. 177 on Reader Inquiry Card

# WEEDS TREES & TURF

The Magazine of Landscape and Golf Course Management Since 1962



24



48



60



82

**24 COVER STORY: THE BIG BOYS**

Cypress Gardens, once a swamp in Central Florida, now boasts more than 8,000 thriving plant species.

**28 IRRIGATION BLUES**

It's spring and time to take a look at your thawing irrigation system. Suggestions for preparing for the summer ahead.

**34 TREATING SOIL COMPACTION**

Dr. Robert Carrow examines methods of treating soil compaction on recreational turf through water management.

**44 DUTCH ELM DISEASE**

Your elms have it, you don't know how to treat it. There are no sure cures but there are treatments.

**48 A STAR IS BUILT**

Arid Tucson is home to yet another TPC course—Star Pass. It's rock now but by October, Star Pass will play host to a PGA tourney.

**54 WEED BUSTERS**

A profile of two custom applicators who specialize in industrial and commercial accounts.

**WEED CONTROL GUIDE**

- 60 Warm-Season Turf
- 68 Herbicide Directory
- 76 Cool-Season Turf

- 82 Right-of-Way Control
- 92 Tree and Shrub Control
- 98 Aquatic Control

**102 HARD-TO-CONTROL WEEDS**

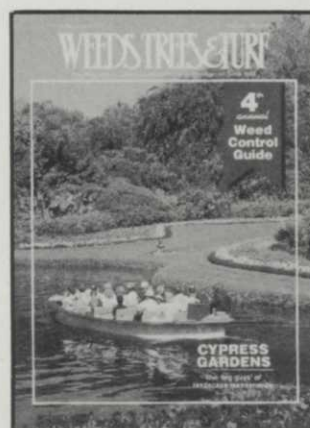
You know them—spurge, oxalis, wild violet, ground ivy, etc.—all too well. New formulations show promise in the fight against the diehards.

**107 SEASONAL HELP**

Do you keep them or let them go? The answer depends on your company philosophy.

**DEPARTMENTS**

- 6 TRENDS
- 8 GREEN INDUSTRY NEWS
- 20 SHORTCUTS
- 110 PROBLEM SOLVERS
- 113 PRODUCTS
- 120 EVENTS
- 122 CLASSIFIED
- 127 AD INDEX
- 128 OUTLOOK



Cover photo courtesy of Cypress Gardens.

WEEDS TREES & TURF (ISSN 0043-1753) is published monthly by Harcourt Brace Jovanovich Publications. Corporate and Editorial offices: 7500 Old Oak Boulevard, Cleveland, Ohio 44130. Advertising Offices: 7500 Old Oak Boulevard, Cleveland, Ohio 44130, 111 East Wacker Drive, Chicago, Illinois 60601 and 455 East Paces, Ferry Road, Suite 324, Atlanta, Georgia 30305. Accounting, Advertising Production and Circulation offices: 1 East First Street, Duluth, Minnesota 55802. Subscription rates: \$25 per year in the United States; \$35 per year in Canada. All other countries: \$70 per year. Single copies (pre-paid only): \$2.50 in the U.S.; \$4.50 in Canada; elsewhere \$8.00; add \$3.00 for shipping and handling per order. Second class postage paid at Duluth, Minnesota 55806 and additional mailing offices. Copyright© 1986 by Harcourt Brace Jovanovich, Inc. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher.

POSTMASTER: Send address changes to WEEDS TREES & TURF, P.O. Box 6198, Duluth, Minnesota 55806-9898.

A HARCOURT BRACE JOVANOVIICH PUBLICATION

# WEEDES TREES & TURF



© 1986 by the American Fisheries Society, Inc. All rights reserved. This journal is published quarterly by the American Fisheries Society, Inc., 1145 North 17th Street, Bethesda, MD 20814. The American Fisheries Society is a non-profit organization. The American Fisheries Society is a member of the American Society of Zoologists, the American Society of Limnology and Oceanography, and the American Society of Ichthyologists and Fisheries. The American Fisheries Society is a member of the American Society of Zoologists, the American Society of Limnology and Oceanography, and the American Society of Ichthyologists and Fisheries. The American Fisheries Society is a member of the American Society of Zoologists, the American Society of Limnology and Oceanography, and the American Society of Ichthyologists and Fisheries.

