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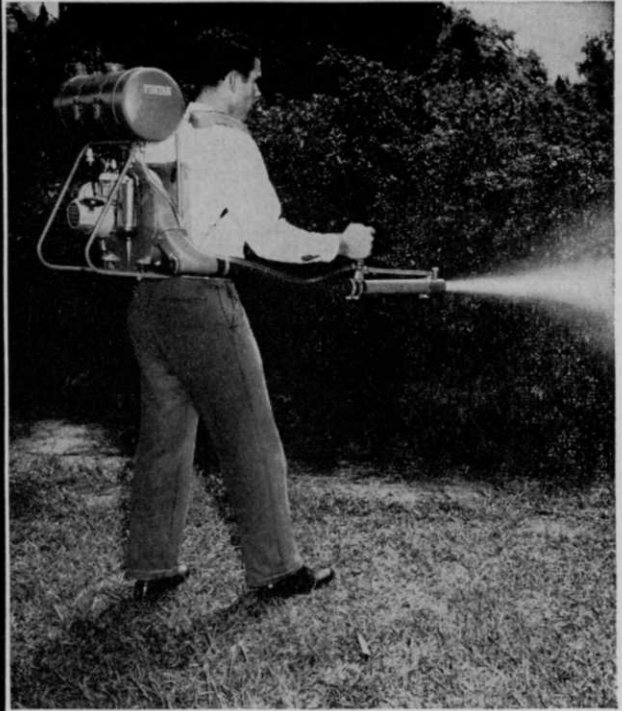


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ters will play increasing roles in weed control in the future.

Scanning the Diseases

With Gallagher on the program was Dr. Michael Britton of the Department of Plant Pathology, University of Illinois, Urbana.

A noted authority of turfgrass diseases, the Illinois scholar presented an orderly slide review of typical turf ailments and their symptoms. Throughout his talk, the scientist insisted that disease control, through the application of fungicides, is best carried out on a preventive basis, since once the disease is evident, damage frequently has already been done.

In the case of snowmold, for example, fungicides *must* be applied before snowfall, since the disease forms under cover of snow and doesn't become evident until thawing occurs.

Probing the Causes of Wilt

Another discussion of singular importance to turfgrass managers was a review of research into the causes of wilt, presented by Harry W. Meusel, Superintendent, Yale University Golf Course, New Haven, Conn.

Meusel's highly detailed studies involve microscopic analysis of the paths water takes when distributed through blades of grass. Understanding these patterns, Meusel feels, will help to discover maintenance practices which will alleviate the wilting problem in fine turf.

So far the Connecticut turf expert has found that phenylmercuric acetate with a nonionic wetting agent is useful in helping prevent wilt.

Heavy watering and fertilization in conjunction with a wetting agent has also proved helpful. Sometimes wilting can be caused, in part, by compacted soil, conceivably because of shallow root systems which exist in such packed-down areas.

Avoiding Ravages of Winter

Last winter's inordinate severity has made turf managers more cognizant than ever of the damages wrought by cold, snowy, windy weather, so the resumé of winter damage problems presented by Alexander M. Radco was most welcome.

Radco is Director, Eastern Region, U. S. Golf Association Green Section, and does his re-

search at Rutgers University, New Brunswick, N.J.

Damages which occur in winter range from rodent problems (burrowing animals) to inundation caused by melting snows.

One way to alleviate the latter, Radco said, is to remove a strip of the sod and dig a ditch through which water may run off. The turf which is removed is placed somewhere else to grow, and can then be replaced when winter is over.

Weather and Insects

An adjunct to the winter damage study was offered by John C. Schread, a Professor of Entomology from the University of Connecticut Agricultural Experiment Station in New Haven.

Professor Schread's observations about Japanese beetles and the chinch bug were particularly notable. Theoretically, a temperature of 15° F. will kill Japanese beetles, but because snow layers protects the pests even when they're near the soil surface, there are recorded instances of survival of even -28° F.

In his discussion of the effect of weather on insect infestations, the Connecticut entomologist said that the chinch bug is adversely affected by heavy rainfalls in late June or early July. This applies, of course, to the Connecticut area, which until recently did not number the chinch bug among its important turf pests.

"Since 1960, however, the chinch bug has been a major pest in turf in Connecticut—in lawns, parks, and other large turf areas," the professor proclaimed.

Fertilizer Trio

"Understanding Fertilizer Behavior" was the theme of another half-day session, in which a trio of turf-feeding specialists discussed the rudiments of their field of interest.

The ecology of nitrogen breakdown was explained by Dr. Roy E. Blaser from the Department of Agronomy at Virginia Polytechnic Institute in Blacksburg, Va.

