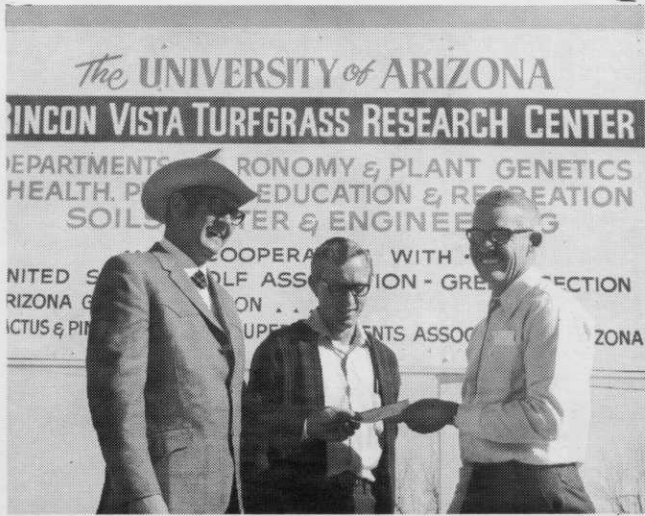


# ational

®





Investment In The Future—Bob Sanders (l) secretary-treasurer, Cactus and Pine Golf Course Superintendent's Association of Arizona presents a check for \$400 to Dr. W. R. Kneebone, (r) department of agronomy and plant genetics, University of Arizona to support continuing turfgrass research. Presentation was made at the Rincon Vista Turfgrass Research Center in Tucson. Dr. Gordon V. Johnson (c) and Dr. Kneebone are in charge of the center's research programs.



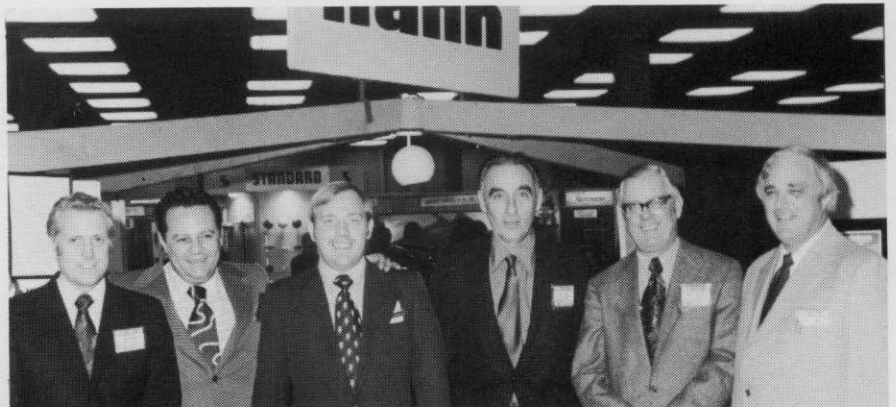
Groundwork For Success — F. E. Myers & Bro. Co. salesmen recently underwent a two day seminar on marketing conducted by American Business Consultants, Inc., Clinton, N.J. Sales problems that had to be worked out through cooperative group effort stimulated the Myers force. In addition, goals were set, new products and tools explained and marketing strategy planned. All divisions of the company were represented.

## Green Industry Newsmakers PEOPLE PLACES EVENTS

Hypro Division, Lear Siegler, Inc., recently honored one of its founders on his retirement. Harry J. Sadler, president, received a special commemorative degree given by Lear Siegler's education division. Incoming Hypro president Bernard A. Napier (r) makes the presentation. Looking on is Mrs. Sadler.



Here's the Ohio team that will lead the Ohio Nurserymen's Association for 1973. Executive committee members are: (standing l-r) Eldon Studebaker, New Carlisle; Dale Manbeck, New Knoxville; Jack Goode, Circleville; Geid Stroombeck, North Madison; Larry Riegel, Maumee; and Ken Natop, Cincinnati; (Seated) Peter Olmsted, Columbus, executive secretary; Robert Siebenthaler, Dayton, past president; William Thornton, Cincinnati, president; Edward Losely, Perry, vice-president; Elton M. Smith, extension specialist, landscape horticulture, Ohio State University.



