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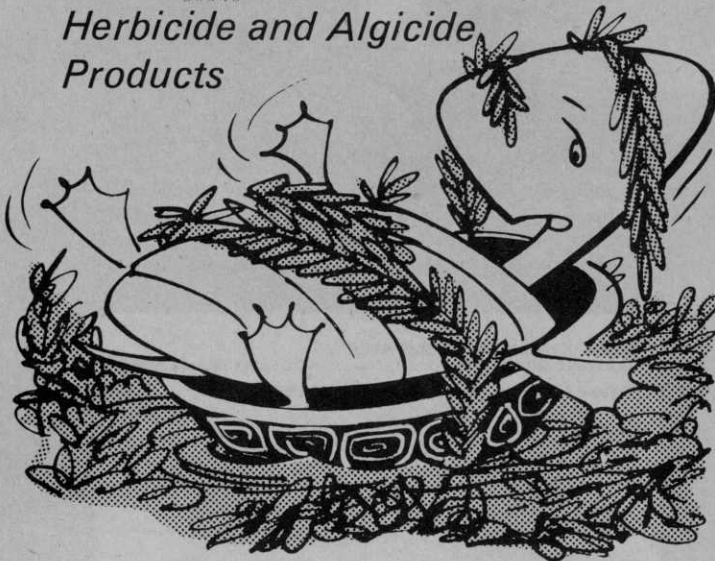


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# —insect report—

## INSECTS OF ORNAMENTALS

### SPRUCE APHID

(*Elatobium abietinum*)

NORTH CAROLINA: Damage observed on yard-planted spruce in Waynesville, Haywood County. This is second report of occurrence in Eastern U.S. and is a new county record. First observation of damage made during December 1967 on ornamental white spruce (*Picea glauca*).

### BLACK THREAD SCALE

(*Ischnaspis longirostris*)

OKLAHOMA: Moderate on *Philodendron pertusum* in retail outlet in Oklahoma City, Oklahoma County. This is a new State record.

### FALSE SPIDER MITE

(*Brevipalpus lilium*)

ALABAMA: Populations developed to extreme levels on 20 large azalea plants at building in Auburn, Lee County. All leaves heavily bronzed; several hundred mites and eggs noted per leaf.

### TEA SCALE

(*Fiorinia theae*)

ALABAMA: Heavy and damaging on camellia and holly at such southern locations as Atmore, Escambia County and Monroeville, Monroe County. Lighter populations observed on numerous sasanqua plants at Dothan, Houston County. MISSISSIPPI: Very heavy on camellia leaves in Washington and Bolivar Counties.

### FIRE ANTS

(*Solenopsis spp.*)

SOUTH CAROLINA: *S. invicta* (red imported fire ant) collected in Greenville County. This is a new county record. Infestation (about 30 mounds) in localized area around one building. Eradication efforts planned, nearest infestation about 100 miles southeast of Greenville. TEXAS: Heavy populations and mound building activity by *S. geminata* (fire ant) and *S. xylonia* (southern fire ant) reported on pastureland in De Witt County. Increased mound building activity by *S. invicta* reported in many other counties in this area.

### DIASPIDID SCALE

(*Gymnaspis aechmeae*)

ALABAMA: Heavy infestation occurred in bromeliad plants in greenhouse at Auburn, Lee County. This is a new State record.

### PERIODICAL CICADA

(*Magicicada septendecim*)

TENNESSEE: Damaged tender growth on several ornamental species in Shelby County during 1973 growing season. Oviposition punctures caused one-year growth to die in many cases.

## BENEFICIAL INSECTS

### LADY BEETLES

KANSAS: Trace populations of *Hippodamia convergens* (convergent lady beetle) active adults observed in alfalfa stubble in Elk County field. MISSISSIPPI: Thousands of *Coleomegilla maculata* adults readily found in Bolivar and Washington Counties. Some became active during warm weather last week of January but recent cold weather decreased activity.

### CONVERGENT LADY BEETLE

(*Hippodamia convergens*)

NEW MEXICO: Lady beetles, mostly this species, increased in alfalfa; 1-10 larvae per square foot very common.

