

EDITORIAL REPORT

Since the initial issue of the Official Bulletin of our Association, The Bull Sheet, the circulation has increased more than 50 percent. The cost of printing and mailing of each issue amounts to approximately twenty-three dollars. (\$23.00).

During the past year, twelve regular monthly issues were printed and in addition, two supplemental issues were printed. One covering the timely use of sodium arsenite by Dr. O. J. Noer, and the other during the National Open Golf Championship at Medinah Country Club.

In line with Association policies, we have been exchanging periodicals with other district Associations who have indicated interest in receiving our Bulletin. We feel that this procedure has promoted a cooperative and friendly spirit with other greenkeeping organizations.

From time to time, we have been receiving requests from non-members to be put on the mailing list. In view of the increased cost of printing and mailing, a policy was established whereby all non-members requesting issues on a yearly basis would be requested to send the Editorial Committee \$1.00 in stamps per annum for the purpose intended. We have observed this policy during the past year.

The important objective of the bulletin is to promote sincere interest in Association functions and responsibilities. Considerable time and effort is consumed in the layout work of each issue by a few members who are willing to give up some of their limited time towards the welfare and progress of our Association. What is needed most of all, is constructive comments from the members. This will indicate that the bulletin is not being taken for granted.

To those persons who have contributed material for the bulletin, we wish to express our very sincere appreciation for the interesting articles submitted. May we continue to have your co-operative support during the coming season of 1950. -- Editorial Committee--

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COMMON ARBORICULTURAL TERMS

ANAEROBIC.. Physiologically active in the presence of oxygen. Not requiring free oxygen for growth.

ARBORICULTURE. The cultivation and care of woody plants, particularly those used for decorative, shade and ornamental purposes.

ASFHALT.. A solid bituminous material of a petroleum residue, soluble in petroleum solvents, insoluble in water. Sometimes used as basic material in tree fillings and tree paints.

BACTERIA.. One-celled, non-green, microscopic plants, multiplying by simple division or fission. Some cause plant disease. BARK..Those tissues of woody stems outside the cambium. Usually consists of inner living tissues (phloem) and outer dead corky layers.

BOERS, FLATHEAD AND ROUNDHEAD.. Beetle larvae of certain species which form galleries and commonly feed just beneath the bark.

CABLING. The installation of flexible cable in the crown to provide additional support to leaders and branches.

CANKER. A localized disease area on stems and branches resulting in the death of the affected bark and cambium.

CHEMOTHERAPY.. The internal treatment of diseases by means of chemical reagents which, in concentrations used, do not have noticeable toxic effects on the treated plants.

CHLOROFHYLL.. The green pigment with which carbo-hydrate synthesis (photosynthesis) is associated in plant tissues.

CONK.. Fruit-body of a woody decay fungus. A sporophore. Also simbodies on tree trunks.

CHEMICALS FOR DUTCH ELM DISEASE THERAPY

by: A. W. Feldman, F. L. Howard, Nester E. Caroselli

Abstract of papers: Chemicals selected after evaluation in laboratory and greenhouse were tested in 1948 and 1949 on more than 1,200 trees of Ulmus americana growing under natural conditions. Results were: (1) Hydraulic soil impregnation with lime suppressed wilt symptoms for at least one month when soil pH was maintained at 7.0 or slightly above. (2) Low magnesium lime gave better disease control than high magnesium lime. (3) Hydraulic soil impregnation with urea. salicylate, and azo dye, alone or combined, did not effectively suppress symptoms. These three chemicals, combined with low magnesium lime, gave approximately 70 and 50 percent control on woodland and estate trees, respectively. Equal control was obtained when this combination was applied in the fall, spring or summer. (4) Nutrient sprays containing urea, KH₂ PO₁, and sucrose temporarily retarded wilt symptoms when applied at the onset of wilting. Adding NaNO2, or salicylate to the nutrient spray resulted in 40% control. (5) Better control resulted when treatments were applied before rather than after inoculation. (6) Results from greenhouse elm seedlings were comparable with those in woodland experiments. (7) Trunk injections of basic chemicals (N_aHCO₃ KHCO₃, C_a (OH) gave good control; citrates of Mg, K, Na, no control. (8) Trees succumbed more rapidly to trunk than to twig inoculation.

