# New help may be coming!

Spring brings the green leaves on the trees to gladden the hearts of homeowners.

All too soon afterwards may come the hordes of hungry caterpillars and other insects, chomping leaves, denuding trees, sometimes even killing them.

Along with this damage comes the ugly mess of worm droppings, squirming caterpillars hanging from threads... crawling everywhere. It's uncomfortable to walk about the grounds, impossible to sit on the outdoor patio and unwise to even park a car under a tree.

Arborists have new help coming to give their customers greater freedom from insect attacks on trees and shrubs. It's Imidan<sub>®</sub> insecticide from Stauffer, which already is being used to provide outstanding control of many insects on fruit trees.

Label registration for Imidan is expected this spring before these insects hatch out to attack shade trees: gypsy moth, elm spanworm, spring cankerworm and birch leaf miner. Years of tests by experiment stations and commercial arborists show that Imidan is highly effective in controlling these insects. And their results show that Imidan has special advantages in insect control, with a minimum of unwanted side effects on the environment. With its low toxicity to many beneficial insects, it allows their survival to improve their control of other injurious pests.

Imidan has been used for years to control major insect pests of apples, pears, peaches and several other fruit crops in commercial orchards. Imidan can be used alone for insect control and does not harm finish on automobiles or outdoor furniture.

For full information on Imidan and its expected new use for shade tree insect control, write to Stauffer Chemical Company, Agricultural Chemical Division, Dept. HD, Westport, CT 06880.

Imidan from





# Mini-size, Triple-Threat Trencher-Plow-Blade

"The Diggin' Dutchman" calls it his "triple-threat mini," but the Vermeer M-147H is really a giant in the service line field. It's built to absorb the daily punishment of hard commercial jobs; yet, it's designed with a no-shift, no-clutch hydrostatic drive so that anyone can be an expert operator in minutes. Ask "The Diggin' Dutchman" about the M-147H as a mini-trencher . . . mini-plow . . . mini-dozer . . . and maxi-moneymaker! Send for more information and complete literature. Better yet, tell him you want a demonstration.



Another Trencher From . . .

## THE DIGGIN' DUTCHMAN

7205 W. Washington Pella, Iowa 50219





Vermeer M-147H . . . as a mini-trencher, digs 3"-5" wide, down to 30" deep (standard) . . . as a mini-plow, direct buries service lines down to 15" deep . . . as a mini-blade, pushes spoil back into trench with 30° angle, left or right. Available with mini-size trailer.

For More Details Circle (103) on Reply Card

#### CHICKEN FEED (from page 60)

equipped with elevated dump tanks for loading out bulk trucks and 50-pound-bag packaging facility for small users. On-site bulk storage capacity is 150 tons, and these bulk tanks are equipped with a nitrogen gas generator to reduce oxidation and possible loss of xanthophyll.

Analysis of the feed now being produced at the plant shows higher levels of xanthophyll (and also desirable carotene and protein) than even the exhaustive research had predicted. So successful has the operation proved to be that a second dehydration facility of the same type has been set up at Cal-Turf's El Toro sod farm, located at the Irvine Ranch. The dried clippings from this unit are transported to Camarillo for final processing and marketing.

Perhaps the most encouraging aspect of the Hy-Gold development is the increased contribution the entire process is making toward ecological progress. Not only does the new facility reduce air pollution by making use of waste materials that at one time might have been burned, but the use of long-lasting pesticides has been completely eliminated to maintain purity of the finished feed. The few products that are used in the field are short term and biodegradable. No clippings ever are processed until all traces have vanished. Some biological pest controls also have been successfully employed, and continuing research is being conducted in this important area.

### Cost of Weed Control Compared With Slide Rule

A slide rule that compares the cost of using Assault soil sterilant with that of 21 other herbicides is now available from West Chemical Products. Inc.

The movable slide lists herbicide ingredients, unit price, rate of application, and use-cost. An application guide gives dilution instructions for proper use of Assault Concentrate on various types of soils. The tabulation shows that Assault can save the user from \$10.00 to several hundred dollars over current weed control costs.

Assault, a liquid soil sterilant, soaks into the ground and attacks roots and seedling growth. Weeds begin to wither and die within 24 hours. A single treatment can prevent weed growth for up to 12 months. Assault is designed for areas where no plant growth is designed.