Dr. Blaser hastened to warn that overstimulation with nitrogen had increased other problems in turf maintenance. For example, grass heavily fertilized with nitrogen produces more thatch, increases the wilt hazard, and ups the weight of clippings.

Nevertheless, nitrogen is the

key to quality control in turf, the Virginian commented.

Role of other major elements in turf nutrition (phosphorus and potassium) was examined by Dr. Marvin S. Ferguson, National Research Coordinator, USGA Green Section, Texas A&M College, College Station, Tex.

"You can't depend on deficiency symptoms to indicate when and how much to feed the turf," Dr. Ferguson said, "because it will be too late and the damage will have been done."

It is therefore important to understand the mechanics and technicalities of turf fertilization so proper feeding can be carried out continuously.

Along this line of thought, delegates were told that they should be able to tell the pH of the soil in every green, and if not, should take a soil test to determine the factor. Why? Because the acidity or alkalinity of soil affects the availability of trace elements such as boron, copper, iron, etc.

This observation was part of a talk on trace elements by Dr. J. R. Love, Department of Soils, University of Wisconsin, Madison.

"A cold wet spring may herald iron deficiency," Dr. Love indicated in his catalog of tips on trace-element management.

The other educational sessions of the 35th International Turf-Grass Conference and Show were given over to matters affecting golf course people only. Next year the meeting will be in Cleveland, Ohio, at the Sheraton Cleveland Hotel, January 31-Feb. 4.

New Name for Ansul

Stockholders of the Ansul Chemical Company voted recently to change the corporate name to The Ansul Company, it was just reported.

In addition to chemicals, the Marinette, Wis. firm also manufactures tanks, pumps, and related equipment for fire fighting and other uses; refrigeration components, and other products.

Ansul spokesmen predict significantly higher sales gains in 1964, as a result of, among other things, the development of the company's "Ansar" line of herbicides.

Weed Society Report
(from page 14)

established turf by removing much of the weedy plants which produce a running type of growth, and machines can aid also when one wants to completely kill all grass and start over," Dr. William H. Daniel, Purdue University agronomist, Lafayette, Ind., indicated in his talk on the usefulness of dethatching machines.

"Often after turf is killed with cacodylic acid or a urea formaldehyde solution, the thatch (that layer of dead stems and leaves over the soil) ruins the opportunity to reseed because it prevents seeds from reaching the soil," Dr. Daniel explained.

"Removal of thatch beforehand with a machine will permit seeds to contact soil and produce a more healthy stand," the agronomist feels.

Dethatching machines, as Dr. Daniel pointed out, can also produce a more healthy stand of grass if stoloniferous weedy grasses, such as goosegrass, creeping bent, and chickweed are removed with a machine. "Considerable thatch, mat, and

old clippings can be loosened, then swept up," he concluded.

Dybar Used For Right-of-Way

"Mechanical control of rights-of-way with saws and axes only postpones problems, and increasingly dense regrowth makes greater problems later for us," Charles P. Aho, Public Service Co., Division of Commonwealth Edison, Chicago, Ill., pointed out in the brush control session.

"We've found fenuron pellets (Dybar) to be very satisfactory for woody plant control along power lines to keep down large brush. It is better than liquid toxicants for us because it is cleaner, lighter, effective, economical and can be applied in wind and rain," he cited.

"We have lines in our area which are as far as two miles from roads. Chemicals must be packed in, since we use hand labor for selective control," Aho explained. "Here is where we find the pelleted formulation handiest."

"On rights-of-way through suburban areas, care must be exercised to avoid damage to desirable shrubs and trees. Fenuron pellets applied on one

brush species can damage a nearby tree if the tree is on the downhill side and leaching will carry toxicant to its roots," he cautioned.

Part of Commonwealth's lines run through the Cook County Forest Preserve and Aho indicated that selective control with fenuron avoided problems of drift to forest trees and enabled workers to keep low-growing shrubs while eliminating higher growth that interferes with power lines.

Warren Succeeds Shaw

At the banquet of the Weed Society of America, new officers were installed. Dr. Warren C. Shaw, Crops Research Division, USDA, Beltsville, Md., handed the presidential gavel over to Dr. G. F. Warren, horticulturist of Purdue University, Lafayette, Ind.

The new president-elect is Dr. William R. Furtick, Oregon State University, Corvallis.

Weeds & Turf was advised that the last biennial meeting of WSA will be held Feb. 6-11, 1966, at the Sheraton Jefferson Hotel in St. Louis, Mo. Beginning in 1967, meetings will be annual.