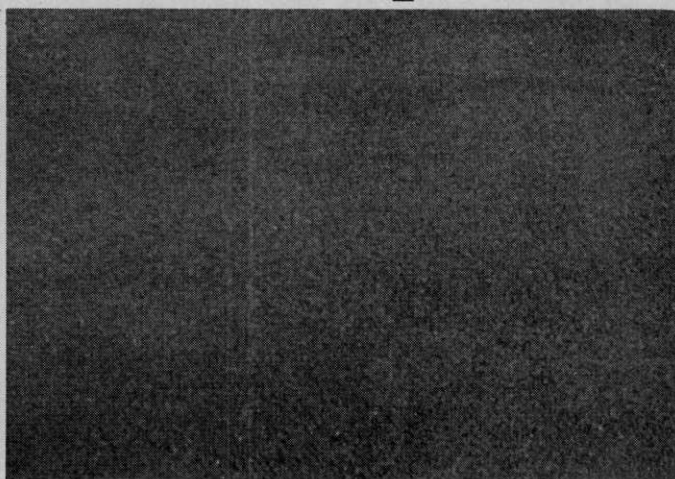
This is the team that sells the equipment that makes the dollars that pay the men that . . . Together briefly for the GCSAA convention and show in Boston, Hahn's North American marketing team rallies at the booth for a quick photo. Standing (l-r) are: Vollie Carr, field service manager; Mike Eason, southeastern USA regional manager; Wade Stith, western USA regional manager; Walt Dickinson, international marketing manager; Harry Dawson, northeastern USA regional manager.



# When dollar spot hits, here's how systemic **MERTECT® 140-F** flowable saves your turf, time, and money.



Untreated dollar spot disease



Treated with MERTECT 140-F

These pictures show the kind of dollar spot control you get with flowable MERTECT 140-F. Even against cadmium-resistant strains. It also works well against brown patch and *Fusarium* patch.

And with its special advantages, MERTECT 140-F makes the performance picture look even better.

Being flowable, it saves you time in measuring and mixing. Handling is safer. Dispersion is more complete, so you get the right mixture for more effective results.

Since MERTECT 140-F is systemic, you also get away with fewer applications per season, thanks to its residual disease control. And it has a lower dosage rate than other fungicides, so you save there, too.

Just follow the label instructions. MERTECT 140-F is not phytotoxic to grasses when used as directed. Your Merck distributor has flowable MERTECT 140-F now. If you don't have his name, write us. Agricultural Products, Merck Chemical Division, Merck & Co., Inc., Rahway, N.J. 07065.



MERTECT [2-(4-thiazolyl)benzimidazole] is a registered trademark of Merck & Co., Inc.

For More Details Circle (131) on Reply Card

# CROWN VETCH

We stock most seed varieties - certified and uncertified. CROWN VETCH CROWNS. CROWN VETCH PLANTS. (Pa. and north-eastern states only.)

Write or phone for literature & prices. Advise quantity.

## STANFORD SEED COMPANY

Post Office Box 230  
Plymouth Meeting, Pa. 19462  
Phone: 215 - 825-1240

Post Office Box 366  
Buffalo, N. Y. 14240  
Phone: 716 - 825-3300

For More Details Circle (108) on Reply Card

IN 1972 WE SOLD OVER 1000 RIGGIN'-BUDDIES® WITH A MONEY-BACK GUARANTEE. SO FAR NOT ONE BUYER HAS ASKED US FOR A REFUND!



Developed by a Tree Man to MEET TREE MEN'S NEEDS!



Makes right work a snap. Use in any position. Ideal aid for tree cabling (use in pairs). Speeds limb lowering operation. Use as false crotch for easier Ripping.

STILL ONLY

\$17.98

From: P.D.I.

200 Sylvan Ave.  
Rutledge, Pa. 19070

THE RIGGIN'-BUDDY® ISN'T NEW ANYMORE ... IT IS PROVEN!

# Herd's TWO NEWEST BROADCASTERS

for the COMMERCIAL OPERATOR and HOMEOWNER

NEW 750  
9.6 BU., 750 LB.  
CAPACITY  
FOR THE  
LARGER BROAD-  
CASTING JOBS



NEW GT-77  
77 LB. CAPACITY  
FOR GARDEN TRACTORS

Write for catalog describing all seven HERD models

**HERD SEEDER CO., INC.**

P. O. BOX 448, DEPT. 117, LOGANSPORT, IND. 46947

For More Details Circle (175) on Reply Card

# —insect report—

## TREE INSECTS

### CALIFORNIA FIVESPINED IPS (*Ips confusus*)

CALIFORNIA: Hundreds of ornamental Monterey pine trees killed around bay area and into Santa Clara County. Some very large, old trees are dead or dying.