For more details circle (723) on the reply card.

### New Formulation of Dylox Registered For Gypsy Moth

A new formulation of Dylox insecticide has been developed by Chemagro Division of Baychem Corporation for use in gypsy moth control programs conducted under the supervision of governmental agencies. A temporary permit application for the new formulation, Dylox 80% SPA insecticide, has been filed

with the Environmental Protection Agency.

Dylox insecticide has been used on a variety of ornamentals and vegetable and field crops for more than a decade. The compound offers the advantage of pest control without destroying beneficial insect populations when applied as directed. Its low order of toxicity to beneficial insects has permitted extensive use in integrated control programs on agricultural crops.

A registered ultra-low volume (ULV) formulation of Dylox has provided exceptional control of gypsy moth larvae on forest and shade trees. However, since the ULV formulation can cause some spotting of automobile paint finishes, it is not to be used in areas where the spray might come in contact with automobiles

Dylox fits well into a forest environment. It is a bio-degradable insecticide with relatively low toxicity to fish and wildlife as well as beneficial insects. Data indicates that exposure to dosages higher than normal forest insect control rates has not resulted in significant reductions of fish populations.

A mixture of Dylox 80% SPA and horticultural oil has been found suitable for application in helicopter and fixed-wing aircraft spray systems.

In cooperation with the U.S. Department of Agriculture Forestry Service, additional testing is to be conducted under the 1972 temporary permit in the New England and Mid-Atlantic states where gypsy moth infestations are most severe.

### Davey Field Men Attend School of Hard Knots

Knowledge of ropes and knots are important to tree men who must move about in tall trees. Ropes must be in good condition at all times and knots must be tied properly to minimize the chance of an accident.

Davey Institute of Tree Service, the only school of its kind, recently graduated 29 students following an intensive five week program in the care and perpetuation of shade trees. During the course, tree care men from 11 states received instruction and training in tree feeding, moving large trees, pruning, cabling and bracking, tree identification, land-scape planting, tree surgery, control of insects and tree diseases, first-aid and safety.

W. A. Jeffers, Institute director, says that students Davey field men further their education in laboratory, classrom and field courses at this school founded in 1909. They learn the latest techniques available including a working knowledge of ropes and knots.

Sixty years ago, tree men worked with nothing more than a length of rope and a hand saw, says Jeffers. Today they must know how to handle power tools, 70 foot cranes, skyworkers and all kinds of other mechanical equipment.

One of the newer sections in the course is insect control in conifers.

Davey students learn the latest methods for controlling cankerworm or gypsy moth, the leaf-eating worms that have caused extensive damage throughout the Northeastern US



Practice makes perfect and these men associated with the Davey Institute are getting first hand experience in knots. They are: (I-r) J. L. Hutson, Greensboro, N.C.; H. W. Fielder, Yonkers, N.Y.; W. A. Jeffers, Institute Director; and L. E. Thompson, Denver, Colorado.

### Permanent vecetative gover

(seeded areas

### By Environmental Control...

Retain Moisture, Maintain Constant Temperature, Provide Shade with the Exclusive...



(available with plastic or paper netting)

P.S. it also stops soil erosion too!



### AMERICAN EXCELSIOR COMPANY

For information on AMXCO's turf establishment and erosion control write: dept. WTT-5 AMXCO, P.O. Box 5067, Arlington, Texas 76011



FROM THE
TURF RESEARCH OF
RUTGERS UNIVERSITY



(Wide area field-tested by leading turf specialists)

### **BONNIEBLUE**

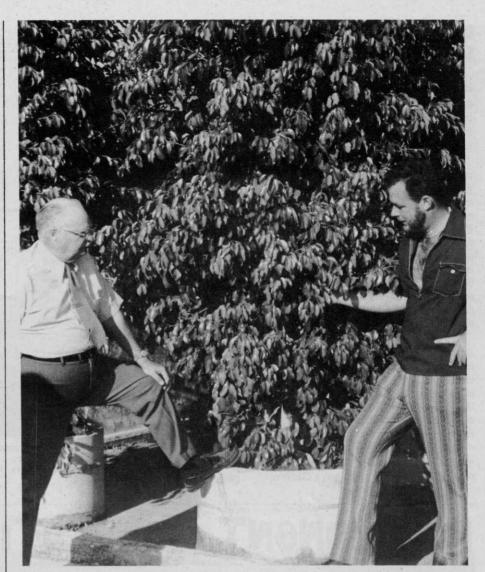
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- Excellent disease-resistance.
- Rich, dark-green color that lasts throughout entire growing season.
- Fine textured foliage.
- Low growth to save cutting time.
- Produces dense turf. Resists invasion of weeds.
- Jointly developed at Rutgers University with E. F. Burlingham & Sons.