### BRACONID WASP

(*Lysiphlebus testaceipes*)

OKLAHOMA: Heavy parasitism (up to 90 percent) caused a decline of *Schizaphis graminum* (greenbug) in wheat in Washita County; adults ranged up to 10 per linear foot in some wheat in Jackson County. Moderate parasitism of greenbug noted in Grady County, light parasitism noted in Bryan County.

## TURF INSECTS

### CHANGA

(*Scapteriscus vicinus*)

FLORIDA: Adults appeared at lights last week of January at Gainesville, Alachua County. Due to warm weather, dispersal flight starting earlier than usual. Mated females can be expected to dig into turf and cause damage after dispersal flights.

WEEDS TREES and TURF

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## Sycamore Blight Infection Triggered By Wet Weather

Last spring's excess of cool wet weather accelerated the spread of a number of fungus diseases which attack ornamental trees and shrubs.

One of these diseases that made a sweep through the mid-western states last year was sycamore blight or anthracnose (*Gnomohia planti*). Most tree care specialists say this disease does more damage to sycamore trees than any other disease in the mid-continent.

Sycamore anthracnose has no known cure, but can be prevented by spraying protective fungicides such as maneb compounds (M-45, Manzate 200) and some of the new systemic fungicides about the time the leaf buds begin to swell.

Once the disease has infected the tree, good sanitation practices can prevent it from spreading.

Signs of blight may appear on the twigs, buds, shoots or leaves of the tree. Shoot blight, the sudden dying of expanding shoots and young leaves, is the most noticeable symptom. Leaf blight is also apparent, appearing as irregular brown areas adjacent to the midrib and veins of sycamore leaves. Partial or even complete defoliation of an infected tree may occur, but a new crop of leaves is usually put out by late spring or early summer.

Although anthracnose does not usually cause the death of the tree, it can reduce the tree's resistance to attacks by other insects and diseases.

## Pest Management Director Gives Nod To Integration

The major objective of the USDA pest management pilot projects, is to develop multiple and alternate choice systems for controlling insects, weeds, diseases and nematodes, and systems which are effective, economical and environmentally sound, noted J. M. Good, director of pest management programs for the USDA Extension Service.

The ultimate goal, Good said, is to promote effective use of combinations of cultural, biological and chemical methods for integrated pest management.

The first pilot programs were established in 1971 to provide more effective use of pesticides on cotton. Subsequently, the program has been expanded to include 39 current proj-

ects in 29 states on 19 major crops.

The development of integrated pest management projects, Good said, is progressing from simple to complex systems, depending on environmental factors, crops involved and nature of pest complexes. As technology and experiences permit, integrated pest management — or crop protection — will be accomplished by systems analysis, and management of weeds should become an integral part of pest management schemes.

## Golf Course Architect William F. Gordon Dies

William F. Gordon, one of the founding members of the American Society of Golf Course Architects, died Nov. 30 at Abington, Pa. He was 80.

Gordon, who had been active in the field of golf course architecture for more than 53 years, was buried in his home town of Doylestown, Pa., Dec. 3. He is survived by his widow, Ernestine, and son, David, also a golf course architect.

## Greenfield Brand Trademarks Sold To Lebanon Chemical

Elanco Products Company has announced that it recently completed arrangements for Lebanon Chemical Corporation, Lebanon, Pennsylvania, to purchase trademarks of former Elanco Greenfield® lawn and garden products, effective July 1, 1974. Elanco will discontinue marketing of these products on that date.

Individual names of major products will remain unchanged, as will product quality, according to Lebanon officials. "We will continue the supporting programs with dealers that have helped make these products what they are," said Vernon Bishop, president of the Lebanon, Pa. firm. "Lebanon is 100 percent committed to continued sales growth for these lawn and garden products. We look forward to working with each dealer." He added that the overall appearance of the familiar packaging will be the same.

A. M. McVie, Elanco president, said, "This change is being made to maximize the resources of both organizations. Elanco will continue to supply those active ingredients

that it manufactures and devote considerable effort to the development and testing of new products. Our long association with Lebanon convinces us they will put vigorous effort behind these products and give effective merchandising support to all dealers."