# TODAY'S VEGETATION CONTROL SPECIALIST HAS TO LOOK A LOT OF PEOPLE STRAIGHT IN THE EYE.

Annual total vegetation control today is a lot more sophisticated than just killing weeds. You have to get the job done economically enough for your budget, simply enough for your work crews, and responsibly enough for the environment. That's why Cyanamid developed ARSENAL® herbicide. Its advanced chemistry answers the needs of all people involved.

## WHY ARSENAL IS EASY ON THE ENVIRONMENT.

Because of its unique mode of action, ARSENAL, when used as directed, has no harmful effects on mammals, fish, bees, birds or earthworms. Because ARSENAL is non-volatile and does not move laterally in the soil, off-target vegetation is unaffected. ARSENAL is non-flammable. Its unique chemical activity causes a slow "burn-down" in foliage, so it poses little fire hazard. Unlike tank mixes, ARSENAL introduces only one biodegradable product into the environment. And it's applied only once during a season, resulting in a lower chemical burden and a reduction in "touch-up" treatments.

## CONTROLS MORE UNDESIRABLE VEGETATION.

ARSENAL has demonstrated control of a broad spectrum of weeds, vines and brush species. Tests in southern states showed that ARSENAL alone (at rates of two quarts per acre) out-performed several tank mixes for annual and perennial weed control. Even more impressive, ARSENAL was most effective on difficult species like Johnsongrass, trumpetcreeper, kudzu and red maple.

## ONE APPLICATION GIVES SEASON-LONG CONTROL.

ARSENAL gives you full-season control for up to eight months in temperate climates. It fits your spray schedule,

Always read and follow label directions carefully.

because it can be applied at any time during the growing season. ARSENAL controls not only existing vegetation, but also new weeds that germinate after application. So you get residual control for the rest of the season. On hard-to-kill vegetation, ARSENAL keeps working on the roots until complete control is achieved. In spray solution, ARSENAL is stable for several days. That means no waste due to decomposition, and no chance of under-dosing target vegetation.

ARSENAL offers broad-spectrum control, including these tough species:

Johnsongrass	Blackberry
Trumpetcreeper	Bindweed
Poison ivy	Canada thistle
Greenbriar	Foxtails
Redvine	Red maple
Kochia	Kudzu
Multiflora rose	Sumac

## DUAL ACTION CONTROLS IN A WHOLE NEW WAY.

Unlike most other herbicides, ARSENAL is absorbed through both roots and foliage to stop new cell growth. Vegetation absorbs ARSENAL in less than two hours, so rain won't wash off your investment. Within four hours, plant growth ceases. In perennials, ARSENAL translocates thoroughly in the roots to prevent regrowth. This unique chemistry makes the visible results of control more gradual. In some vegetation, loss of color and other outward signs may not be apparent for weeks after application. After a year or more, returning vegetation is mainly desirable annual grasses and legumes.

## ARSENAL IS RIGHT FOR YOUR RIGHTS-OF-WAY.

On railroad, highway or industrial rights-of-way, around power substations, signal boxes, bridge abutments, lumber or freight yards — wherever you need annual total vegetation control, ARSENAL is the smart new choice for the job.

# TOUGH ON WEEDS. EASY ON THE ENVIRONMENT.

Circle No. 105 on Reader Inquiry Card



**CYANAMID**  
Agricultural Division  
Wayne, NJ 07470 © 1985



Jerry Roche



Ken Kuhajda



Heide Aungst

## Golf course boom continues

■ Golf course construction and remodeling should continue to prosper in 1986, according to John Watson, president of the American Society of Golf Course Architects. The reason? Lower interest rates.

"The pent-up demand that had not been met for five years because of high interest rates was unleashed in 1985, and that momentum will continue through the next few years," Watson says.

Watson says that golf course architects face a new challenge today in designing courses which meet the needs of various players.

The sport is attracting more seniors, women and juniors. This has led to the construction of more executive courses, particularly in the Sun Belt, to accommodate older players who can't hit the long ball.

"With most new and remodeled courses having a wide range of tees, players of different ability can realize equal challenges from each hole," Watson says.