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CHANGE OF ADDRESS

Matthew L. Bezek 18516 Lexington Homewood, Illinois Tel. 57-RX SEED TRANSMISSION OF THE ELM MOSAIC VIRUS by: T. W. Bretz

Abstract of papers: Handpicked seed from a mosaic-infected American elm was planted in the greenhouse and the seedlings obtained were examined periodically for mosaic symptoms. Prior to planting the seed was divided into two lots; in one the seed was separated from the fruit covering; in the second the fruit covering was left intact. Over a 3-month period, approximately 1% and 31%, respectively, of the seedlings developed characteristic mosaic symptoms. Because approximately 20% of the fruit was observed to be malformed, another planting of malformed versus normal fruits was made to determine whether a correlation existed between the appearance of the fruit and mosaic symptom expression. There appeared to be no such correlation. The percentage of seedlings showing mosaic symptoms was approximately the same in each lot. When leaf tissue from seedlings having mosaic symptoms was grafted into healthy elm seedlings, about 25% of the grafted seedlings developed typical mosaic symptoms within 5 months. Seedlings of the same lot in a control series remained healthy. * - * - * - * - * - * - * - * - *

ROOT GRAFTS AS A POSSIBLE MEANS FOR LOCAL TRANSMISSION OF OAK WILT.

by J. E. Kuntz and A. J. Riker

Abstract of paper: The progressive spread of oak wilt in local areas has been studied more intensively than the spread over long distances, because the greater feasibility of local control. Periodic examinations of 36 oak-wilt plots, established in central and southern Wisconsin from 1939 to 1947, have demonstrated such tree-to-tree spread. An additional 47 control plots included: (1) eradication of dead and wilting trees, (2) periodic application of DDT sprays, (3) combination of these, (4) various disposition of diseased material, and (5) poisoning trees. Items (1) through (4) had little effect on local spread. Abundant and widespread natural grafting of black oak roots was revealed by digging and washing out of root systems, and by the movement of poisons between trees--observed up to a distance of 28 feet. Dyes and spores of the oak-wilt fungus also readily passed through such grafts. Chalara quercina H. was isolated on the symptomless side of root grafts between wilted and "healthy" trees. Bur oak roots were found to graft with one another but not onto black oaks. Thus, adjacent oaks may have united root systems. Interruptions of these systems on six plots in 1947 by poisoning adjacent healthy trees have thus far given local control. * - * - * - * - * - * - * - * - * - * Tam O'Shanter Country Club plans to install telephones at each tee on the course during the coming season.

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- Q. I would like to hear some discussion on types of grass cutting equipment used for tee mowing?
- A. J. S. uses a Toro Park Special set at 5/8 inch. W. K. uses a Toro Professional set at 1/2 inch. R. D. uses a Jacobsen Green Mower set at 1/2 inch. G. K. uses a Worthington Over-Green set at 1/2 inch.
- Q. I would like to know what the disadvantages are in a very early spring fertilization program?
- A. There is a danger of losing considerable nitrogen through washing away due to thawing and excessive rainfall, and perhaps early application of plant food might be taken up by objectionable vegetation before permanent grasses can respond to the treatment.
- Q. How much fertilizer do golf courses use on fairways during the growing period?
- A. This depends a great deal on the condition of turf, and what the membership desires for playing conditions. The following reports are approximate:
 - R.D. Heavy Spring & fall feeding w/5-10-5 Summer feeding w/Milorganite
 - M.W. May feeding w/10-8-6 at 450 lbs an acre June Feeding w/Organics 500 lbs an acre Fall feeding w/5-10-5 at 500 lbs an acre

(watered fairways)

A.L. Spring feeding w/5-10-5 & Milorganite Fall feeding w/5-10-5 & Milorganite

(un-watered fairways)

- Q. What about Bermuda grass in the district?
- A. It is too early to make any comments concerning the merits of bermuda grass in this area. In experimental plots, bermuda grass has now turned a straw color and appears to be quite dormant but there are no indications of any winter kill to date.
- Q. How early is it most practical to treat for snow-mold, and how often is it necessary to treat during the winter period?
- A. If possible, first treatment should be applied just prior to the first snow-fall, and again after midwinter thaws. Two or three applications has been the usual practice.

