



Retiring Florida Turfgrass Association Executive Secretary Frank Ward (left) greeted his successor, Walter Anderson. The active Florida group requires the full-time services of an executive secretary.

president; and James L. Blackledge, secretary-treasurer.

James E. Ousley, Sr., a member of the board of directors, was also named as general chairman of the Second Annual Trade Show, to be held in the spring of 1963. Date and location are still to be announced.

Mailing address for the Fla. Turfgrass Assn. has been changed to P.O. Box 5284, Jacksonville 7, Fla., and interested CAs may write to that address for more information about the group.

### Turf Diseases (from page W-6)

ly enlarge and elongate parallel to the veins in the leaf. Reddish-brown (rusty) pustules are exposed as the outer layers of grass tissue are ruptured. The disease eventually turns an entire stand of grass yellow. The bentgrasses are relatively immune to rust infection, whereas Merion bluegrass is very susceptible.

With the rising popularity of Merion Blue the rusts are now considered to be among the more important and costly turfgrass diseases. Outbreaks may be expected in July or August.

Cycloheximide can be effective against rust if applied at the rate of 2 gallons of 60 ppm per 1000 sq. ft. Zineb applied at the rate of 2 oz. per 1000 sq. ft. in 3 to 5 gallons of water will also combat rust. Most of the fungicides are aided in their action if a commercial spreader-sticker is used with the preparation.

Preventative practices include nitrogen fertilization and application of granular urea.

Additional information concerning the identification and control of fungus diseases affecting turfgrass may be obtained in booklets produced by extension services, or by fungicide manufacturers. An excellent text on the subject, *Diseases of Turfgrasses* by Houston B. Couch (See book review, August, 1962), would be helpful to anyone interested in this new, exacting, and expanding phase of a contract applicator's service.

### Editor's Note . . .

This original article on turfgrass diseases was prepared by *Weed's and Turf's* technical staff, from available literature and our own investigations. While opinions presented are strictly our own, we wish to thank the companies which reviewed our manuscript and made helpful suggestions. Firms especially cooperative were Chemagro Corp., The Dow Chemical Co., E. I. DuPont de Nemours and Co., Morton Chemical Co., The Mallinckrodt Chemical Works, and the Upjohn Co. We also thank university researchers who reviewed the text.

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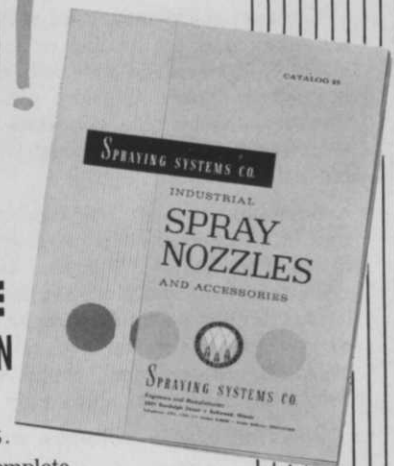
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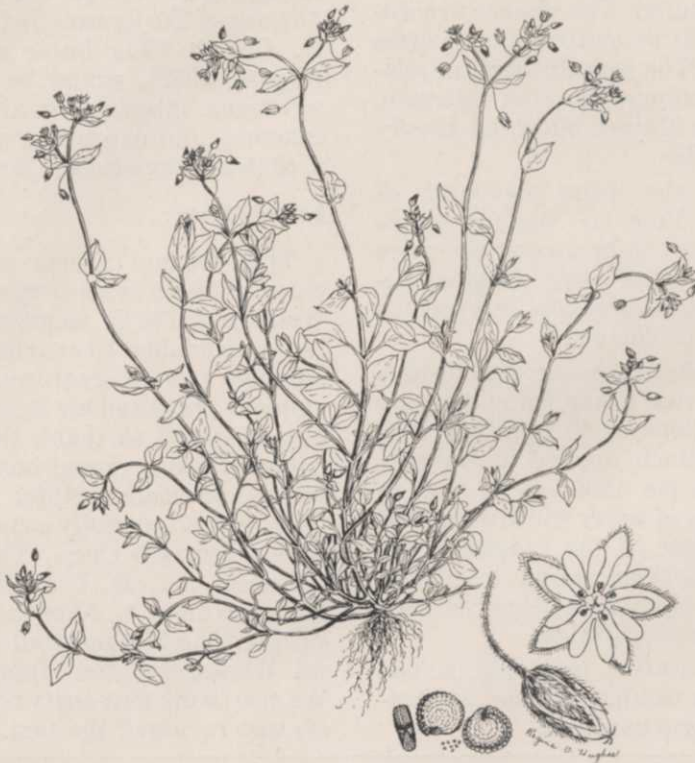
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**COMMON CHICKWEED**