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Down from the town of Palm Beach "with money in my pocket," was Robert Jones, Supt. of Parks. He and his host, Tommie Hofmann examine a "Big Stuff" Ficus nitida, grown in a special two-section container. It has never touched the ground.

### Merchandising Pays For Hofmann Nurseries

Tommie Hofmann's recent unique merchandising idea of inviting the nursery industry to participate in his all day "Big Stuff" Plant Carnival, paid off "famously in fellowship and sales." About 400 friends (and buyers) representing every facet of the industry responded, with visitors waiting when the gate was opened at the Bill Hofmann Wholesale Nurseries in Hollywood, Fla.

If possible, those attending the Plant Carnival were as excited as Tommie and his "Uncle Bob" were happy with the gala; even the sun smiled its approval on the rain-predicted day.

There was a run on the electric carts for zipping through the symmetrically laid out nursery, where plants are always kept groomed in high fashion by Uncle Bob. And, fragrance wafting from two large barbeque ovens attracted trafficstopping interest; for bubbling in one were 225 pounds of juicy pork tenderloin, and in the other, 4-20 pounds of piece de resistance . . . standing prime rib roasts.

The event was climaxed with the Florida Nursery Growers Assn. Broward Chapter's regular monthly meeting, with many of the FNGA state officers on hand. Included were, President Joe Welker, Duval Landscape Co., Jacksonville, Joe Shaw, Shaw Landscape and Nursery Co., South Miami, who steps into the presidency in May, and Second Vice President Dick Gladwin, Gladwin Nurseries, Jupiter. Also, Janette Robb, executive secretary. Others were Dave Stabler, Sr., Winter Haven Nurseries, Winter Haven, charter president, and Beverly Turbeville, the only woman to hold the presidency since the association's inception in 1952.





When answering ads where box number only is given, please address as follows: Box number, c/o Weeds Trees and Turf, 9800 Detroit Ave., Cleveland, Ohio 44102.

Rates: "Position Wanted" 10¢ per word, minimum \$3.00. All other classifications 20¢ per word,

Rates: "Position Wanted" 10¢ per word, minimum \$3.00. All other classifications 20¢ per word, minimum \$4.00. All classified ads must be received by Publisher the 10th of the month preceding publication date and be accompanied by cash or money order covering full payment. Boldface rule box: \$25.00 per column inch.

#### USED EQUIPMENT

VERMEER TRUCK mounted tree spade, TS-44 mounted on 1963 Dodge, 4 wheel drive, asking \$6,200. 1963 Dodge 4 wheel drive dump truck, 1 ton, \$950. Asplundh V-8 16" chipper, excellent condition, asking \$2,800. 1969 and 1970 Skyworker, 50' reach, excellent condition. We buy used tree equipment—chippers, stump grinders and aerial towers. Edwards Tree Service, 3190 Cooper Foster Park Rd., Vermilion, Ohio 44089. Phone 967-6750 or 933-6750.

RECONDITIONED brush chippers, sprayers, log splitters, stump routers, bucket trucks. Let us know your needs. Equipment Sales Company, 5620 Old Sunrise Highway, Massapequa, New York 11758. Phone 516 799-7619.

FOR SALE: Deming 25 horsepower centrifugal water pump. 220V, 3 phase, capacity 250 gallons water per minute. Includes electric starter and foot valve. Joe Rybka, Thorny Lea Golf Club, Brockton, Massachusetts 02403.

FOR SALE: One five gang Jacobsen reel mower, one year old, like new. One five foot Brillion Seeder, three point hitch, like new. One five foot rotary clipper, three point hitch,

P.T.O., like new. Chris Teigum, Madelia, Minn. 56062.

#### FOR SALE

Will fit any Ryan sod cutter. Works like double edge razor blade. Cuts much more sod per blade. Made to bolt on both ways. \$24.00 plus postage. New automatic sod loaders for direct loading to pallets, trucks or trailers. No workers needed on ground. Both products developed and designed by Hadfield. Write or call Glen Hadfield, 4643 Sherwood, Oxford, Michigan 48051. Phone 313 628-2000.

