

Hyacinth Control Commission, of which Dryden is commissioner.

Secretary-treasurer for the coming year is Herbert Friedman, president of Southern Mill Creek Products Co., Inc., Tampa. This is Friedman's second term in the post.

Directors installed were A. S. Chipley, Lee County Hyacinth Control Commission; Jack Salme-la, Brevard County Mosquito Control Director; Dan Gorman, Hills-boro County Mosquito Control Director; and Mel Williams, Sara-sota County Mosquito Control Director.

Friedman told *Weeds and Turf* that next year's meeting will probably be held in Tampa, but exact time and place will be announced later.

### Chlorea Herbicides

(from page W-5)

signed to apply granular materials. Usual rates of application are 1 to 2 pounds per 100 square feet. One-half pound per 100 square feet is frequently all that is required for annual follow-up treatments.

### Safety to Man and Animals

The individual chemicals in Chlorea products are generally regarded as having rather low toxicities to man and animals. It may be fairly concluded, therefore, that the Chlorea herbicides can be considered generally nonhazardous to mammals under normal conditions of use. It is, nevertheless, advisable not to leave containers or chemicals where children or animals may have access to them.

### Precautions

Avoid applications in periods of hot, dry weather, because killing action of Chlorea herbicides is generally through the roots and is dependent on soil moisture. The Chlorea sprays, however, will burn off the tops of weeds at any time and will be effective on the roots as soon as rain falls. Be careful not to apply on or near valuable trees, shrubs or other ornamentals, or to areas into which these roots may extend. Also, do not use on slopes where runoff will move the chemical into the root zone of turf or desirable plants and trees. Remember that all three products should be used only where unproductive soil is not an objection.

### Book Review

#### Diseases of Turfgrasses

by Dr. Houston B. Couch, Rheinhold Book Division, New York, N. Y., 1962, 304 pps. \$10.00.

Extensive appendices and thorough classification tables are among the best features of this new textbook designed to help CAs, and turfmen in general, with the complex problems of disease control.

Nearly 100 pages are given over to analysis of turfgrass disease chemicals, and grasses susceptible to ailments. Arranged both by common and technical names, these tables provide a handy guide which could be used by technical directors and servicemen alike.

Couch's new text is more than a handbook, however. In the first 178 pages, the distinguished author delves insistently into the rudiments of both fungus and nematode-incited diseases, and gives valuable pointers on how to tell one disease from another.

A section on the fundamentals of disease control is a welcome facet of author Couch's comprehensive reference work. This indispensable background material is designed to aid the newcomer to turfgrass disease control, and at the same time is a convenient

reminder for the experienced professional.

Another highlight of the volume are the illustrations, both full color and black-and-white, which give vivid reinforcement to the details set forth in the text.

Couch, who is an associate professor of plant pathology at Pennsylvania State University, has given the contract turf spraying field a valuable tool in his new book. While not an inexpensive publication, serious students of the field will find this reference an important buildingblock to further understanding of turfgrass diseases and how to control them.

### 300 Expected at Midwest Turf Day

Nearly 300 delegates are expected to attend this year's annual Midwest Turf Field Days scheduled for September 10 and 11 on the campus of Purdue University, Lafayette, Ind.

Made up of applicators, supplier staff technicians, government and university researchers and others, the group will spend most of the day in outside examination of Purdue research work.

More information is available from Dr. William Daniel, group secretary, at Purdue.

### Literature you'll want . . .

Here are the latest government, university and industrial publications of interest to contract applicators. Some can be obtained free of charge, while others are nominally priced. When ordering, include title and catalog number, if any. Sources follow booklet titles.

**Sprayers for Weed Control Chemicals.** Agronomy Dept. Mimeo No. 60. 4 pp. University of Maryland Extension Service, College Park.

**Aquatic Weed Control.** Circular 219. 16 pp. il. 1962. Agricultural Extension Service, University of Florida, Gainesville.

**Weed Control in Western Irrigation and Drainage Systems.** Agricultural Research Service and Bureau of Reclamation Joint Report No. 34-14. 24 p. 1960. U.S. Department of Agriculture, Washington 25, D. C.

**Lawn Diseases in the Midwest.** North Central Regional Extension Publication No. 12. 16 p. il. 1961. University of Nebraska Extension Service, Lincoln.

**Use of Low Volume Sprayers for Applying Atrazine 80W and Simazine 80W.** Bulletin GAC 630. folder. il. Geigy Agricultural Chemicals, P. O. Box 430, Yonkers, N.Y.

**Weeding with Chemicals: 1962 Guide.** Bulletin ID-1. 20 pp. Purdue University Agricultural Extension Service, Lafayette, Ind.