(*Stellaria media*)



Common chickweed is an annual or winter annual which reproduces by seeds and by rooting at low points along the trailing stems. The weed is common on rich soils of gardens and shady or moist lawns throughout North America, especially on the east coast. This weed shares the same common name as another pest species, mouse-eared chickweed, a perennial plant which is densely hairy and has no stalks on its leaves.

Stems of common chickweed are many branched, low and creeping, and have rows of hairs on them. The branches which stand erect may reach a height of 12 inches. Leaves are opposite each other on the stem, spoon-shaped in appearance, and less than 1 inch long. The lower leaves have a stalk while upper ones sit close against the stem. Flowers of common chickweed are small and white, with 5 deeply notched petals. Seeds are nearly round, 1 mm. across, and notched. The reddish-brown seeds are roughened by curved rows of tubercles.

Roots are shallow, fibrous, and easily pulled from the ground.

Common chickweed often germinates in the fall and grows during the winter. It flowers and produces seed in late spring and early summer. It usually dies by summer.

Recommended control methods of chickweed in established lawns consist of applying urea compounds such as neburon in fall until the ground freezes. Silvex may be used at any time that the weeds are growing rapidly.

Application of a pre-emergent herbicide such as Dacthal in the fall would prevent germination of chickweed and other winter annuals such as annual bluegrass.

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

DRAWING BY REGINA HUGHES, USDA, BELTSVILLE

**U. S. Borax Makes Soil Sterilant To Control Weeds Under Paving**

Undesirable vegetation in the subsoil of a paving project can be effectively controlled with Monobor-Chlorate, a new herbicide from U.S. Borax, the firm announced recently.

The weedkiller can be applied either dry, by hand or mechanical spreader, or in solution from conventional spray equipment. It has nonselective, quick-killing action on the root systems and shoots of perennial and annual vegetation, the company stated.

To be marketed in 25 lb. and 50 lb. bags, the new product is a combination of sodium chlorate and sodium borate, and will not corrode underground piping or application equipment, according to U.S. Borax.

"Because Monobor-Chlorate Granular kills plant tissue on contact, the pavement is protected against initial ruptures. And because weeds under paving can be killed only by absorbing a toxic chemical dissolved in the moisture about them, Monobor-Chlorate's high solubility in water enables it to be incorporated into the soil from existing moisture," Dr. L. M. Stahler, U.S. Borax Director of Agricultural Chemical Sales, reports.

Dr. Stahler also says the new product is effective in other surfaced areas, such as irrigation ditches, reservoir sites, and fire walls around storage tanks containing flammable liquids.

CAs interested in more information on Monobor-Chlorate should write to U.S. Borax, Marketing Department, 630 Shatto Place, Los Angeles 5, Calif.

**Data on Spreader-Sticker Ready**

Test results of effectiveness and proportionate cost of various spreader-stickers, chemical agents which reduce the surface tension of water to give better coverage of sprayed surfaces, are contained in Star-Bar Technical Bulletin No. 101.