(Continued page 4)

THE QUESTION BOX (cont'd)

- Q. When using 2,4D on astoria bent fairways which type is the safest to use sodium salts or the esters?
- A. Runner type bents are susceptible to ester type 2,4D, therefore sodium salts are reported to be much safer.

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LETTERS TO THE EDITOR



Dec. 29, 1949

Dear Norm:

Enclosed find some stamps for your costs of mailing the "Bull Sheet" to me. Thanks a million for adding me to your list of Bull-Sheeters. I have always known I was something besides a greenkeeper.

Am making plans to attend the National at Boston. If you have any information of a group of Illinois boys going - send it along. I am checking with the Wisconsin boys and we may be able to get together for the trip.

> Thanks again Norm, New Bull Sheeter,

> > Ray Rolfs Menomonee Falls Wisconsin

> > > Jan. 5, 1950

Dear Norm:

You hadn't better drop me off your mailing list - even if your President, Bill Stupple has to pay my way.

Here's wishing you all the best for the coming year and hope I'll see you in Boston.

Thanks again ---

Sincerely,

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Colin Smith Cleveland, Ohio

EXPERIMENTAL PROPAGATION OF DISEASE-RESISTANT ELM SELECTIONS BY VEGATATIVE CUTTINGS

By

T. W. Bretz and R. C. Swingle

Abstract of papers: Research on the development of elm resistant to the Dutch Elm disease and to phloem necrosis has included methods for the propagation of disease-resistant trees by vegatative cuttings. Requirements for the production of rooted elm cuttings varied between species and between individuals of the same species. The Christine Buisman elm, selected from Ulmus carpinifolia and resistant to Dutch elm disease and phloem necrosis, was propagated best on its own roots from root cuttings collected during the dormant season. Selections from U. americana were propagated most satisfactorily from softwood stem cuttings or leaf-bud cuttings with a "heel" of stem tissue collected in early summer and subjected to a constant water mist. The highest percentage of root strike and the most vigorous rooting was obtained with leaf-bud cuttings treated . with rooting compounds. Survival of rooted leaf bud transplants was greater than the survival of rooted softwood stem cuttings. Dormant stem cuttings gave generally unsatisfactory results. U. thomasi, U. pumila, and U. fulva were propagated successfully by means of leaf-bud cuttings, and preliminary trials using this technique with hybrid Castanea have given promising results.

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Ray Didier will represent the Association as delegate to the NGSA National Turf Conference in Boston next month. Bill Stupple will be around as alternate just in case political problems get a little too hot for Ray to handle by himself.

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GREENKEEPER'S CHEMICAL APPLICATION GUIDE NOW READY FOR DISTRIBUTION.

A new chemical quick reference guide which covers types of chemicals, and amounts used for various turf maintenance operations, is now ready for sale to members of greenkeeping organizations.

The guide was originated by Robert Williams, and developed by the PRACTICAL TURF RESEARCH COMMITTEE of the Midwest Association of Golf Course Superintendents.

The data was compiled for the benefit of our members, and other district greenkeeping associations and is the result of practical research experiences by superintendents of this Association. The materials and rates are not to be construed as a recommendation for any specific control or cure. All applications accomplished through information of the guide should be performed in a sensible manner and with some flexibility according to local conditions. All rates indicated should be carefully checked before applications are made.

The guide is being copyrighted by this Association, and will be the first of a series of such guides containing pertinent information concerning materials and rates which will cover all phases of golf course maintenance projects.

In view of Association policies, the guide can only be obtained at a regular membership meeting. For those persons who are members of other district greenkeeping organizations, availability of the guide will be made through their Association secretary.

For further information, contact Don Strant, Westmoreland Country Club, Wilmette, Illinois.