**Potassium Cyanate Controls Crabgrass and Chickweed.** Bulletin F-255. 8 pp. il. American Cyanamid Company, Agricultural Division, Princeton, N.J.

**Johnson Grass Control.** Agronomy Dept. Mimeo No. 16. 2 pp. University of Maryland Extension Service, College Park.

**Poison Ivy, Oak, and Sumac: Identification and Control.** Ext. Folder No. 144. 6 pp. il. North Carolina Agricultural Extension Service, Raleigh.

**What the Experts Say about Crabgrass Control.** 24 p. il. Agricultural Chemicals Div., Diamond Alkali Co., 400 Union Commerce Bldg., Cleveland, O.

**Turfgrass Diseases.** Circular 207-A. 1960. 16 pp. Colorado State University Extension Service, Ft. Collins.

**Control of Cattails in Ponds.** Leaflet 229. 4 p. University of Kentucky Extension Service, Lexington.

**HENBIT**  
(*Lamium amplexicaule*)



Henbit, a winter annual or biennial that reproduces by seeds and rooting stems, is a serious pest in lawns, turf, gardens, cultivated fields, and waste places. It is particularly troublesome in fertile soils. Henbit is also variously known as dead nettle, blind nettle, or bee nettle.

Common throughout eastern North America and the Pacific Coast, henbit is also found in the Northcentral states. It is thought to have been introduced from Eurasia.

Stems are 4 to 16 inches tall, slender, smooth (not hairy) and 4-sided. There are many branches that are more or less prostrate with ascending tips. Henbit frequently roots where nodes (joints where leaves are attached to the stem) are in contact with the ground.

Leaves are opposite each other on the stem, and are hairy with rounded teeth. Lower leaves have petioles (stalks), while upper leaves, without petioles, clasp the stem directly. Leaf veins radiate in a fanlike pattern from approximately one point. These leaves are nearly circular.

Flowers are whorled (found in groups of more than 3 at the node), and are located among the upper leaves. Henbit blooms are tubular but 2-lipped, about  $\frac{3}{8}$  inch long, and range from pinkish to purple.

Seeds are borne 4 in a pod, sharply 3-angled, grayish-brown, about  $\frac{1}{16}$  inch long.

Silvex and 2,4,5-T give good control and 2,4-D offers fair results. Apply according to directions on the label.

*Prepared in cooperation with Crops Research Division, Agricultural Research Service, United States Department of Agriculture, Beltsville, Maryland.*

DRAWING BY REGINA HUGHES, USDA, BELTSVILLE

**Geigy to Hold Weed Clinics**

A new series of weed control clinics for pest control operators and contract applicators is being offered throughout the country this year and next by Geigy Agricultural Chemicals Division, Geigy Chemical Corporation.

"Enthusiastic receptions that PCOs and CAs gave last year's clinics have influenced the company to present another program this year," a Geigy spokesman told *Weeds and Turf* at presstime.

Contents of the new courses will be completely different and will lay major interest on industrial weed control.

Increasing interest on the part of PCOs and contract sprayers in general in the booming vegetation control market prompted Geigy to concentrate on killing weeds in the '62-'63 clinics.

New information on Diazinon will also be presented.

Meetings will be held in most major cities as they were last year and invitations will be sent to PCOs and CAs asking them to attend the clinics in their areas.

First program was held in Kansas City, Kans., on July 19, 1962, followed by clinics in Georgia and North Carolina the week of July 23.

PCOs and CAs should contact their local Geigy representatives if they wish to attend. Or write directly to Geigy Agricultural Chemicals Div., P. O. Box 430, Yonkers, N. Y.

**Bagworm Spray Season Here**

Now's the time for CAs to sell their customers on a custom spray job for bagworms. Purdue University entomologist Glen Lehker says the pests are already present and feeding on foliage, but their presence may possibly go undetected. Evergreen trees and shrubs are most likely to be attacked.

Lehker says bagworms can be controlled with either malathion or Diazinon.

Malathion is available as a 57% emulsifiable concentrate which can be mixed at the rate of 2 teaspoons per gallon of water. Diazinon is usually purchased as a 25% emulsifiable concentrate which is used at the rate of 3 teaspoons per gallon.

## Emmi, New Turf Fungicide, Introduced by Velsicol

A new turf fungicide, said to be especially effective on dollar spot, has just been introduced by the Velsicol Chemical Corporation.

Designated "EMMI," the new fungicide is said to have little or no phytotoxic effect on St. Augustine, Zoysia, ryegrass, bahia, Bermuda, and centipede grass. Velsicol recommends 1½-2 oz. EMMI in 10 gallons of water per 1000 sq. ft.

Higher dosages should be used with caution, especially during hot weather.