### A GALL MIDGE (*Taxodiomyia cupressiananassa*)

INDIANA: Galls of this species found under bald cypress trees (*Taxodium distichum*) in Warrick, Spencer, and Perry Counties December 7, 1972. These are new county records.

### GYPSY MOTH (*Porthetria dispar*)

MARYLAND: Five egg masses recovered near Hagerstown, Washington County, November 24, 1972. Egg masses also recovered near Darlington Harford County, December 6, 1972. These are new county records.

### NANTUCKET PINE TIP MOTH (*Rhyacionia frustrana*)

ALABAMA: One to 4 pupae per tip on 15-50 percent of all 6 to 8-foot pine trees along highway planting in Macon County.

### WALKINGSTICK (*Diapheromera femorata*)

TEXAS: Taken October 27, 1972, at Lufkin, Angelina County. This is a new county record.

## INSECTS OF ORNAMENTALS

### AN ARMORED SCALE (*Pseudaonidia paeoniae*)

SOUTH CAROLINA: Light on azaleas at residence in Newberry County. This is a new county record.

### EUONYMUS SCALE (*Unaspis euonymi*)

SOUTH CAROLINA: Specimens taken from euonymus in Williamsburg County November 29, 1972. This is a new county record.

### TEA SCALE (*Hemileuca oliviae*) (*Fiorinia theae*)

ALABAMA: All stages occurring on several hundred plants examined in Lee County during the week ending January 12. This scale continues to be the most important insect affecting camellia throughout State.

## TURF INSECTS

### RANGE CATERPILLAR

NEW MEXICO: Egg clusters light to heavy on native grass in Chaves and Lincoln Counties.

### AN ARMORED SCALE (*Odonaspis saccharicaulis*)

FLORIDA: Taken on pangolagrass (*Digitaria decumbens*) at Fort Drum, Okeechobee County, November 21, 1972. This is a new county record.

## BENEFICIAL INSECTS

### A LADY BEETLE (*Coleomegilla maculata*)

MISSISSIPPI: Thousands of adults taken from bases of cottonwood trees in many Delta counties; confirmed from Washington, Sunflower, and Bolivar Counties. Also taken from ground trash, surrounding fields in Oktibeha County.



it's a SPRAYING machine

it's a SEEDING machine

it's a FERTILIZING machine

it's a SPRIGGING machine

it's a MULCHING machine

it's a TIME SAVING machine

it's a MONEY SAVING machine

it's a . . .

**HYDRO**



**MULCHER**



There are  
**SO MANY WAYS**  
a Bowie  
Hydro-Mulcher  
can serve you



Bowie's exclusive  
features give you  
the capability  
**TO DO MORE**



Models sized and  
equipped for  
**ALL**  
**REQUIREMENTS**



Write today for details on the Bowie Hydro-Mulcher

**BOWIE INDUSTRIES, INC.**

P. O. BOX 931 BOWIE, TEXAS 76230 AC 817 872-2286

For More Details Circle (122) on Reply Card



# 11 NEW FEATURES

make HI-RANGER®  
even better!

Already No. 1, now HI-RANGER moves out far ahead with design features that give owners and operators the safest, most productive personnel towers for any overhead work. Get the facts. Send for your new "5F" Catalog today... you will appreciate what we can do for you.

HI-RANGER Aerial Towers meet the "American National Standard for Vehicle-Mounted Elevating and Rotating Work Platforms ANSI A92.2-1969," as required by the Williams-Steiger Occupational Safety and Health Act of 1970; Part 1910, Occupational Safety and Health Standards; Section 1910.67.

**HI-RANGER**

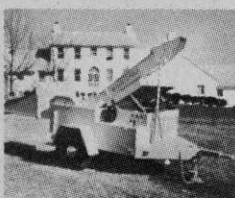


MOBILE AERIAL TOWERS, INC. • Dept. N • 2314 BOWSER AVE. • FORT WAYNE, IND. 46803

For More Details Circle (110) on Reply Card

## SAFETY TEST HEAVY DUTY

# WOOD/CHUCK®



Okay. But what puts Safety Test Wood/Chuck in a class by itself where chippers are concerned? Just superior performance, economy and safety.