Watson adds that another trend is to remodel old courses. "Today's high-performance golf clubs and balls enable the better golfers to score higher than they should," he says. "Therefore, architects are developing master plans to phase-in new tees and greens, reposition bunkers, and add water retention ponds for both aesthetic and preservation purposes."

For more information on building or remodeling courses, write the American Society of Golf Course Architects, 221 N. LaSalle St., Chicago, IL 60601.

## Slowpokes ousted from Denver's courses

■ In an effort to eliminate five to six hour 18-hole adventure the Denver Department of Parks and Recreation created a "time to play" rule last summer.

The new rule states that each group of 18-hole golfers must finish the first nine in two hours, 20 minutes or be removed from the course. Nine-hole players must finish hole number four or number 13 in one hour or face ejection.

The system works by using a time clock which stamps a group's scorecard before the first tee. A ranger checks the scorecard at holes number nine and 14. If a group is late, they can't continue on and the late time is added to the following group's time. A revised municipal code enforcing this is part of the time limit rule, in case a group refuses to leave the course for slow play.

At the Wellshire and Kennedy courses in Denver, the average time after two and a half months for nine holes was two hours, eight minutes and for 18 holes was four hours, 18 minutes.

## STAFF

Editor  
**Jerry Roche**, Cleveland  
Managing Editor  
**Ken Kuhajda**, Cleveland  
Associate Editor  
**Heide Aungst**, Cleveland  
Publisher  
**Dick Gore**, Atlanta  
Associate Publisher  
**Ron Kempner**, Atlanta  
Senior Vice President  
**Tom Greney**, Chicago  
Group Vice President  
**Robert Earley**, Cleveland  
Production Manager  
**Anne MacLean**, Duluth  
Production Supervisor  
**Marilyn MacDonald**, Duluth  
Graphic Design  
**Denise Johnson**, Duluth  
Graphic Coordinator  
**David Komitau**, Cleveland  
Circulation Supervisor  
**Judy Bogenholm**, Duluth  
Directory Coordinator  
**Corinna Betterman**, Duluth  
Reader Service Manager  
**Gail Kessler**, Duluth  
Promotion Director  
**Linda Winick**, Cleveland

## OFFICES

**ATLANTA**  
455 East Paces  
Ferry Road Suite 324  
Atlanta, GA 30305  
(404) 233-1817

**CLEVELAND**  
7500 Old Oak Boulevard  
Cleveland, OH 44130  
Editorial: (216) 243-8100

**CHICAGO**  
11 East Wacker Drive  
Chicago, IL 60601  
(312) 938-2344

**SEATTLE**  
1333 N.W. Norcross  
Seattle, WA 98177  
(206) 363-2864

**DULUTH**  
120 West Second Street  
Duluth, MN 55802  
(218) 723-9200

## MARKETING REPRESENTATIVES

**Dick Gore**  
Atlanta (404) 233-1817

**Ron Kempner**  
Atlanta (404) 233-1817

**Jon Miducki**  
Cleveland (216) 243-8100

**Robert Mierow**  
Seattle (206) 363-2864

**(HBJ)** HARCOURT BRACE JOVANOVIH PUBLICATIONS

Robert L. Edgell, Chairman; Richard Moeller, President; Lars Fladmark, Executive Vice President; Arland Hirman, Treasurer; Thomas Greney, Senior Vice President; Ezra Pincus, Group Vice President; Joe Bilderbach, Vice President; James Gherna, Vice President; George Glenn, Vice President; Harry Ramaley, Vice President.

# A PREVIEW OF OUR COMPETITORS' 1989 MODELS.



You're looking at a new tractor that will still be new three or four years from now. That's about how long we estimate it will take our competitors to play catch-up.

In the meantime, our L2850 is loaded with forward thinking.

Under that streamlined hood is a 4-cylinder high torque-rise diesel engine. Most competitive tractors are 3-cylinder. It also has

direct fuel injection, a feature no competitive model has.

Other advanced engineering ideas add to maneuverability. A mechanical shuttle transmission is one. Another is 4-wheel drive with our bevel gear system.