## Outstanding Dealer Award Presented To Watson Dist.

Watson Distributing Company, Inc., of Houston, has been named the 1973 Outstanding Dealer for Ryan turf care equipment.

John T. Watson, president of the firm, accepted the award from Vern Worrel, Ryan general manager, at Busch Gardens in Los Angeles during the 45th annual GCSSA Turf-Grass Conference. Ryan hosted more than 50 dealers throughout the nation at the Busch Gardens.

Watson Distributing was founded in 1956 and has branch offices in Dallas and San Antonio, Tex. Other principals include H. Craig Watson, executive vice president; Gene Bockholt, sales manager; and John Pytel, operations manager.

## California Distributorship Established By Vermeer

Vermeer Manufacturing Co., Pella, Iowa has established its first, exclusive Vermeer distributorship in Southern California, effective January 1, 1974.

Bob Qualls, a Vermeer factory representative for the past two years, will manage the new outlet located at 1401 E. Pomona Street in Santa Ana.

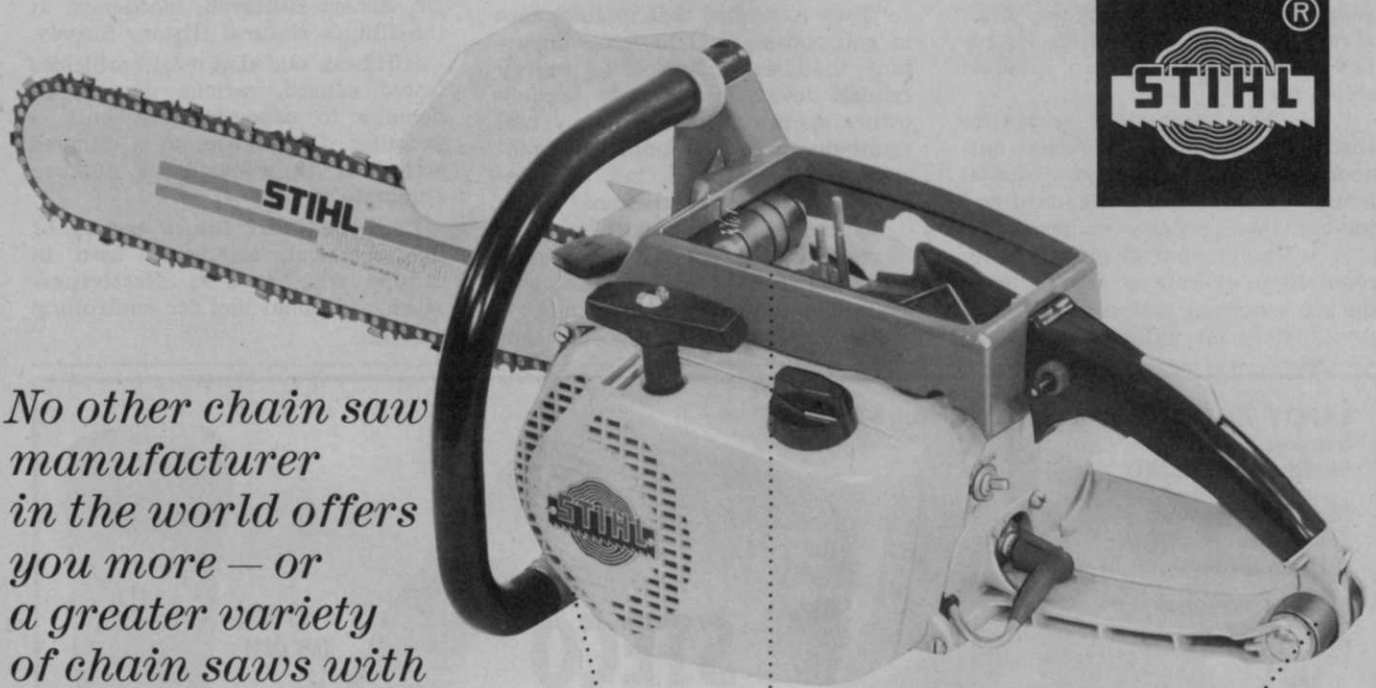
## Distinguished Faculty Award Given To Forest Geneticist

Dr. Jonathan W. Wright, forest geneticist at Michigan State University, recently received that institution's Distinguished Faculty Award.