First, there's less down-time for blade adjustment and replacement. The Wood/Chuck's

blades lock into the rugged rotor and automatically position properly. This takes just minutes for a Wood/Chuck but often requires hours with other chippers. Wood/Chuck's blades are "V"-grooved for full length support that means extra safety. And where most "chippers'" blades are so positioned that chips are actually crushed away... the Wood/Chuck's shallow blade angle slices chips away. Goodbye friction, wasted energy and vibration; jobs go faster, fuel goes farther.

Only the Wood/Chuck has really been built from the ground up as a chipper for heavy-duty use. It's modern, functional, no-nonsense design sets it apart. Above all, the Safety Test Wood/Chuck has that built-in Safety Test "Extra Measure" of dependability. You can rely on it to do a full day's work... day after day, year after year. Frankly, there are dozens of reasons why no other chipper compares with the Wood/Chuck. You owe it to yourself to get the full story from your Wood/Chuck representative or write Safety Test & Equipment Co., Inc., P.O. Drawer 400, Shelby, N. C. 28150. Tel. (704) 482-7346

For More Details Circle (160) on Reply Card



Patrissi points to the excellent weed control around this marker. Mower operator need not mow closer than four inches. Hand trimming is virtually eliminated.

## CHEMICAL TRIMMING (from page 18)

ground material near trees, shrubs or other valuable plants. On sloping terrain, for example, uneven weed control may result, especially if heavy rains follow application.

"Areas where people have planted flowers in the past are also noted," Patrissi says. "These areas are also left untreated."

A home-made spray rig is used at the Mount Saint Benedict cemeteries. Mounted on a ski, the unit fits neatly onto a Cushman maintenance vehicle or in the back of a small pickup. Similar manufactured units are available, as are back-pack spray rigs which could also be used.

"Frequent inspections of all equipment is vital," says Patrissi. "If there are any leaks they're sure to lead to complaints." And, as you might suspect, the applicator plays a critical role when it comes to spraying. The wrong move of the wand or gun, walking through a sprayed area, dragging hose across a sprayed area—all can lead to highly visible complications within a few days. That's why it takes a professional applicator who is trained in herbicide application techniques.

Patrissi says early applications will give full-season control. Grass is trimmed, then allowed to grow back for a couple of days, then sprayed.

"If the application is made right after the ground thaws, the area looks very near clear through fall," he says.

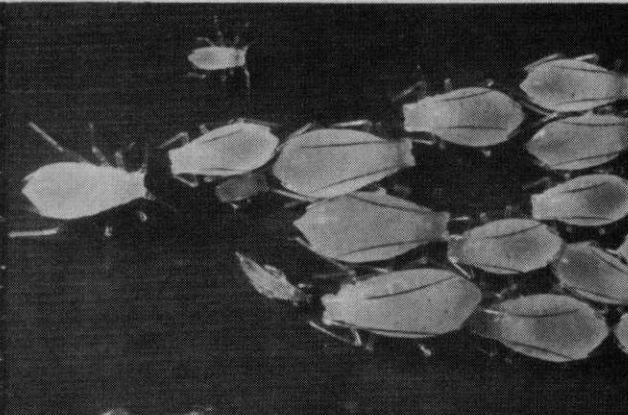
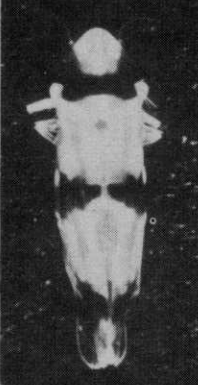
"We try to limit application to the times of the day when there's moisture in the soil. If the moisture is there, it helps eliminate leaching problems, since the herbicide will penetrate as the moisture is taken up by the grass roots. With a dry soil, a heavy application could leach or spread before it penetrates into the soil. Usually we'll spray early in the morning, up until around 11 o'clock or so."

Even with the care needed in application and management, chemical treatments are paying off, Patrissi says.