Of course, our Kubota L2850 works best with Kubota implements. They're perfectly matched to each other. For example, you

can attach the mid-mount mower without removing the subframe or front loader. It's a neat trick.

With all of these new L Series models (rated at 27, 23.5 and 21 PTO hp), Kubota hasn't just left the competition behind. We've left them behind the times.

 **KUBOTA**  
Nothing like it on earth.



## INSECTICIDES

### EPA proposes diazinon ban

The death of 546 Atlantic Brant geese at a Long Island golf course (see WT&T, Aug., 1984) has been cited as partial reason for a ban on golf course use of diazinon insecticide recently proposed by the EPA.

Steven Schatzow, EPA director, said that the agency was changing its policy to encompass not only public but wildlife health, according to a story in the *New York Times*.

Schatzow noted 60 different reports of geese, ducks, herons and pheasants which had died in large numbers on golf courses and turf farms treated with diazinon.

Waterfowl is attracted to open, grassy feeding sites of golf courses and turf farms because they can easily be seen from the air.

But there is also some concern about diazinon use on lawns, recreational areas and parks.

In its position document, the EPA further stated that it "wants to emphasize that the concern is not limited to golf courses and sod farms. The agency does not have sufficient data to evaluate all of the sites, but will require such data. Pending review...the agency may or may not initiate a special review."

Ciba Geigy Corp., the major pro-



ducer of diazinon, is standing behind its product.

"It can be used safely with the proper procedures, one of which is watering it in properly," says Bob Clark of Ciba-Geigy. "We will be meeting with the EPA's Scientific Advisory Panel, probably in April, to present our case."

"This is not just a monetary matter—only 5-8 percent of the total use of diazinon is by golf courses and sod farms—but we strongly feel that our data supports use of the chemical," Clark concludes.

## CHEMICALS

### EPA wants MCPP research data

The Environmental Protection Agency has called for the suspension of the manufacturing of mecoprop (MCP), a widely-used postemergence broadleaf herbicide. The EPA wants more data.

EPA has issued notices of intent to suspend to some registrants of MCP for noncompliance with data call-in requirements. It has also done the same with a registrant of maneb, a turf fungicide.

The EPA sent suspension notices to the following MCP registrants: Germain, Inc., Los Angeles, Calif.; Arco, Inc., Irwin, Pa.; Hysan Corporation, Chicago; Estech, Inc., Chicago; Koos, Inc., Kenosha, Wis.; and NCH Corporation, Irvin, Texas.

A similar notice was sent to Agchem Division, Pennwalt Corporation, Philadelphia, to suspend production of maneb.

## EVENTS

### Landscape Expo to kick off on Mar. 5

The 1986 Landscape Expo will open its doors on March 5 at the Valley Forge (Pa.) Convention Center.

The convention, which expects about 6,000 visitors, is being staged by HBJ Conventions and Expositions. It is co-sponsored by WEEDS TREES & TURF and LAWN CARE INDUSTRY magazines, both HBJ publications.

Registration will be available at the door.

**NYSTA**  
president Jack Sloane (right) salutes Citation of Merit winner Melvin Lucas.



## ASSOCIATIONS

### New Yorkers present merit citation to Lucas

The New York State Turfgrass Association presented its Citation of Merit to Melvin Lucas, Jr. during the group's turfgrass conference and tradeshow in Syracuse.

Lucas, golf course superintendent at Round Hills near New Bedford, Mass., has served as president of the Golf Course Superintendents Association of America, the NYSTA, and the Long Island Golf Course Superinten-

dents Association.

The NYSTA elected new officers during the conference. They are: Jack Sloane, Oakwood Morningside Cemetery, Syracuse, president; William Stark III, Bellevue Country Club, Syracuse, vice president; and Steve Smith, I & E Supply, Montgomery, N.Y., treasurer.

Newly elected members to the board of directors include J.R. Brun-

dage, Brundage Lawn Maintenance, Medina, N.Y.; Tom Charnock, Brookfield Country Club, Clarence, N.Y.; Jim Girard, Jim Girard Landscaping, Glen Falls, N.Y.; and Rick McGuinness, Woodmere Club, Woodmere, N.Y.

The NYSTA, with 850 members, is one of the largest state turfgrass associations in the country.