An internationally known researcher and teacher, Wright conducts the largest and most varied genetics program in the U.S. He has contributed to the black walnut planting program in Michigan and is now testing elms to find resistance to the Dutch elm disease.

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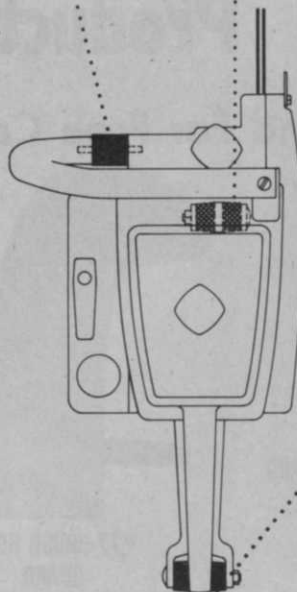
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## Record Six Months Sales Reports Toro Company

The Toro Company has reported sales of \$47,804,000 for the six months ended Jan. 31, 1974, an increase of 13 percent over the \$42,222,000 reported for the first half of the preceding fiscal year.

Earnings after taxes from continued operations for the six-month period were \$1,373,000 or \$.55 per share, up six percent over the same period last year. Both sales and earnings for the first half of fiscal 1974 were new records, David T. McLaughlin, Toro president, said.

Toro included with its report to shareholders a position paper on "Toro and the Energy Crisis." In it, Mr. McLaughlin stated, "We do not foresee any major impact on our sales due to gas shortages. Even severe rationing of gasoline, we believe, would have only a minimal effect for these reasons:

"... The homeowner recognizes that his lawn mower and other outdoor power equipment are essential home appliances that safeguard and increase his property values."

"... The amount of gas normally required to operate a rotary mower during a normal season's use is approximately six gallons. Toro's ex-

clusive high torque engines use substantially less gas — up to 35 percent less — reducing the gas required to only four to five gallons for the season."

"As for the higher horsepower engines on our larger turf maintenance equipment, we recently conducted a survey of leading golf course superintendents — from Florida to the state of Washington — to determine what effect the energy crisis had on our primary market for this equipment.

"The common thread that ran through all their reports was that labor costs far outweigh fuel costs. Any increase in fuel costs only makes it that much more important, they said, to reduce labor costs through the use of sophisticated, labor-saving equipment," he said.

"They recognize that maintenance of golf courses will be more important than ever if a true energy crunch develops, not only because owner/operators have a heavy real estate investment that must be maintained and protected, but also because less gas for recreational travel — by car or plane — will bring an increase in the use of recreational areas closer to home, such as golf courses, parks and playgrounds."

The Toro president reported that

orders are at record levels, reflecting, he felt, the mounting concern of consumers with increasing prices and products shortages.

Although the outlook for the second half of the fiscal year is "tempered somewhat by forecasts of sluggish economic growth," Mr. McLaughlin concluded, "we nevertheless are confident that sales and earnings for the fiscal year will attain new records for the company."

## Preliminary Herbicide Tests Halt Growth Of Cabomba

Preliminary studies indicate that a granular dichlorprop is an effective herbicide for controlling the aquatic plant cabomba, according to Dr. Robert Hiltibran, biochemist at the Illinois Natural History Survey.

Hiltibran said that most herbicides tested caused various degrees of damage to cabomba, but only a granular dichlorprop, in a delayed action of 12 weeks, was able to eliminate it.

He hoped that future testing of this chemical, commonly used in Europe, will prove its effectiveness as an additional tool for controlling cabomba.