"In the older cemetery area, which is 10 or more acres, it requires about a full week's work to trim around the large number of raised memorials. Now, with chemical trimming, we've cut mowing time to about one day for two men."

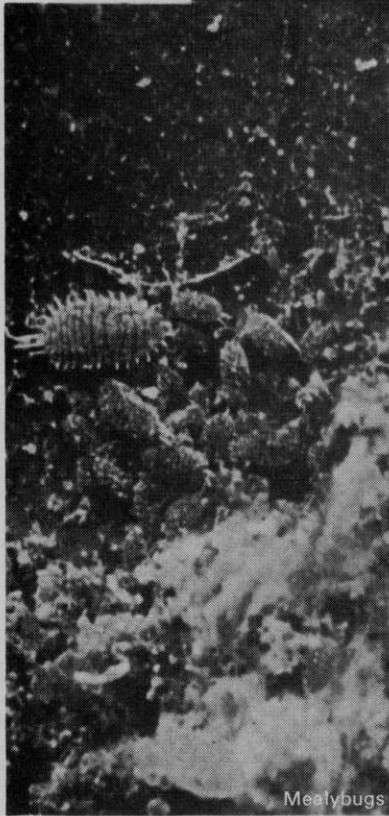


Leafhopper

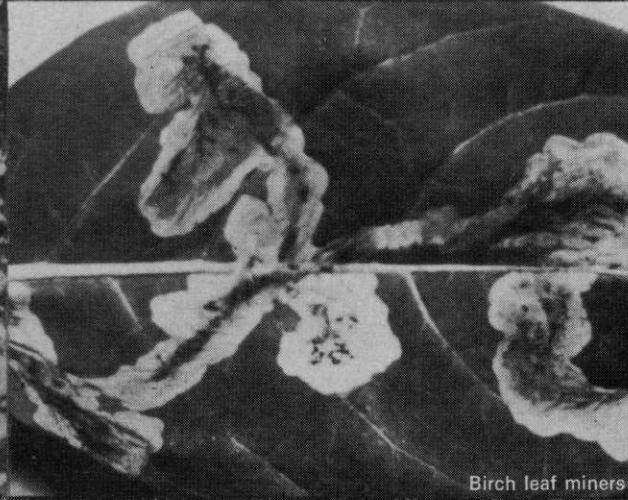


Aphids

Cutworm



Mealybugs



Birch leaf miners



Whiteflies



Looper

Ag-Organics Department, Midland, Michigan 48640

**Bet you can't name another insecticide that kills as many bugs as Zectran.** That's because there's nothing quite like ZECTRAN\* insecticide. It's the powerful, general use product that may replace other insecticides you're now using. ZECTRAN insecticide works on almost all major foliage-feeding insects—including hard-to-kill kinds, foliage-feeding worms and caterpillars, even many major turf pests. And more. ZECTRAN insecticide is also effective against slugs and snails. Use ZECTRAN on over 600 different flowers, ground covers, trees, shrubs, house plants and turf. It's biodegradable, easy to apply—in either liquid or powder form. Just remember to read and follow all the directions for use and precautions for safe handling on the product label.

\*Trademark of The Dow Chemical Company



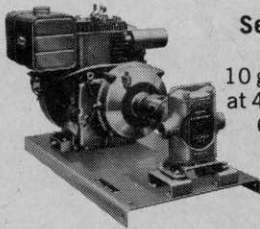
DOW CHEMICAL U.S.A.

For More Details Circle (176) on Reply Card

# Hypro sprayer pumps

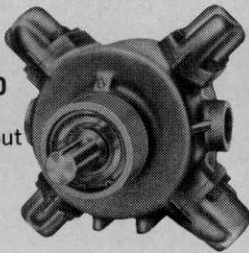
Choose from a wide range of pump designs and materials to suit your requirements: cast-iron, Ni-Resist and bronze pump housings... even nickel plating on piston pumps.