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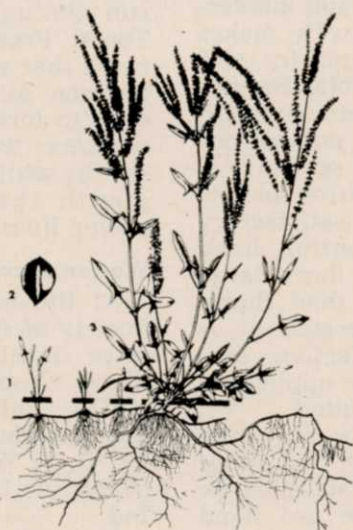
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RED SORREL

(*Rumex acetosella*)



Red sorrel, (1, 3) also called sheep sorrel and sourgrass, is a perennial which reproduces by seeds and by sprouts from shallow, but extensive, creeping roots. It is common throughout the United States and southern Canada.

Not easily confused with dock, also in the genus *Rumex*, red sorrel has arrow-shaped leaves (sagittate) with broadened basal lobes. Leaves are smooth, and rather thick, about 1 to 3 inches long. Sorrel stems usually grow to about 10 inches high, but may grow to a height of 18 inches.

Leaves begin to grow in the spring and form circular rosettes on dry, sandy, or gravelly soils. Soils favorable to red sorrel growth are generally acid (low pH). It also thrives on neutral or slightly alkaline soils, especially if soils are low in nitrogen. Plant tissues are sour to taste. This is why the weed is called sourgrass, sourweed, etc.

Sorrel is thought to be an indicator of acid conditions in the soil. It gives warning that grasses may not thrive. Such soils should be limed according to soil tests to promote vigorous growth of turf-grasses.

Male and female flowers are found on separate plants. Small flowers bearing male parts (pollen) are described as yellowish-green, whereas female flowers (seed producers) are reddish. Flower parts are borne on short branches (racemes) terminally on upright stems. Seeds (2) are between 1/16 and 1/32 inch long, three-sided, reddish-brown, and glossy.

Jointed roots are shallow but extensive. New stems are sent up intermittently from joints.

Since red sorrel is "acid-loving" and desirable grasses are not, sorrel will have an advantage on poor soils. Liming to relieve acidity will restore turf vigor. Proper fertilization with nitrogen will help eliminate red sorrel by producing healthy turf. Most desirable pH for lawn grasses is neutral (pH 7).

Herbicidal controls for lawns infested with red sorrel consist of several applications of 2,4-D before plant maturity. Of course, red sorrel will succumb to spot applications of any of the more powerful contact herbicides. Especially effective for selective control is dicamba (2-methoxy, 3,6-dichlorobenzoic acid) (Banvel D) as a foliage spray, but it should not be used where ornamentals are grown in adjoining beds.

Prepared in cooperation with Crops Research Division, Agricultural Research Service,
United States Department of Agriculture, Beltsville, Maryland.
(DRAWING FROM NORTH CENTRAL REGIONAL PUBLICATION NO. 36, USDA EXTENSION SERVICE)

Azar, Hercules' New Herbicide, Called Safe, Effective, Cheap

A new selective preemergence herbicide for crabgrass control said to offer the unique combination of economy, effectiveness, and safety, has been developed by the Hercules Powder Company.

Called Azar, the new aid to professional turf experts will be available as a wettable powder easily dispersed in water. It is practically nontoxic to humans and warm-blooded animals, Hercules says.

Lawn turf of red fescue, bent, Bermuda, dichondra, common Kentucky blue, and Merion blue grasses are, under normal conditions, tolerant to Azar at the recommended rates of application, company spokesmen report. Azar was identified as "9573" during the evaluation program.

Tests indicate that for best results Azar should be applied to established turf before crabgrass germination in the spring at the suggested rate of 10 lbs. active compound per acre as a spray or in granular form.

Of especial interest is the claim that Azar gives seasonal control with one application, and that it is effective even if applied several months prior to crabgrass germination.