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#103-D SAW SCABBARD

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## meeting dates

**All Ohio Safety Congress and Exhibit**, 44th annual meeting, Sheraton-Columbus, Columbus, Oh., Apr. 16-18.

**Perlite Institute, Inc.**, 25th annual meeting, Broadmoor Hotel, Colorado Springs, Co., Apr. 19-24.

**National Water Safety Congress**, annual meeting, Heart O'Town Motor Inn, Charleston, W. Va., Apr. 21-24.

**Southern California Turfgrass and Landscape Horticulture Institute**, annual session, Royal Inn, Anaheim, Calif., April 23-24.

**Arizona Turfgrass Conference**, Sheraton-Pueblo Inn, Tucson, Arizona, May 1 and 2.

**California Fertilizer Conference**, Anaheim, Calif., May 2 and 3.

**Western Chapter, International Shade Tree Conference**, annual meeting, Del Monte Hyatt House, Monterey, Calif., May 19-22.

**Florida Nursemen and Growers Association**, annual convention, Dutch Inn, Lake Buena Vista, Fla., May 23-25.

**American Society of Landscape Architects**, 74th annual meeting, Americana Hotel, Bal Harbour, Miami Beach, Fla., June 30-July 4.

**American Association of Nursemen**, annual convention, Four Seasons-Sheraton Hotel, Toronto, Ont., July 13-17.

**American Sod Producers Association**, summer meeting, Park, Fla., July 14-17.

**American Sod Producers Association**, summer meeting, Sheraton Inn-Northeast, Washington, D.C. (New Carrollton, Md.) July 16-19.

**American Society for Horticultural Science**, 71st annual meeting, and **Canadian Society for Horticultural Science**, 19th annual meeting, University of Guelph, Ontario, Aug. 11-17.

**International Shade Tree Conference**, Golden Anniversary meeting, Atlanta, Ga., Aug. 18-23.

**National Hardware Show**, 29th annual show, New York Coliseum, New York, N.Y., Aug. 25-29.

**Professional Grounds Management Society Conference**, annual meeting, Crown Center Hotel, Kansas City, Mo., Sept. 3-7.

**International Plant Propagators' Society, Western Region**, 15th annual meeting, Mission Bay area, San Diego, Calif., Sept. 4-6.

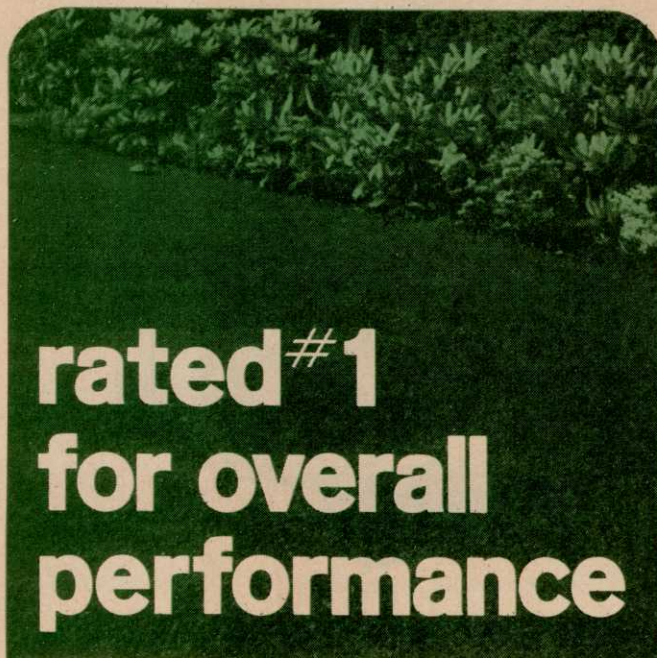
**International Pesticide Applicators Association**, Seattle, Wash., Sept. 18-21.

**American Horticulture Society Congress**, Washington, D.C., Oct. 10-12.

**Central Plains Turfgrass Conference**, K-State Union, Kansas State University, Manhattan, Kan., Oct. 23-25.

**CONEXPO '75**, McCormick Place and International Amphitheatre, Chicago, Ill., Feb. 9-14.

**Southern California Turfgrass Council**, 14th annual exposition, Orange County Fairgrounds, Costa Mesa, Calif., Oct. 23-24.