## PISTON PUMPS



**Series 5200  
Big Twin**  
10 gpm output  
at 400 psi with  
6 hp engine

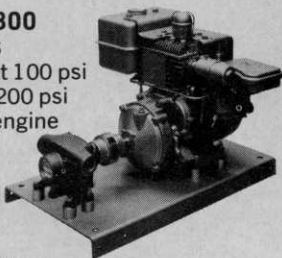
**Series 5400  
4-Cylinder**  
25 gpm output  
at 600 psi



## ROLLER PUMPS

Choice of rubber or nylon rollers

**Series 6300  
6-Rollers**  
6.9 gpm at 100 psi  
6 gpm at 200 psi  
4 hp gas engine

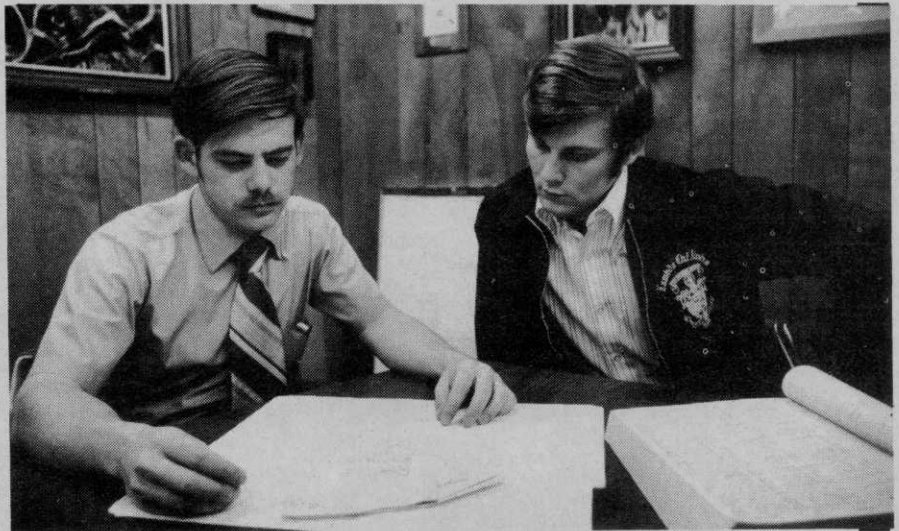


**Series 7560C  
8-Rollers**  
10 gpm at 200 psi  
with 4 hp engine

Write for complete pump catalog or request pump recommendation for your need.

**Hypro** / **ISI**  
A division of Lear Siegler, Inc.

347 Fifth Avenue NW, St. Paul, Minnesota 55112



Tom Smith, Hill-Smith Systems, (l) and Orvil Cotten look over schedule of the day's work ahead. Cotten is a recent Memphis State grad, employed by Hill-Smith as a management trainee.

## HERBICIDE EMULSIONS (from page 16)

decrease velocity of the spray liquid thereby increasing or decreasing pressure.

Of course, just like in a bubble bath, you need something to make the foam. This is done with a spray adjuvant—mixed right in the same tank as the herbicide.

How does the system work in the field? Great, says Thomas M. Smith, who heads up industrial weed control for Hill-Smith Systems, Memphis and Nashville, Tenn. He's been able to cut application costs "nearly half" while at the same time rack up a record of impressive results.

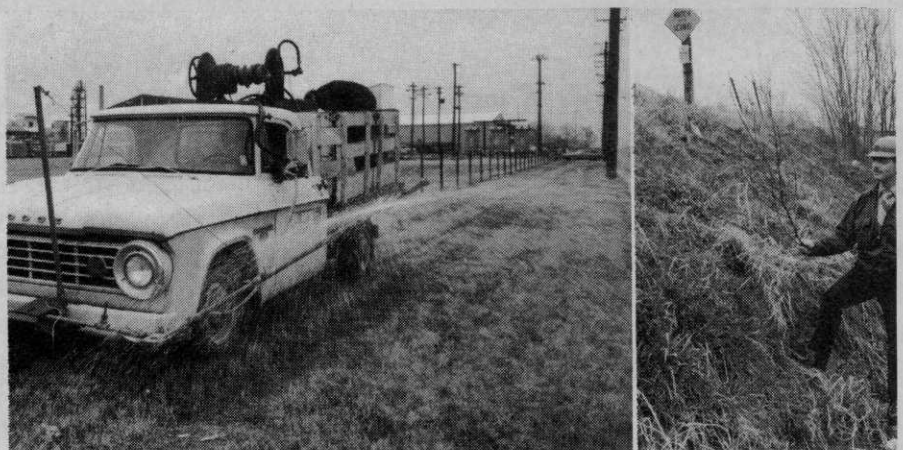
Smith reports his crews have in many instances cut gallonage and application time nearly in half, too, still maintaining excellent control. "The reason is that there's better, more complete coverage using the foam-type nozzles," he says. "Also, one V-type Accutrol boom-mounted

nozzle sprays as wide a path as we formerly got with nine conventional nozzles."