EMMI is described as "quick acting and long lasting," and is easy to handle because its liquid form dilutes easily, and won't clog nozzles.

Velsicol says a gallon of the new substance is enough for 12 to 16 average spray jobs. In most cases, the firm claims, only one treatment is needed to clear up disease.

CAs who want more information about EMMI should write the manufacturer at 330 East Grand Ave., Chicago 11, Illinois.

## John Blue Machines Described

A complete catalog of sprayers, pumps, nozzles, and booms made by the John Blue Company, Inc., is now ready for applicators interested in reading of the firm's equipment.

"While we're primarily agricultural manufacturers," John Blue's, Michael Graznak, told *Weeds and Turf*, "much of our machinery is ideally suited for use by contract applicators."

CAs who want to know more about the company's products should write the firm at Huntsville, Ala., and ask for bulletin 7-D-2.

## Sheet on Broyhill Pump Ready

An informative, illustrated sheet describing the Broyhill 805-RL combination pump and tank spray unit can now be obtained from the manufacturer, Broyhill Company, Dakota City, Neb.

Broyhill says the 805 provides CAs with a convenient single-unit, high-low pressure sprayer, when both gun and boom options are selected.

## Meeting Dates



**Rhode Island Field Days**, University of Rhode Island, Kingston, Aug. 15-16.

**American Society of Agronomy 54th Annual Meeting**, Cornell Univ., Ithaca, N.Y., Aug. 20-23.

**American Society of Plant Physiologists**, Department of Botany and Plant Pathology, Oregon State University, Corvallis, Aug. 27-31.

**Florida Turfgrass Conference**, University of Florida Student Service Center, Gainesville, Aug. 28-30.

**Midwest Turf Field Days**, Purdue University, Lafayette, Ind., Sept. 10-11.

**North Central Weed Control Conference**, Hotel Lowry, St. Paul, Minn., Dec. 3-5.

**Northeastern Weed Control Conference**, Hotel New Yorker, New York, N.Y., Jan. 9-11, 1963.

**Southern Weed Control Conference**, Admiral Semmes Hotel, Mobile, Ala., Jan. 16-18.

**California Weed Control Conference**, Santa Barbara, Jan. 22-24.

**Aquatic Weed Control Society Annual Meeting**, LaSalle Hotel, Chicago, Ill., Feb. 12-13.

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## —W & T Mailbox—

### "Very Interested . . ."

I was very much interested in the first issue of *Weeds and Turf*. I think you have done an excellent job in its preparation and if future issues are as good as the first I am sure that it will be of much interest to those engaged in weed control and turf work and really fit a need.

Dr. L. C. Chadwick

Secretary-treasurer  
National Shade Tree Conference  
Professor of Horticulture  
Ohio State University  
Columbus

### "Fine Start . . ."

My sincere congratulations to you on the *Weeds and Turf Section*. It is a fine start and well done!

R. C. Hudson

President  
H. D. Hudson Mfg. Co.  
Chicago, Ill.

### "Most Helpful . . ."

We received a copy of your first publication of *Weeds and Turf* and find it most interesting and helpful.

I very much appreciate receiving your periodical.

Harry E. Chamberlain

Junior Plant Physiologist  
Colorado State University  
Fort Collins

### "Much Needed Communication . . ."

Just wanted to tell you that we feel *Weeds and Turf* provides a much needed channel of communication to a much-neglected market.

Congratulations! We think you've hit one!

B. T. Givauden, Jr.

New York, N.Y.

*Weeds and Turf welcomes expressions of opinions from its readers. Send ideas and comments briefly as possible to Charles D. Webb, Editor, Weeds and Turf, 1900 Euclid Ave., Cleveland 15, Ohio.*

## Zytron Good for Nimblewill

Use of Zytron for control of nimblewill in Kentucky bluegrass lawns was favorably reported recently by scientists working at the Kentucky Agricultural Experiment Station, Lexington.

Tests carried out over a two-year period showed that two applications of liquid Zytron at 15 lb./A are necessary to curb this troublesome weed. One application at 20 lb./A also gave good control.

To obtain complete eradication, it may be necessary to make certain spot treatments with Zytron after the initial application.

Spring and early summer applications of Zytron were apparently more effective than treatments in late July, August, and September.

Dry formulations of Zytron were not effective on nimblewill, the Kentucky scientists report.

Further experiments with Banvel D at 4 and 8 lb./A gave variable control of nimblewill with one application, but results indicate more study is necessary to evaluate this chemical fairly.

Zytron is manufactured by the Dow Chemical Company, Midland, Mich.

## New Lab Device Tests Weedicides

Scientists at the University of California, Riverside, have developed a new tool for speeding up studies of weed killers. Laboratory staffers have humorously dubbed the new machine "the pot and the pendulum."