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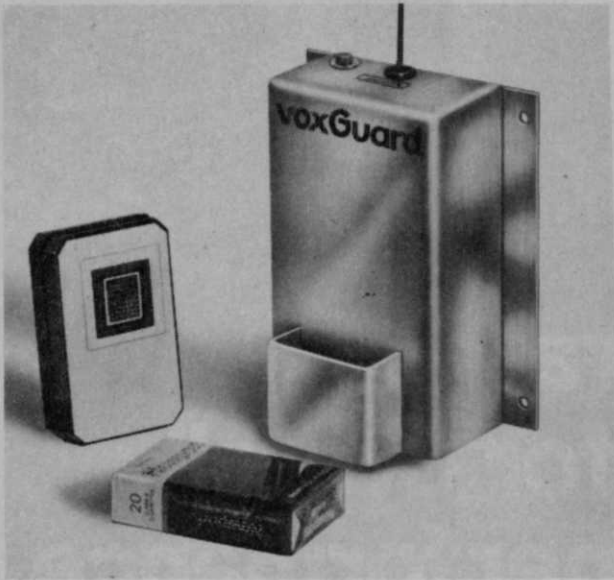
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**VOICE-ACTIVATED SAFETY DEVICE:** Vox Industries, Inc., Independence, Ia.

This new safety device is designed to stop a machine at the critical moment to prevent or minimize operator injury. It is activated by the operator's voice and is immune to engine sounds and other mechanical noises. The six-ounce, cigarette pack-sized transmitter is carried in a pocket or worn on the operator's clothing. When activated by a shout or scream, it transmits a radio signal to the machine-mounted receiver unit. The receiver unit instantly shuts off the machine's electrical power or fuel supply. For more details, circle (701) on the reply card.



**POWER-KART:** SNOW CO. Omaha, Neb.

This rugged, three-wheeled grounds maintenance vehicle features a unique variable speed, torque amplifier drive unit. The cart seats two people, hauls up to 350 pounds and is equipped with spring-loaded front fork suspension. Wide flotation-type rear tires buck through mud, snow and sand and at the same time prevent compaction when driven over turf. For more details, circle (702) on the reply card.



**HEAVY DUTY 22 INCH SELF-PROPELLED MOWER:** Bunton Co., Louisville, Ky.

Front-wheel drive with extra large (10 x 2.75) tires makes this mower more maneuverable and easier to handle in rough terrain. Without engaging or disengaging a clutch, you can trim around shrubs, trees and the hard to get changes of cutting height. This model is equipped with a 4 hp engine, a five-quart fuel tank and a snorkel-type air cleaner mounted on the handle. For more details, circle (703) on the reply card.



**"LANDSCAPE SPECIAL" SPRIG PLANTER:** Bermuda King Co., Okarche, Okla.

Small and highly maneuverable, this machine works and handles easily in close quarters with a small tractor. Strictly a one-man operation, it is the ideal sprig planter for estates, golf courses, industrial and public parks. It automatically inserts the sprigs to proper depth, in 2 inch row spacings. Instant setting provide 5 to 100 bushels of sprigs per acre. It mounts easily on any three-point tractor hookup. For more details, circle (704) on the reply card.