Hill-Smith got into the industrial weed control business in 1959. The company is still active in structural pest control, a business that started in 1928.

Industrial weed control must be done right the first time. It cost money to retreat an area. That's why Smith uses a prescription approach in his operation. Banvel, simizine, Pramitol and other herbicides are regularly called on to control vegetation in such areas as ditchbanks, parking lots, utility substations, fences and around signs. Many of these areas have valuable plantings around them which could be injured by drift. Smith's air emulsion system, however, keeps drift to a minimum.

Another big advantage of foam



One Accutrol nozzle attached to a boom sprays a band of chemical 12-15 in width. Truck will soon be equipped with three nozzles for broadcast spray jobs. At right, Smith stands on hillside cleared of Black Locust with treatment of Banvel-4S.



is in coverage. Because the spray that comes from the nozzle is white in color, it's easy to see what you've sprayed. A trained applicator can "eyeball" where he's been. Surprisingly, many applicators report better coverage with less chemical. That's what happened to Smith.

"The first time we used the air emulsion system we ended up applying a lot less solution than we had intended," he says. "We were spraying Banvel and 2,4-D at relatively low rates on honeysuckle,



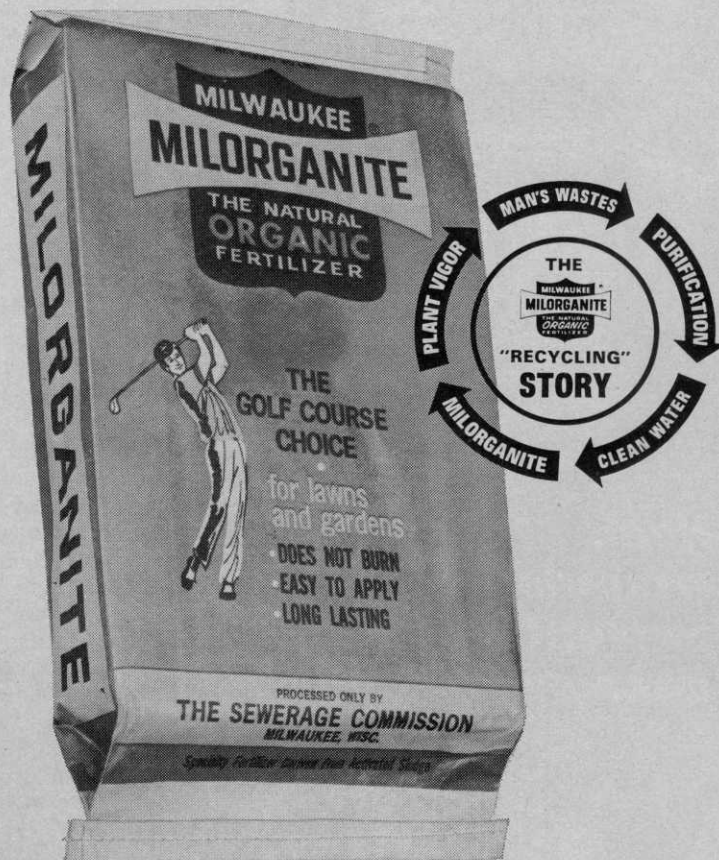
Smith adds Banvel-4S to tank to control seedling Black Locust. Note that he's wearing gloves and hardhat.

trumpet creeper (vine), dewberry and other vines. I figured we needed 150 gallons of mix to handle the job, but when we finished we had applied only about 30 gallons. It was a hand job, and we judged coverage by the 'eyeball' method. It looked good to us as we applied the chemicals, so we decided to wait and see what would happen.

"In three or four days," he continued, "we could see we'd achieved just about complete control."

Smith explains that the adjuvant in the air emulsion sticks the mixture to the leaves—there's practically no runoff.

Is foam just a passing fancy which like air bubbles pop after a time? We think not. Foam has a definite and growing place in the Green Industry. Commercial applicators are finding that anything that makes the job more precise, anything that makes for better control and anything that enhances weed control management will increase their reputation as industry professionals.