## TREES

# Researchers getting to root of chestnut blight problems

It may not be too long before you can once again roast chestnuts on an open fire.

Scientists at Michigan State University may have discovered a cure for the chestnut blight which has killed off most American chestnut trees.

The researchers have found a naturally-occurring virus which can infect the fungus that causes the blight. The virus makes the fungus harmless, allowing the surviving chestnut roots to send up healthy shoots, which eventually grow into trees.

Although similar viruses have recently been found in chestnut trees, this is the first time scientists have succeeded in getting the virus to spread to other chestnuts.

The chestnut blight, which was first recognized in 1904, did the most damage through the 1950s, killing an

estimated 3.5 billion trees.

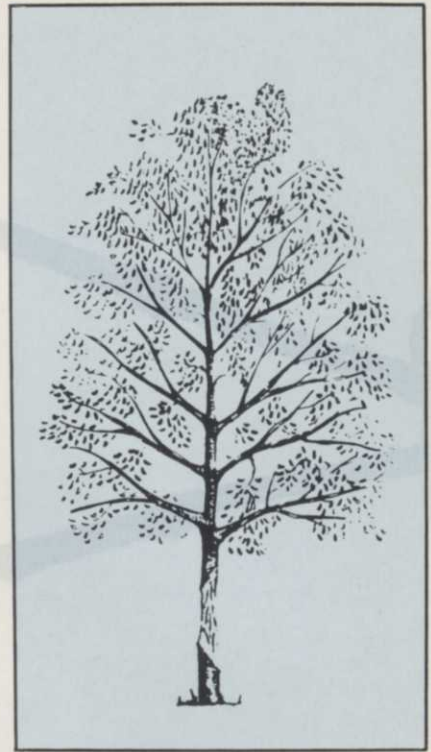
Since that time, most chestnuts roasted at Christmas have been imported from Italy.

The origin and nature of the new-found virus remains a mystery. What is known is that it differs from ordinary viruses since it lacks a protein coat.

It consists only of a double strand of RNA. Also, it can only exist in fungal cells and is only transmitted when an infected fungal cell fuses naturally with the cells of an uninfected fungi.

The mysterious disease worked quickly, decimating even the largest trees—ones 120 feet tall with 13-foot diameters—within two to three years.

The chestnut virtually disappeared from the American forest causing a recession within the American forest industry.



Chestnut blight

## PESTICIDES

# Expert panel cites 'national chemical scare'

"We're in the midst of a national chemical scare."

"A minefield of risks—that's how the public sees the pesticide issue. It's a black and white issue."

Dr. Allen Felsot, professor of environmental entomology at the University of Illinois, then switched gears. "I have news for you. When it comes down to economic issues, pesticides are good."

Speaking at the North Central Turfgrass Expo in Peoria, Ill., Felsot assured his audience of lawn care operators and turfmen that "the risks (of pesticide exposure) are actually quite low but you should never be complacent."

Felsot said the risks the public are exposed to each day (he cited natural radiation as one) are actually greater than those posed by pesticide exposure.

During the same session, Wendall R. Mullison, an agricultural products development research scientist with Dow Chemical, added: "Everything is toxic at some concentration, everything is non-toxic at some concentration." He attributed the quote to Paracelsus, a scientist of the Middle Ages known to some as "The Father of Toxicology."

Mullison, listing the importance of



Mullison, Dr. Felsot

pesticide use, said the United States Dept. of Agriculture estimates that without pesticides, food production would be off 50 percent in the U.S.

Felsot and Mullison stressed that proper disposal of pesticides should be of paramount importance to users. Mullison said incineration of those materials is a trend that will become the norm in the future.

Unfortunately there are those who disregard proper disposal procedures, said Illinois EPA agricultural advisor A.J. Taylor.

Improper handling, storage, and disposal of pesticides has resulted in higher levels of toxins in streams lo-

cated near pesticide storage sites.

During his presentation, Taylor showed extreme cases of improper pesticide storage and disposal. He urged his audience to use proper handling techniques, conceding that "pesticides will continue to be used. Let's be as cautious as we can."

He cited contamination of groundwater as the "hottest issue" associated with pesticide use today.