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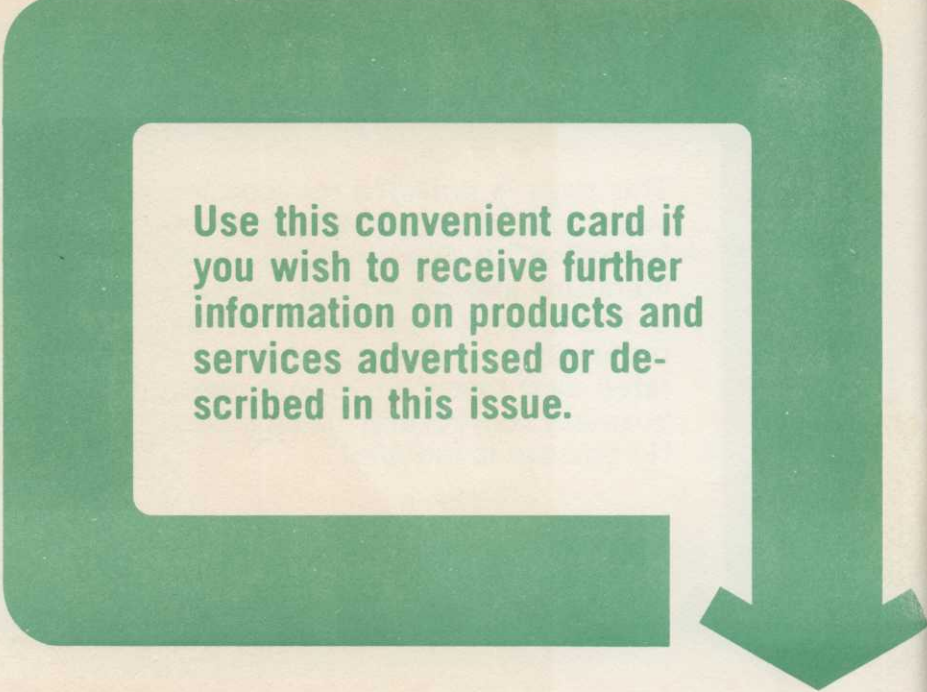
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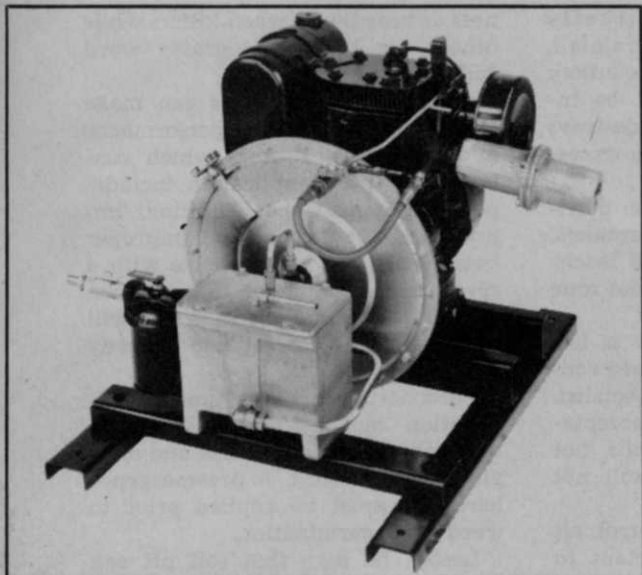


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**LARGE AREA OUTDOOR MOSQUITO FOGGER:** London Fog Co., Crystal Bay, Minn.

This heavy duty aerosol generator incorporates a new method of low micron size fluid particle generation which produces accurate particle size control with 80 per cent of the particles less than 20 microns in diameter or smaller. The result is a finer insecticide fog which remains in suspension longer and does a better job of mosquito control. Its powered by a Kohler cast iron industrial engine with electric starter and generator. The insecticide tank holds 11 gallons. The total weight of the unit is 180 pounds. For more details, circle (705) on the reader reply card.



**SELF-PROPELLED IRRIGATOR:** Boss Irrigation Co., San Angelo, Tx.

This self-propelled, water driven unit is ideal for use on any uneven odd-shaped area or any area obstructed with trees, utility lines or buildings. Adjustable travel speed and water rate application settings are easily set. The units feature an automatic throw-out clutch and long-life irrigation hose. The larger units sports a built-in hose reel powered by a 5 hp gasoline engine. For more details, circle (706) on the reply card.



**76 TURF SPECIAL:** Ferrari Tractors, Inc., Carlsbad, Calif.

This tractor has an air-cooled 45 hp diesel engine, weighs 2,850 pounds and displaces its weight and traction over all four wheels. Power articulated steering gives extremely tight turning radius and extra wide 12.00 x 16 terra-tires give hillside stability. It has a standard three-point hitch and a 2-speed P.T.O. that handles conventional domestic implement rpm operating ranges. For more details, circle (707) on the reply card.