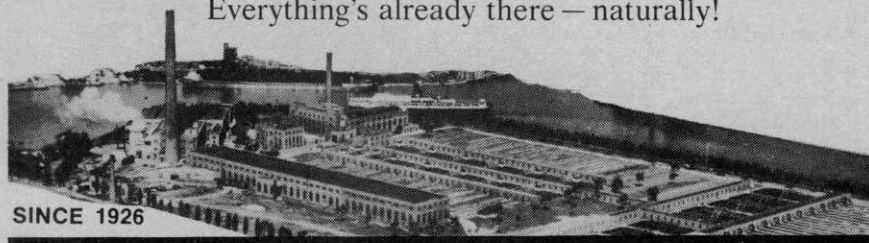


# the super-natural organic fertilizer!

What do we add to Milorganite?

Nothing!

Everything's already there — naturally!



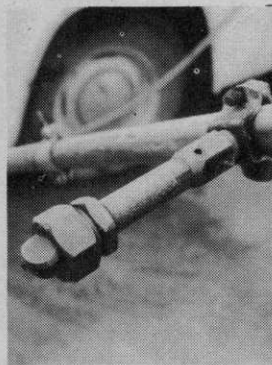
SINCE 1926

THE SEWERAGE COMMISSION P. O. BOX 2079 • MILWAUKEE, WISCONSIN 53201

For More Details Circle (127) on Reply Card



Air emulsion system from the driver's seat.



Close-up of Accutrol V-type nozzle.



This nozzle tip can spray a stream up to 80 ft.

## GYPSY MOTH 1973

(from page 26)



**Heals  
wounds;  
prevents  
decay**

Cabot's Tree Healing Paint is a carefully prepared bituminous paint for protecting live wood and preventing decay. Leading arborists and foresters have been using it for almost half a century. Here are the reasons why:

- ideal for trees, shrubbery, etc.; seals, heals wounds, cuts, broken limbs, pruning abrasions.
- stimulates growth of new bark
- apply with brush or spray; produces a black, tough, elastic, quick-drying coating.
- excludes moisture; stops rot; prevents evaporation of sap
- may be used in any season

**clip and mail this  
coupon today**

### Samuel Cabot Inc.

Dept. 358, One Union St.  
Boston, Mass. 02108

Ship \_\_\_\_\_ pints (12 per case) @ 65¢ each

Ship \_\_\_\_\_ quarts (12 per case) @ \$1.10 each

Ship \_\_\_\_\_ gallons (4 per case) @ \$3.65 each

#### Pruner's Applicator Jar (4 oz. jar)

Ship \_\_\_\_\_ cases (24 Applicator  
Jars per case) @ \$15.60 per case

#### Aerosol Spray Container (5 oz. can)

Ship \_\_\_\_\_ cases (12 Aerosol  
Containers per case) @ \$15.00 per case

Prices f.o.b. Boston less normal trade discounts

attributes this reduction to the wet year, accompanying viral and bacterial attacks, as well as "peak out" of populations. Although these factors and limited state spray programs and containment efforts have been successful, he speculates there will probably be continuing heavy infestations in the central, northwest and eastern sections of the state this year.

Dr. William Metterhouse, state entomologist in New Jersey, does not anticipate significant change in the overall gypsy moth picture. But he points out that all counties in the state are infested to one degree or another. In northern areas infestations are stabilizing, but in central areas such as Mercer county and points south he expects heavy to severe infestations.

Chemical and biological control programs are being researched in the Garden State to find the best methods for what Dr. Metterhouse refers to as containment.

"We feel the gypsy moth is here to stay and our job is to contain it and prevent serious environmental imbalance," he says.

New Jersey sprayed 54,000 acres last year under a state and municipal program. Recommendations call for discriminate spraying in populated, recreational, and park areas this year.

New York State reports a drop in defoliated acres this previous year. E. G. Terrel, head of New York's Bureau of Forest Insect and Disease Control, attributes this to the wet cold year plus increased bacterial and viral disease.

The quarantine line in 1971 ran

The ultimate insult to an entomologist: his mail, a field report on Gypsy Moth infestations, spattered with egg masses.