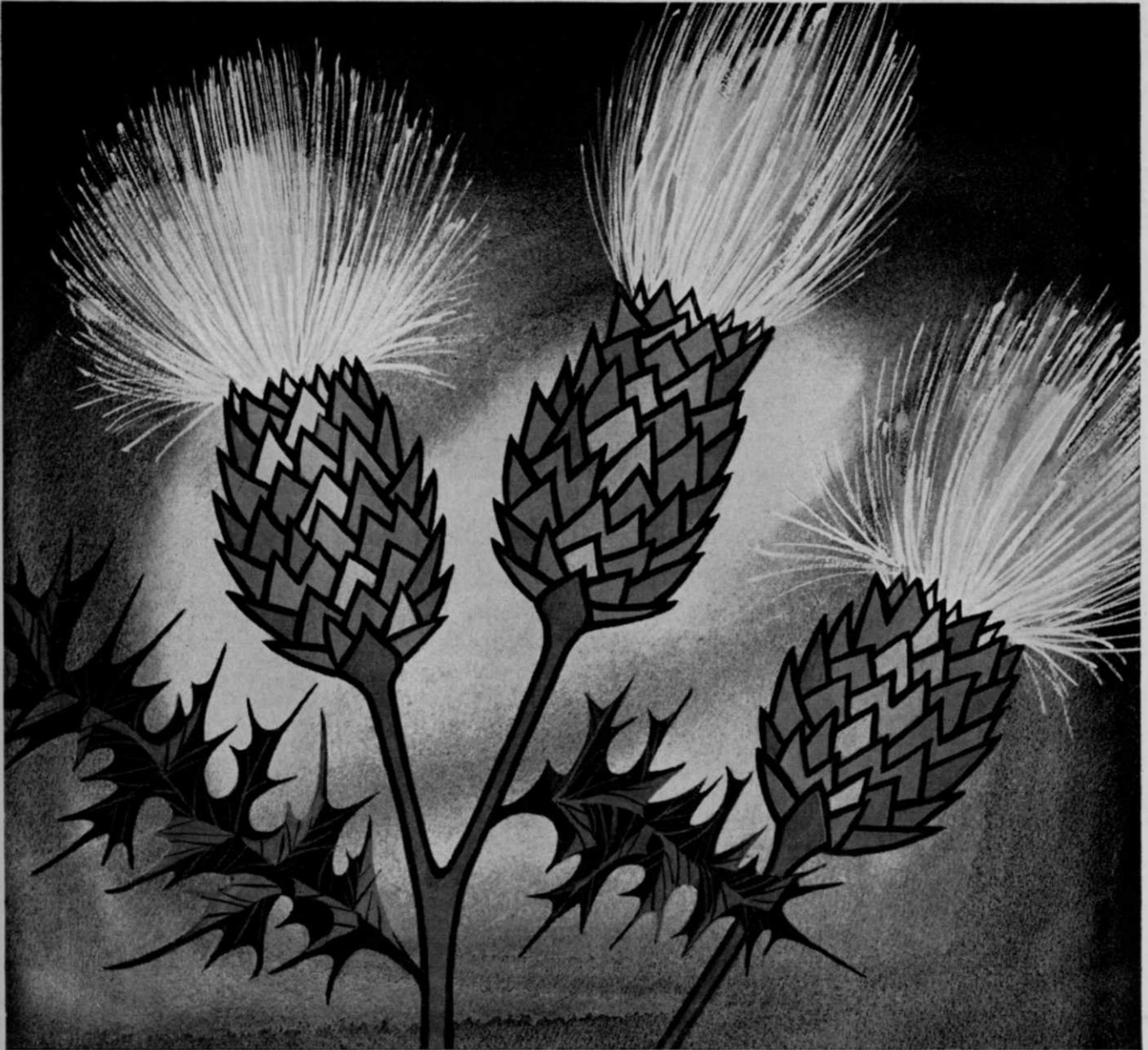
More information about this new product is available from Hercules Powder Co., 910 Market St., Wilmington, Del.

Residex Releases '64 Catalog

A new catalog and price list describing a complete line of products for the professional vegetation manager has been announced by the Residex Corp., according to Richard E. Sameth, sales manager for the Clark, N.J., formulator.

Residex reports it has a complete line of insecticides, herbicides, and brush killers. Also included in the Residex line of products are compression sprayers, mechanical and thermal aerosol generators, and other application equipment.

A copy of the 1964 Residex catalog may be obtained by writing to: Residex Corp., 225 Terminal Ave., Clark, N.J.



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After more than 35 years of weed killing, it's *still* the most effective chemical for destroying such pests as Canada thistle, bindweed, Johnson grass and Russian knapweed.

Hooker sodium chlorate reaches deep into the soil to kill germinating seeds and growing roots—and goes on working for months.

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For descriptive folder, please write HOOKER CHEMICAL CORPORATION, 40 Buffalo Avenue, Niagara Falls, New York. *Sales offices:* Boston, Buffalo, Chicago, Detroit, Los Angeles, New York, Niagara Falls, Philadelphia, Tacoma.