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MEETINGS OF INTEREST

- January 23-25 Ohio Arborist Short Course Neil House Columbus, Ohio
- January 25-27 Indiana Arborist Conference Purdue University West Lafayette, Indiana

| | West Lafayette, Indiana |
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| January 30
(1:CO P.M.) | Association Meeting
Winter Sports Cornival
Exmoor Country Club |
| February 6-1 | 0 National Turf Conference
Equipment Exhibits
Hotel Statler
Boston, Mass. |
| February 25- | 27 Midwestern Chapter,
NSTC
Discussion on trees
LaSalle Hotel
Chicago, Illinois |
| February 28
(tentative) | Open House
George A. Davis, Inc.
5440 N.W. Highway
Chicago, Illinois |
| March 6-8 | Turf Conference, MRTC
Purdue University
West Lafayette, Indiana |
| February, 19
* - * - * - | <pre>>51 National Turf Confer-
ence
Equipment Exhibits
Hotel Sherman
Chicago, Illinois
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| TOP-FLIGHT | MEN ELECTED AS MIDWEST |
| President | - William Stupple
Exmoor Country Club |
| lst Vice Pre | s. John Sellers
Northshore Country Club |
| 2nd Vice Pre | s. Frank Dinelli
Northmoor Country Club |
| Treasurer | Walter Kilmer
Ravisloe Country Club |
| Secretary | Bert Rost
Park Ridge Country Club |
| Director | Melvin Warnecke
Idlewild Country Club |
| Director | Mat Bezek
Cherry Hills Country
Club |
| Director | Emil Mashie
Onwentsia Country Club |

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N-E-W P-U-B-L-I-C-A-T-I-O-N-S

INSECT PATHOLOGY - by Edward A. Steinhaus College of Agriculture University of California

PLANT AND SOIL WATER RELATIONSHIP - by

Paul J. Kramer Professor of Botany Duke University

HORMONES AND HORTICULTURE - by

George S. Avery and Elizabeth B. Johnson

FLORICULTURE - by

Alex Laurie and Victor H. Ries Department of Floriculture Ohio State University

(The above material can be obtained from the McGraw-Hill Book Co., Inc. West 42nd Street, New York 18, N. Y.)

GETTING ACQUAINTED WITH THE SOIL

by W. W. Reitz, U. S. Soil Cons. Serv. Teaching Aid 2, U. S. Govt. Print. Off. Washington, 1949.

SPRAYING SYSTEMS TEE JET SPRAY NOZZLES FOR WEED KILLING.

Bulletin 55, Spraying Systems Company.

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"IT'S ABOUT TIME YOU FELLOWS BEGIN TO COMPARE CLUB EXPENSES. THE OFFICIALS HAVE BEEN DOING IT FOR YEARS -- TOTALS WILL VARY GREATLY DUE TO ACCOUNT SYSTEMS BUT INDIVIDUAL ITEMS ARE SOME-THING WHICH WILL MAKE YOU THINK A BIT. IF SUPERINTENDENTS WOULD COMPARE BUDGETS MORE, THEY MIGHT NOTICE THAT THEY ARE NOT UP TO PAR IN SALARIES FOR THEMSELVES AND THEN DO SOMETHING ABOUT IT."



THE "PERFECTION" GRADE SCALE

The "Perfection" Grade Scale is so designed that the direction and amount of fall from O" to 5" in 10 feet is indicated at a glance. The adjustment is very simple and absolutely accurate. In use, the workman merely moves the indicator to the grade desired as shown on the scale bar, place the instrument on the work to be graded with the arrow or pointed end in the direction of desired fall. When bubble shows "level" it is then true to the grade indicated. To determine existing grades, merely place instrument on the work and move indicator until bubble shows "level", then read the answer on the scale bar. When indicator is set at "O" the tool is used as an ordinary level. Used also for plumbing vertical pipes, risers, etc. The double 12" rule with 1/8" graduations on the base permits reading measurements from either direction.

Note: This tool can be obtained from Crane Company, Chicago, Illinois or Modern Utilities Corporation, 7 S. 2nd Street, Harrisburg, Pennsylvania. * - * - * - * - * - * - * - * - *

- T-H-I-S S-P-A-C-E R-E-S-E-R-V-E-D

F-0-R

M-E-M-B-E-R-S-1

A-R-T-I-C-L-E-S-



EDITORIAL STAFF

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