The bulletin, which includes results of tests with Star-Bar's "Slick," is available to interested CAs by writing to the Star-Bar Division, Agricultural Specialties, 12200 Denton Dr., Dallas, Texas.



## —W & T Mailbox—

### Tip on Scales

In an article in October's *Weeds and Turf* (p. W-26), about the pine needle scale insect, you twice referred to the "female turning to eggs."

I've known for quite a while that eggs turn into females (and males), but this is the first time I've heard of females turning into eggs!

Could you please explain how the female insect turns to eggs?

Fred Schoener

Los Angeles, Calif.

*Editor's note: Dr. M. H. Farrier, of the North Carolina State College Entomology Department research division, explained this unusual terminology as follows:*

After the pine needle scale reaches the crawler stage, the female moves over the plant until a suitable feeding place is found. Once positioned, the female settles down to suck the sap, never again moving from that position.

As the female attaches her sucking mouthpart to the needle and begins feeding, eggs begin to develop inside her. The insect then secretes wax over itself. After the maximum number of eggs has been developed, the female dies, and her dead carcass and the wax form a protective white crust. During the winter, the eggs remain inside this white crust.

Thus, in a literal sense, the female pine needle scale insect does "turn to eggs."

### Industry Needed W&T

I wish to take this opportunity to congratulate you on the first issues of *Weeds and Turf*. We have had many favorable comments on your magazine, and it is something that the industry has needed for a long time.

Charlie P. Johnson

Charlie P. Johnson Spray Co., Inc.  
Miami, Fla.

*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.*

### Test Fungi For Lawn Chinch Bug Control at Fla. Experiment Sta.

Fungi and wormlike nematodes are being used in experiments in Florida as natural controls for chinch bugs. Already resistant to DDT, chinch bugs are developing resistance to parathion, the University of Florida Experiment Station reported recently.

Dr. Stratton Kerr, assistant entomologist with the Florida station, reports promising results with a fungus tested for lawn chinch bug control.

Dr. Kerr has also found a new St. Augustine grass that seems to have some degree of chinch bug resistance, a recent report from the University of Florida Experiment Station says. Somewhat coarser than some St. Augustine varieties, the grass is claimed to be fairly attractive, and with no appeal to chinch bugs.

CAs interested in obtaining more information about the experiments or the new St. Augustine grass can write to Dr. Kerr at the University of Fla., Gainesville.

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## Southern Weedmen

### Meet Jan. 16-18

Authorities from 12 southern states will swap information on better ways to control weeds on farms, industrial sites, parks, in water, and on other areas at the 1963 Southern Weed Conference, Admiral Semmes Hotel, Mobile, Alabama, January 16-18.

More than 500 research and education workers, representing state and federal agencies, chemical companies, and other organizations, will attend.

Dr. R. P. Upchurch of North Carolina State College, Raleigh, will be in charge of the program, and V. S. Searcy, of Auburn Uni-

versity, Auburn, Ala., will handle local arrangements. CAs interested in more information about the conference may write directly to Dr. Upchurch.

### No Cure For Dutch Elm Disease

Plant pathologists at Purdue University caution CAs that homeowners may try any remedy claimed effective for prized individual elms that have been attacked by Dutch Elm disease.

Pathologists point out that at this time there is no known cure or preventative for the Dutch Elm disease on individual elm trees that can be substantiated by reliable results from competent research workers.

## New Test Herbicides to be Unveiled At '63 Northeastern Weed Meet

New herbicides, available for testing in 1963 but not yet thoroughly researched, will be presented to delegates at the 17th Annual Meeting of the Northeastern Weed Control Conference. Leaders in weed control research, and representatives of the leading chemical companies and commercial weed control firms, will gather for the annual affair at the Hotel New Yorker, New York City, January 9-11.