#### **SEEDS**

LAWN GRASS SEED — Full line including sod-quality Merion, Fylking, bluegrasses, fescues, bentgrasses, ryegrasses, etc.
We specialize in custom mixing.

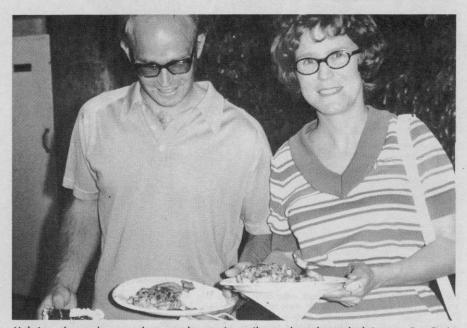
Phone 216/753-2259

SOD QUALITY MERION SEED for discriminating growers. Also Fylking, Delta, Park, Newport, Nugget and Pennstar bluegrasses as well as fine fescues. We will custom mix to your specifications. Michigan State Seed Company, Grand Ledge, Michigan 48837. Phone 517 627-2164.

CROWNVETCH SEED Penngift and Chemung varieties in good supply. Direct all inquiries to: Walter C. Mehlenbacher, Castile, New York 14427. Phone 716 493-2553.

#### **EDUCATION-BOOKS**

LEARN AUTOMATIC IRRIGA-TION. Easy to follow text and diagrams on latest valves, heads, controllers. System design, operation and trouble shooting. Write for free outline on this ten lesson low cost course. Larson Company, P.O. Box 4453, Santa Barbara, Calif. 93103.



Helping themselves to the succulent prime ribs and pork tenderloin are Dr. P. L. Neel, III, and Mrs. Neel. Dr. Neel is associate professor and tree expert at the Agriculture Research and Education Center (AREC), Fort Lauderdale.

#### MISCELLANEOUS

LANDSCAPE DESIGN KIT, 37 rubber symbol stamps and ink pad. Postpaid \$25.00. C.O.D. \$26.00 plus postage. Order direct or brochure sent. California add tax. T-Gordon's, Box 741T, Reseda, Calif. 91335.

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ACUPUNCTURE FOR DYING ELMS has saved one 60 foot tall specimen. Wilfred Weber, a Kitchener, Ontario, blacksmith hammered galvanized nails into a diseased elm tree six years ago. He read about this remedy for Dutch Elm disease after reading a newspaper article in which a horticulturist said soil deficiency of some metallic elements often was responsible for the disease.

ONE HUNDRED TWO YEARS AGO James Ingalls on the floor of the United States Senate said, "Next in importance to the divine profusion of water, light and air, those three physical facts which render existence possible, may be reckoned the universal beneficence of grass."

NOISE POLLUTION IS NOT A 20TH Century phenomenon. As far back as the Roman Empire, there were noise ordinances passed. Noise pollution is an ever growing problem, however. Sound is measured in decibel (dB) and scaled to a range of 0 to 120 dB. Unlike other forms of pollution, the decibel is not additive. If two sources of 40 dB are combined, the total sound is not 80 but 43 dB.

The effects of noise on man can be broken down into three areas — physiological, physical and psychological. A constant exposure to noise levels greater than 85 to 90 dB can result in permanent damage to parts of the ear that even surgery cannot repair. Other physiological effects include fatigue, constriction of blood vessels and pupil dilation.

One physical effect of noise is speech interference. Loud noises also cause an automatic increase in the level of one's voice.

Phychological effects of noise can be described as distrubing, annoying, and at times create reactions of fear.

Transportation sounds are a major part of the noise pollution problem. The most irritating noises come from unmuffled motorcycles, autos and large trucks. Aircraft hold a close second. It's a good idea to wear acustical ear muffs or plugs when working around noise producing equipment.