Literally, a flower pot with a pendulum suspended overhead, the new evaluator is set in a 10-foot-high frame. The 5-foot pendulum carries a tiny spray tank on its lower end. As this tank swings over a flower pot containing weed-infested plantings, a small quantity of weed killer is applied over a predetermined area.

Each application corresponds to a mixture volume of 32 gallons per acre. Two passes of the pendulum equal a per-acre rate of 64 gallons.

If two passes of the pendulum knock down weeds in a potful of merion bluegrass, for example, staffer Boysie Day and his colleagues can estimate the appropriate commercial dosage for any given area planted with this particular grass.

## —Trimmings—

*Indefatigable.* That's the word for Tom Hammal, state publicity director for the Horticultural Spraymen's Association of Florida. Besides having a neat little business of his own that he runs with great pride in the greater Miami area, he's the spark behind much of the HSA educational program to improve safety practices among applicators in his state. Think we've found the secret to his endless energy . . . it's the pot of coffee that's always brewing at his Bow-Arrow Gardens office.

\* \* \*

*Granddaddy back.* Floyd L. Timmons, head of USDA aquatic weed research headquartered at the University of Colorado experiment station and widely recognized as the grandfather of practical weed control, is back after a year's study for his PhD. It takes an unusual man who already is known as an expert to have the drive to go back for more schooling after so many years. Always generous with his help, Dr. Timmons was most instrumental in putting our editors straight during the germination days of *Weeds & Turf*.

\* \* \*

*It's a beauty.* One man who's done a dandy job of combining contract weed and turf pest control with general household exterminating is L. W. Hurt of Odessa, Texas. He has a gorgeous, drive-in landscaped entryway to his nearly block-long building that makes it easy for customers to load up on garden supplies when they come to call. He's another of the hundreds of applicators who successfully combine service with retail sales.

\* \* \*

*Follow-up on Viet-Nam.* Last month we heralded the military's latest strategy which employed weed killers to reduce enemy undergrowth hideaways. Well, now word comes that the defoliation experiment failed. Insiders say it was politics, not chemical ineffectiveness which made the project less than successful. The State Department, fearing "germ warfare" charges from the Reds, objected to the use of arsenic compounds and forced the army to use less effective herbicides. Next idea?

\* \* \*

*Weed Farm.* Two men who thoroughly enjoy growing weeds are Bob Blackburn and Lyle Weldon, keymen at the USDA's Aquatic Weed Research Laboratory in Fort Lauderdale. Last month their staff kept four groups of Hyacinth Control Society conventioners alive with interest during a two-hour tour of their weed farm and laboratories. Here virtually every type of aquatic weed is grown so these researchers can devise the most effective chemical and mechanical ways to destroy them. It was quite an experience to see the loving care with which these experts rear the water weeds, take pictures of them in all stages to help applicators properly identify them (we'll be printing some of them in the near future), and then carefully employ the safest and most scientific methods to rid our waterways of these aquatic cloggers. If you're ever down Fort Lauderdale way, we'd suggest you stop out to see Lyle and Bob.

## Changing Your Address?

If so, notify our circulation department right away to be certain the magazine reaches you at your new location. The Post Office won't forward your copies. So when you write us, make it at least three weeks in advance of your moving date, and include your old address, as well as the new one. We'll see you don't miss a single issue. Send this old and new address information to:

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## WEED ELIMINATION

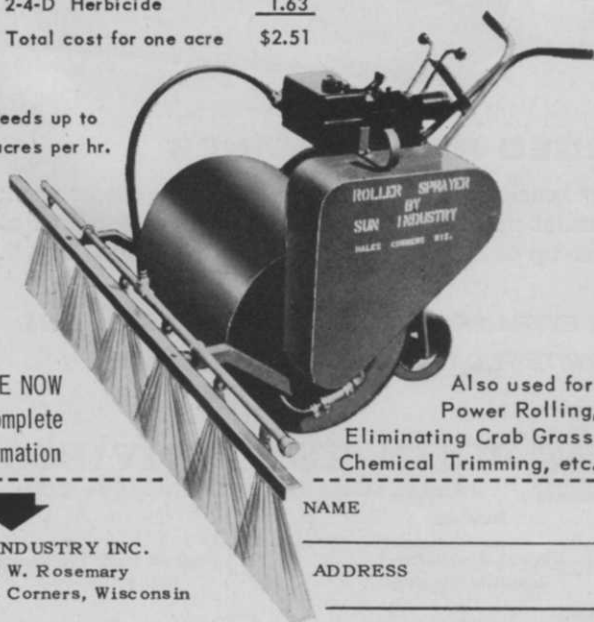
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