Chemical companies participating in the demonstrations will be allotted five minutes to present technical data and information on their new formulations. Delegates to previous meetings recall that many of today's leading herbicides were originally introduced at Northeastern Weed Control Conferences. Interested companies should contact Alex Zaharchuk, Herbicide Research, Cooperative G. L. F. Exchange, Inc., Ithaca, N.Y., for more information about the presentations. Firms participating have been asked to have available for distribution at least 600 copies of a technical data sheet for each product.

Papers of basic research and of general interest will be read on Wednesday, the first day of the conference. Call for papers to be presented has already been issued.

Section divisions and subject matter chairmen have already been selected. Areas of particular

interest to the contract applicator include:

*Industrial weed control*, with B. W. Bergstrom, New England Power Service Co., 441 Stuart St., Boston 16, Mass., as chairman.

*Highways*, under A. M. Ditton, Department of Public Works, State of New York, Albany 1.

*Railroads*, chairman Roy R. Gunderson, Engineer Maintenance of Way, Western Maryland Railway Co., 300 St. Paul Place, Baltimore 2, Md.

*Public Health*, C. S. Maneri, Department of Health, State of New York, 84 Holland Ave., Albany 8, N.Y.

*Aquatic Weed Control*, with the program under the direction of J. E. Gallagher, Amchem Products, Inc., Ambler, Pa.

*Turf Maintenance*, with J. F. Cornman, Department of Floriculture and Ornamental Horticulture, N.Y. State College of Agriculture, Cornell University, Ithaca, N.Y., as chairman.

Sectional meetings and a business meeting will also be included in the conference.

CAs who desire more information on the 17th Annual Meeting of the Northeastern Weed Control Conference may write to Dr. John Meade, NEWCC Secretary-Treasurer, Department of Agronomy, University of Maryland, College Park.

## Trimnings

*Nipp and Tuck.* We've been hearing a lot from Floridian Larry Nipp recently, and are beginning to wonder why this busy applicator is not all "tuckered" out from his many activities. Besides running his American Power Spraying Company in Ft. Lauderdale, Larry finds time to participate in such hard-working organizations as the Florida Turfgrass Association and the Horticultural Spraymen of Florida. Larry tells us he has 12 trucks, operates in 22 municipalities and 4 counties, and has 5,000 lawns under yearly contract! A good example of the kind of companies which contribute to the thriving Florida turf spraying business.

\* \* \*

*Aussies Hike Weed Funds.* News from down under is that state appropriation for control of noxious weeds has been raised from £40,000 to £80,000. Australia has community noxious weed councils much like our mosquito abatement districts, and area groups will certainly welcome this increase in funds.

\* \* \*

*Transfer for Tony.* We've just learned that Tony Tafuro, vice president of the Northeastern Weed Control Conference, has moved from Amchem Products to American Cyanamid's Agriculture Research Center in Princeton, N.J. Veteran members of the NEWCC will remember the fine job Tony did on publicity last year, and will be interested to learn of his new position.

\* \* \*

*Bell Is Ringing.* Our ears are still ringing with words of congratulations we just received from weed controller Ken Bell, who wrote to commend our new *Weeds and Turf* publication. Ken, whose Bell Industrial Weed Control Company is in Amarillo, Texas, is widely known as a proponent for more technical data for contract applicators. He is also active in the National Pest Control Association, and runs a thriving pest control business in Amarillo.

\* \* \*

*Proud Pennsylvanians.* We've had occasion to talk to a lot of Pennsylvania applicators recently, and are pleased to see how highly they speak of their turfgrass education program at Penn State. "It's the biggest turfgrass school in the land," they are wont to say proudly. Under the leadership of Dr. J. M. Duich, the Pennsylvania school, located in College Park, is really turning out some top notch men who'll soon be taking their place with weed and turf spraying companies throughout the country. A credit to everyone involved!

\* \* \*

*It's "Dr." Merkle Now.* We understand Morris Merkle has just finished his Ph. D. at Cornell, and has joined the faculty there to work in aquatics. Hope to hear great things in water weed control from Cornell next year!

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