AGRICULTURAL CHEMICALS

Third Florida Turf Show Set Apr. 30-May 2 in Miami Beach

A tour of turf research plots and a full-fledged demonstration of new turf maintenance equipment is in store for delegates to the annual Florida Turf-Grass Trade Show in Miami Beach's Hotel Seville April 30 through May 2.

Spokesmen for the third yearly affair, co-sponsored by the Horticultural Spraymen Association of Florida and the Florida Society of Golf Superintendents, say the public will be invited to join turf professionals during the Saturday sessions.

Opening day will be spent at the Plantation Field Laboratory in Ft. Lauderdale, inspecting test plots and witnessing equipment use.

For more information, write to Walter D. Anderson, Executive Secretary, Florida Turf-Grass Association, 4065 University Boulevard North, Jacksonville 32211.

Heritage House Puts Dyrene In New Homeowner Fungicide

A new lawn fungicide containing Chemagro's Dyrene has been introduced in a small package line by Heritage House Products, Inc., manufacturers of consumer turf products.

Readers with retail outlets who desire more information on the new HH fungicide, or on other Heritage House products, may write the firm in the Gulf Oil Bldg., Pittsburgh, Pa.



Spra-Boy, a new power sprayer said to handle most any job from lawn and garden to trees up to 20 ft. high has been introduced by the H. D. Hudson Mfg. Co. Details will be sent to readers who write the firm at 589 East Illinois St., Chicago 11, Ill.

Use Dormant Spray for Scales, Maryland Expert Advises

Scale insects that damage woody plants can best be controlled by spraying in the dormant season, before the blossom and leaf buds open, Ted Bissell, University of Maryland entomologist, reminds vegetation maintenance personnel.

Scales are given away by a crust, on the bark, of circular, oysterlike (or terrapinlike) shells, about 1/16 to 3/16 inch in diameter.

On apple, cherry, elm, oak, pyracantha, and taliptru, use superior dormant oil in water at the manufacturer's recommended rates.

Don't use oil on beech, blue spruce, Japanese maple, walnut, or Douglas fir, Bissell cautions.

Meeting Dates



Iowa State Univ. Turfgrass Conference, Iowa State Univ., Ames, March 10-12.

34th Annual Michigan Turfgrass Conference, Michigan State Univ., East Lansing, March 12-13.

3rd Annual Florida Turf-Grass Trade Show, Hotel Seville, Miami Beach, April 30-May 2.

American Society of Landscape Architects Annual Convention, Hotel Baker, Dallas, Tex., June 28-July 1.

International Shade Tree Conference, Shamrock Hilton Hotel, Houston, Tex., August 15-21.

National Agricultural Chemicals Assn. Annual Convention, The Greenbrier, White Sulphur Springs, W.Va., Sept. 8-11.

Midwest Regional Turf Field Days, Purdue Univ., Lafayette, Ind., Sept. 14-15.

Society of American Foresters Annual Meeting, Hilton Hotel, Denver, Colo., Sept. 27-30.

New Betasan Kills Crabgrass in All Lawn Grasses, Stauffer Says

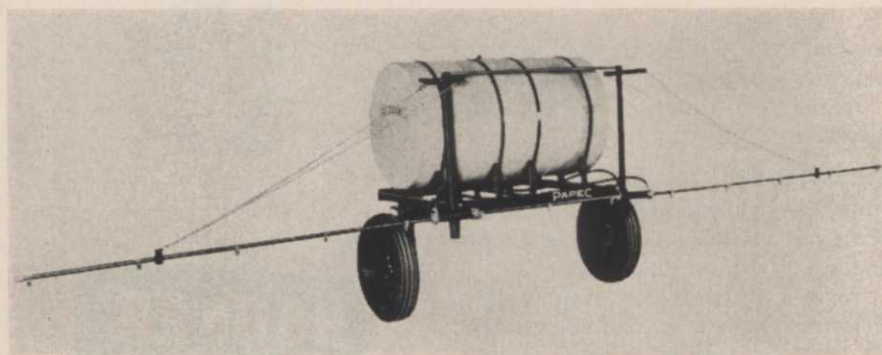
A new selective herbicide called Betasan is said to give excellent preemergence control of crabgrass in all types of lawn grasses including Bermuda and dichondra, according to Stauffer Chemical Co., which developed the compound.

A single application gives all-season-long control, and the chemical offers the widest margin of safety of any commercial product tested, Stauffer claims.

Betasan, in both concentrated liquid and granular forms, is now available throughout California, and is expected to be marketed nationally very soon.

While initial California labeling specified control only of smooth and hairy crabgrass, the 1964 list of weeds controlled has been greatly expanded. Included among weeds controlled, Stauffer says, are redroot pigweed, watergrass, lambsquarters, shepherdspurse, goosegrass, deadnettle, and even annual bluegrass.