Other speakers included:

● Dr. Jack Murray, research agronomist for the U.S. Dept. of Agriculture in Beltsville, Md., on "Potential for Breeding New Zoysiagrasses."

● Dr. William Meyer, Turf Seed Inc. of Hubbard, Ore., on "Breeding for Disease Resistance in Cool Season Turfgrasses."

● Dr. Richard Skogley, turfgrass professor at the University of Rhode Island, on "Ryegrass for Athletic Turf."

● Dr. Joe Vargas, plant pathology professor at Michigan State University, on "Take-All Patch & Disease Update."

● Dr. Kent Kurtz, turfgrass professor at Cal-Poly Pomona, on "The Wonderful World of Sports Turf."

# Researchers 'digging to root' of chestnut blight problems

It may not be too long before you can purchase chestnuts on an open market.

Scientists at Michigan State University have discovered a cure for the chestnut blight which has killed off most American chestnuts.

The researchers have found a naturally-occurring virus which can infect the fungus that causes the blight. The virus makes the fungus harmless, allowing the surviving chestnut roots to send up healthy shoots, which eventually grow into trees.

Although similar viruses have rarely been found in chestnut trees, this is the first time scientists have succeeded in getting the virus to spread to other chestnuts.

The chestnut blight, which was first recognized in 1910, has caused damage through the killing of an

estimated 2.5 billion chestnuts since that time, most of them at Christmas time, as reported from Italy.

The origin and nature of the new found virus remains a mystery. What is known is that it differs from any virus since it lacks a protein coat.

It consists only of a double strand of RNA. Also, it can only exist in fungal cells and is only transmitted when an infected fungal cell comes naturally with the cells of an infected fungus.

The mysterious disease quickly became widespread in the United States with 13-foot chestnuts dying within two to three years.

The chestnut blight was first reported from the American forest during a recession within the American forest industry.



Chestnut blight

# Expert panel cites 'national chemical scare'

Was it the midst of a national chemical scare?

"A mishap of risks—that's how the public sees the pesticide issue. It's a black and white issue."

Dr. Allen Felton, professor of environmental entomology at the University of Illinois, thus switched gears. "I have news for you. When it comes down to economic issues, pesticides are good."

Speaking at the Ninth Central Pesticide Forum in Fort Worth, Texas, he noted the industry of low cost, open row and uniform that "the lack of pesticide exposure are actually quite low but you should never be complacent."

Felton said the time the public was exposed to each day (the total number of hours in a year) are actually greater than those posed by pesticide exposure.

During the same session, Wendell R. Mullison, an agricultural products development research scientist with Dow Chemical, added "everything is toxic at some concentration, everything is neurotoxic at some concentration." He attributed the quote to Parkinson's, a relative of the pesticide Ager known to some as "The Father of Toxicology."

Mullison, listing the importance of



Mullison, Dr. Felton

pesticide use, said the United States Dept. of Agriculture estimates that without pesticides, food production would be off 50 percent in the U.S.

Felton and Mullison stressed that proper disposal of pesticides should be a paramount important to users.

Mullison said restriction of these materials is a trend that will become the norm in the future.

Fortunately there are those who disagree proper disposal procedures, said Illinois EPA regional administrator A. J. Taylor.

Improper handling, storage and disposal of pesticides has resulted in higher levels of

chemicals than pesticides, he said.

During his presentation, Felton showed extensive cases of improper pesticide storage and disposal. He urged his audience to use proper handling techniques, including that "pesticides will continue to be used. Let's be as cautious as we can."

The chief contribution of speakers was the "national issue" associated with pesticides use today.

Other speakers included:

- Dr. Jack Murray, research agronomist for the U.S. Dept. of Agriculture in Beltsville, Md., on "Pesticides for Breeding New Soybean."
- Dr. William Meyer, Tom Seed Inc. of Hubbard, Ore., on "Breeding for Insect Resistance in Corn Soybean."
- Dr. Richard Seigler, professor at the University of Rhode Island on "Resistance for Aromatic Soybean."
- Dr. Joe Vargas, plant pathology professor at Michigan State University on "Take-All Patch & Insecticide."
- Dr. Kent Korte, largest producer at Ciba-Geigy Research on "The