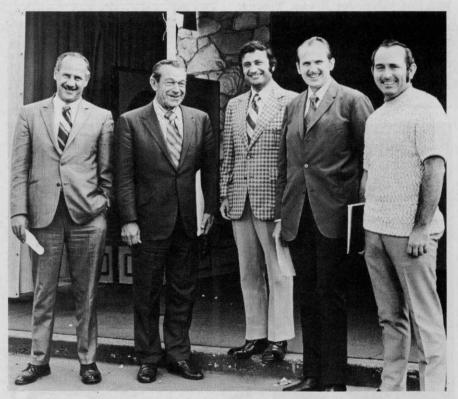
NATURAL OR SYNTHETIC RUB-BER may be used in the application of insecticides and herbicides in the future. N. F. Cardarelli, University of Akron, says that a non-persistent chemical protectant dissolved in natural or synthetic rubber could be released slowly to maintain a very low level of the chemical in the environment. The overall amount of a chemical needed will probably never exceed three percent of that conventionally used.

PLASTIC GRASS AND PLANTS ARE OUT for the city of Los Angeles. The city's Public Works Committee voted to bar the use of plastic grass and plants for the 1972-73 season. Only living greenery will be allowed. The ban came following a public protest over the use of plastic trees in a highway dividing strip in southern Los Angeles. The trees were removed.

GENETICALLY RESISTANT SEED-LINGS may keep deer and rabbit damage to a minimum in Douglasfir forests. Recent work in the Pacific Northwest by the Forest Service proves both the presence and the heritability or resistance traits in Douglas-fir. Unlike artifical repellents, resistant trees could provide year-round protection for as long as needed. However, it may take a decade to intensify resistance or to breed seedling stock in the amounts required. Physical research is underway to determine chemical factors underlying resistance.

THE TRIAD CONCEPT although basic to the plant pathologist, is often negelected in disease control programs. Plant disease does not always occur when a pathogen is present. A susceptible plant and a favorable environment are needed to complete the triangle. The absence of any one or more of the tree components of this triad results in no disease, a fact that can work to the benefit of the grower. If he finds the pathogen hard-to-control, he has the alternate choice of changing the environment or the plant.

HACKETT WILSON, a retired arborist in North Carolina, still has tree roots set deep in Tar-Heel soil. He is the former owner of Wilson Tree Co. and past president of the National Arborist Association and the International Shade Tree Conference. According to the Charlotte Observer he has recently helped beautify the streets of Shelby, N. C. His nearly half-century of tree experience bring a wealth of knowledge to the job.



Here's the hard-working cogs who will make the wheels turn at the International Shade Tree Conference 48th annual convention, Newporter Inn, Newport Beach, Calif., Aug. 13-17. Nearly 800 people are expected to attend. Standing (I-r) are: William T. Bell, president of the Western Chapter and General Chairman of this year's convention; C. Elmer Lee, transportation chairman; Gene Himelick, executive director, I.S.T.C.; Cal Bundy, executive secretary, I.S.T.C.; and, John F. Cyprien, assistant general chairman of I.S.T.C.

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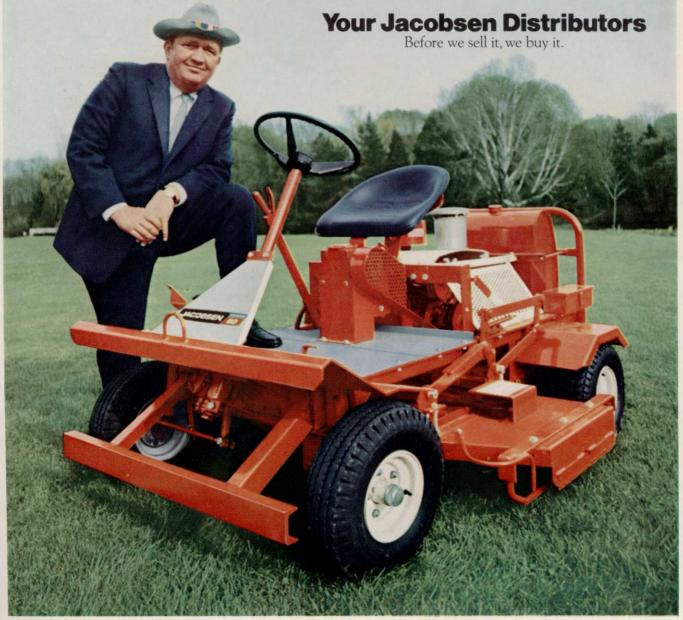
The Commercial 60 can mulch leaves or drive an optional blade for light snow removal. And the high-capacity 10 gallon gas tank cuts refueling stops to a minimum.

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