For more information, write the company at 380 Madison Ave., New York 17, N.Y.



New improvements in Papec Field Sprayers include a polyethylene tank on a trailer model, plus redesigned chain anchors on booms to provide uniform support, regardless of boom height, and increased length to reduce sway. Adjustable booms are available in 20 ft. sections of copper, aluminum, or of angle iron, each with a 40" extension. For more information on the new sprayers, write to Papec Machine Co., Shortsville, N.Y.

Cite Increasing Tree Service Sales as Arborists Gather for Annual Winter Meeting in Fla.

For eight of the past 10 years, average annual increase of tree service sales by members of the National Arborists Association has paralleled growth of such things as the U.S. mean national income, number of households in the country, and construction value of new dwelling units, a marketing expert told delegates to the 13th Midwinter Meeting of the NAA in Ft. Lauderdale, Fla., Jan. 13-14.

Assembled at the resort town's Galt Ocean Mile Hotel, arborists heard New York City business consultant Ralph Head detail the rate of growth, and future potential, which has characterized the tree industry in recent years.

While the growth rate in the last two years has fallen slightly off among NAA members, it is felt that future sales increases will offset this pattern, especially in light of an aggressive advertising campaign which the NAA is expected to approve shortly.

Head recommended arborists develop more aggressive advertising and sales promotion, and Dr. Paul E. Tilford, NAA Executive Secretary, reported his group is devising a plan which will furnish members with advertising mats for local newspapers, and is considering a limited advertising program in national magazines to promote the association emblem, which designates a firm "member of the National Arborists Association."

In other membership surveys, Dr. Tilford reported that most NAA firms offer fringe benefits for employees, sometimes running into an expense as high as 70-75 cents an hour. It was recommended that managers make employees aware that this high expense should be considered a part of the worker's total income.

Increasing use of different makes of aerial lifts and cranes used in tree work, particularly in line clearance, take-downs, and in planting trees in difficult locations, has prompted the NAA safety committee, chaired



New directors for southern weedmen. Here is the new executive committee which will guide the Southern Weed Conference through the coming year. Left to right, front row: Dr. Dale Wolf, duPont; Dr. R. E. Frans, new prexy, Univ. of Ark.; R. F. Richards, Geigy; Henry Andrews, Univ. of Tenn.; back row: James Taylor, Thompson-Hayward; Dr. E. H. Funderburk, Jr., Auburn Univ.; Dr. J. R. Orsenigo, Everglades (Fla.) Experiment Station; Jesse Harris, Niagara Chemical; and Dr. Don E. Davis, also of Auburn.

Dixie Weed Problems Topic for Record 700 at Southern Conclave

A record attendance in excess of 700 delegates at the annual Southern Weed Conference was justified by a program of variety and timeliness, and a special orientation to problems of weed control peculiar to the South.

Meeting at the Hotel Heidelberg in Jackson, Miss., Jan. 15-17, the assembled weedmen had as their 1964 theme "weed control in cotton." While much of the program was strictly agricultural in nature, there were many papers of interest to those involved in nonfarm weed control on rights-of-way and in turf.

One of the keynote speakers, Denis Hayley, described at the outset how pesticides, particu-

larly herbicides, have come to play so important a part in American life, and how the public is misguided by many figures who voice concern over chemical weed and pest control. Hayley is Director of Information for the National Agricultural Chemicals Association of Washington, D.C.

Said Hayley: "The Public Health Service credits pesticides with saving the lives of 5 million people and preventing 100 million illnesses each year."

Furthermore, the NACA spokesman continued, FDA samplings of total diets of the U. S. populace show without doubt that the food consumed by American families is completely safe and is not being poisoned by pesticides.

Brush Control at TVA

Among the papers on nonfarm subjects of interest to urban/industrial vegetation management personnel was a paper jointly prepared by John R. Aldred and R. A. Mann of the Tennessee Valley Authority in Knoxville, Tenn. The TVA officials described methods their agency

by Edward C. Shearer of Farrens Tree Surgeons, Jacksonville, Fla., to develop a "safe practices code" for using these devices. Shearer will present these practices to NAA members at their next meeting.

NAA holds two meetings annually, and the next gathering will take place during the International Shade Tree Conference set for Aug. 16-21 in Houston, Tex.

employs for brush control on transmission line rights-of-way.

Basal or dormant treatment was adopted by TVA for brush control in 1954 after several years of research work.

Dormant treatment is used primarily to eradicate resistant species after one or two foliage applications. "The results are highly satisfactory when applied at any time of the year," the Tennesseans disclosed. "With due caution, this method virtually eliminates the possibility of crop damage."