**MODULAR-MATIC DITCH WITCH:** Charles Machine Works, Inc., Perry, Okla.

This vehicle is specifically designed to accommodate a wide selection of interchangeable, socket-mount modular tools. This means that one basic vehicle can perform many different job functions simply by adding or switching modules. For each vehicle there are several different digging modules available as well as modules for vibratory plowing, the combination digging and plowing module, hydraulic boring, backhoe work, hydraulic breaker operations, clean-up and restoration. For more details, circle (708) on the reply card.

**NEW PRODUCTS**





## Maryland Agronomist Details Why Herbicides Don't Work

Why don't herbicides work all the time? Why does a herbicide work in one area and not in another?

These and other questions continually baffle applicators. According to Dr. James V. Parochetti, extension weed specialist, University of Maryland, herbicide failure can be explained in a number of reasons: 1. rainfall, either too much or not enough; 2. rate of application; 3. kinds of weeds; 4. application; 5. time of application; 6. pH level.

Activation of a preemergence herbicide takes place when rain falls within 10 to 14 days following application, says Parochetti. If it doesn't rain, the herbicide lays on the surface and weeds germinate and grow through the herbicide barrier.

Incorporated herbicides virtually eliminate the necessity of rainfall, he says. However, a word of caution: some herbicides should not be incorporated because it either destroys herbicidal activity or causes excessive injury.

Excessive rainfall can be detrimental to herbicide performance, too. On light textured soils, leaching occurs, often below the root zone of weeds.

The correct herbicide rate is important to insure adequate weed control, says the extension specialist. Reduction in rate may give acceptable weed control on light soils, but with heavier soils, weeds will not be controlled.

No one herbicide can control all weeds. Therefore, it's important to know that weeds are a problem before selecting a herbicide. Some herbicides are noted for their effective-

ness as broadleaf weed killers while others are known as grassy weed killers.

Application techniques can make the difference in the performance of a herbicide. Factors which contribute to poor application include: poor equipment, poor mixing, improper incorporation, and improper boom height or inexperience with a spray gun. Equipment that is worn — nozzles, pump, screens — will not deliver the correct rate of spray material on target.

Parochetti says that time of application can make the difference between good weed control and marginal weed control. A preemergence herbicide must be applied prior to weed seed germination.

Lastly, he says that soil pH can have an effect on herbicide activity. Triazine herbicides do not work well in soils with low pH, for example.

## CONTINGENCY USE OF DDT GRANTED

(from page 14)

formance that this Agency is force to require USDA to initiate, without delay, a fully funded, comprehensive research program which, is successful, will support registration of effective and environmentally acceptable alternatives to DDT before next year." EPA specified that the research must be completed in time to submit the necessary documents to the Agency no later than December 1, 1974.

Late last fall, Secretary of Agriculture Earl L. Butz, commented in a press conference that environmentalist had contributed heavily to the situation currently faced by our national forests. He said that "We've got our hands tied behind our backs" about the use of DDT. "We've got to do some trade-offs" if control of tussock moth is to be achieved.

In its caterpillar stage, the tussock moth, a native American insect, eats the needles of the Douglas and other fir trees. thus defoliating or killing them.

Train said that he is granting this request "reluctantly" but that, "A decision must be made at this time in order that planning and contractual arrangements needed for the 1974 control program may be made." He

noted the following as among the factors in his decision:

—emergency conditions do exist for severe defoliation and/or tree mortality from tussock moth larvae this spring.

—available evidence indicates that DDT will give better assurance of effectively controlling moth damage than any available alternatives.

—significant economic and health problems could occur without use of the pesticide. Particularly the local impacts could be catastrophic, for example, the Colville Indian Reservation depends upon forestry for 95% of its tribal income. Also, the probability of rapid spread of forest fires is greater in defoliated areas.

—the proposed use is temporary. EPA expects that alternative means of control will be available for post-1974 outbreaks. Restrictions on spraying will minimize adverse environmental impacts.

The EPA decision follows several months of investigation of the tussock moth problem, including five days of public hearings, four of which were held in the Pacific Northwest. □



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