A mixture of 3% esters, containing 4 lbs. of acid per gallon, and 97% diesel oil is applied to the brush about 4 inches above the ground line permitting the mixture to run down and thoroughly wet the root collar. Also, the scientists said, any exposed roots should be wet.

This method is effective on resistant species, such as ash, maple, and elm. When conifers appear in the course of dormant treatment, it is best to wet the entire plant.

The method described by the TVA duo will not effectively eliminate lateral sprouters, such as sumac, locust, and sassafras.

Substituted Urea Usage

In another brush control presentation, Texas A&M College researcher Dr. G. O. Hoffman explained his studies on the effectiveness of substituted urea herbicides.

Both powder and pellets of fenuron, monuron, Urab, and Urox were tested. It was concluded that fenuron pellets, applied at 1 tablespoonful of pellets per square yard, effectively controlled such woody plants as post oak, elm, pine, slat cedar, sweet gum, hickory, hackberry, and others.

Hoffman reported that monuron and Urox pellets work satisfactorily on mesquite and huisache, but they produced considerable soil sterilization and the material needed constant agitation to remain in suspension.

Reviewing the Arsenicals

A second look at arsenical compounds, which, while highly effective, are often subject to

abuse by the public, was offered by researcher P. J. Ehman of The Ansul Company, Marinette, Wis.

Dr. Ehman, who heads the Wisconsin firm's research department, presented a number of tabulations and test results to show that pentavalent organic arsenicals used as herbicides have a very limited toxicity and are not harmful when used properly.

He also pointed out the difference between organic arsenicals (in general, less toxic to man) which are showing promise as herbicides and the inorganic arsenicals, which are considerably more toxic.

Dr. Ehman observed that evidence is being developed which shows that specific arsenicals in low dosages are nonaccumulating in animals similar to man in arsenical metabolism.

Alabama Turf Tests

In the sections devoted to weed control in turf, a highlight was the paper presented by R. W. Couch, a graduate student in botany at Auburn University in Auburn, Ala.

Couch's studies have shown that there is no injury to Bermudagrass from 2,4-D used at 2 lbs. per acre, or 4 lbs. per acre of silvex, DMA, or monoammonium methanearsonate.

Both 2,4-D and silvex gave excellent control of catsear, with 2,4-D causing more rapid kill. These two were also effective against yellow woodsorrel and cudweed, but not against carpetgrass and dallisgrass.

Delegates found time to elect officers for the coming year and to agree on meeting dates for 1965. In charge until the next conference is Dr. R. E. Frans, an agronomist from the University of Arkansas, who was elected president replacing R. F. Richards of Geigy Chemical Corp., Ardsley, N.Y. Dr. Dale Wolf of duPont was chosen vice president, and the new secretary-treasurer is Henry Andrews, a researcher from the University of Tennessee.

The 1965 Southern Weed Conference will be held Jan. 19-21 in Dallas, Texas.

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OUR COMPANY is now operating in termite and pest control. We wish to expand into weed control, turf maintenance, tree care, etc. If you qualify to form and manage this new department, kindly give education details, experience, reference and personal data. Write Box 512, Haverstown, Pa.

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Chemical penetrates deep in the soil . . . kills deep-rooted perennial weeds and grasses.

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Cyclone

MODELS FOR LAND AND WATER FOR HERBICIDES, FERTILIZERS, SEED

The Cyclone Electric Model shown on boat, above, also mounts on garden tractor or front or rear of large tractor, truck or jeep. Powered by a self-contained electric motor which operates from the electric system of the vehicle upon which it is mounted. Models also available which operate from heavy

duty, flexible drive shaft which fits tractor PTO. Double agitator, easy setting rate gauge, and positive shut-off. Spreads up to a 30-foot swath, depending on material being spread. 1-, 2½-, 3- and 5-bushel sizes. Time and money savers that can put many extra dollars in your pocket.

See your distributor or write for further information

THE CYCLONE SEEDER CO., INC.
Urbana 36, Indiana



CYCLONE LAWN SPREADER. Famous for speed, freedom from streaks, accuracy. Ideal for fast, precision spreading of pelleted and granular fertilizers, herbicides, insecticides, seed, ice melters, etc. Covers a 6- to 8-foot swath. Feathered edge spread to prevent streaks and double overlaps.



CYCLONE MODEL 20 HAND SPREADER. For fast, precision spreading of pelleted and granular chemicals; also seed. Galvanized hopper holds 3 gals. or approx. 20 lbs. Covers a 6- to 8-foot swath with most materials. Feathered-edge spread prevents streaks and double overlaps. Shield protects operator.

Design "Professional" Package for Diamond's Dacthal W-50

Dacthal W-50, Diamond Alkali Company's preemergence herbicide, is now available in 24-lb. packages for convenient use by professional turf management personnel, nurseries, and other bulk applicators.

Dacthal controls annual grasses and broadleaf weeds, including crabgrass.

The 50% wettable formulation was highly successful in comprehensive tests conducted through-

out the country, at federal, state, and private research facilities, Diamond claims.

Dacthal also offers compatibility with lawn food, and safety for desirable turf, ornamental shrubs, trees, and flowers, the company maintains.

Applicators wishing more information about the new professional formulation and package may write to the Diamond Alkali Company, Agricultural Chemicals Div., 300 Union Commerce Bldg., Cleveland, Ohio 44114.

Trimmings

Arboreal urban renewal. Does the arborist play a part in urban renewal? Absolutely! We were sidewalk-superintending the construction of Cleveland's new downtown skyscraper, Erieview Plaza, recently when we noticed a crew, some trees, and a truck from the Charles F. Irish Company moving onto the scene. The Irish firm operates both in Detroit and Cleveland, we learned, and this particular crew, under foreman Earl Socia, was from the Detroit office. They'd journeyed all the way to Cleveland to install 52 sugar maples around the lengthy pool which will reflect this new skyscraper from a landscaped plaza of several acres. Unable to chat very long with our new acquaintance, since everyone looked very busy and official, we still couldn't help but note the efficiency with which the crew was planting the large maples, which will surely be a source of comfort on hot days next summer!

* * *

What's my lime? News from a Wisconsin conference of fertilizer and lime dealers is that someday computers may "gobble up soil test results" and automatically report the proper amount of lime and fertilizer to use on lawns, trees, and various crops. We trust these machines will be impartial in their recommendations, and that they'll lay it on the lime without fear of disagreement from more human judges of soil needs!

* * *

Two nursery experts get life. Two Floridians, both expert horticulturists, are currently enjoying the first year of lifetime honorary membership in the Florida Nurserymen and Growers Association. Dr. J. R. Beckenbach, director of the University of Florida's Agricultural Experiment Station, and Mark B. Jordan, vocational agricultural leader at the Florida State Prison, were so honored not too long ago. Dr. Beckenbach was cited for his work directing the ag station, and Jordan for his rehabilitation of prisoners through horticultural vocation training. We congratulate both on notable achievements!

* * *

Booze in the blight. What next? A communiqué just crossed our desk which indicates that alcohol, in moderation, may help defeat one of the most widespread and devastating enemies of crop production in the world, a root rot fungus known as *armillaria mellea*. Apparently experiments with ethyl alcohol at the University of California reveal that a few stiff belts during the growing season can do much to give the fungus DT's, or at least speed the ailment towards extinction. Barring any unforeseen developments, this might make some farmers more cordial towards use of alcohol, although we suppose it will be necessary to offer adequate proof that the technique is truly deserving of our cheers!

PROBLEM . . . SOLUTION . . . RESULT!



What's more unsightly than a dead tree stump in a lovely lawn? There was a time when removal meant days of laborious and expensive chopping, sawing and digging by a crew of men to remove a big stump like the one shown above.



And then came Vermeer, with a revolutionary new stump removal machine. Look how the machine's big, high-speed revolving cutting wheel has ripped half the stump to chips—as it moved back and forth across the stump.



Now see the difference! Stump has been removed. Hole has been filled with dirt and chips—ready for seed or sod. All accomplished in minutes by one man . . . and a Vermeer Pow-R Stump Cutter.

Here's the machine acclaimed by cities and tree service men everywhere for fast, low cost stump removal!



VERMEER'S Pow-R Stump Cutter

available in 5 models to fit every stump removal problem

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You'll save thousands of dollars and man-hours annually with a Vermeer Pow-R Stump Cutter. There is a model to fit every need—to remove an occasional small stump . . . or hundreds of stumps every week! Thousands of Vermeer Pow-R Stump Cutters have been used extensively in cities and towns in every state . . . and in many land clearing, highway widening and construction projects. Praised by municipalities as a tremendous labor and money saver—and by tree service firms as an invaluable profit-maker! Simple 3-lever hydraulic control system lets one operator remove large stumps in minutes. No back breaking labor. It's the modern, economical way to remove stumps. Ruggedly built to give years of satisfactory service with minimum of low cost basic maintenance.

VERMEER . . . WORLD'S LARGEST STUMP CUTTER MANUFACTURER