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*Farm Chemicals &
Insecticides Division*

SLIPPERY ELM

(*Ulmus rubra*)



Drawing from: Manual of the Trees of North America, by Charles S. Sargent, Dover Publications, Inc. Reprinted through permission of the publisher.

Prepared by J. H. Kirch, forester and horticulturist serving as Marketing Manager, Industrial Chemicals, for Amchem Products, Inc.

Slippery elm, sometimes called red elm or moose elm, is a medium-sized tree 60 to 70 feet high and 12 to 30 inches in diameter. It is found on rich, well-drained limestone soils, but will grow on poorer sites. This species is found from the valley of the St. Lawrence River south to Florida and west to North Dakota and Texas.

The leaves are alternate, simple, about 5 to 7 inches long, oval to obovate and dark green. Both leaf surfaces are very rough.

The wood of slippery elm is very resistant to decay, making it useful for posts, railway ties, and agricultural implements.

Slippery elm may be distinguished from American elm (*Ulmus americana*) in several ways. Its leaves are rough above and below. Those of American elm are smooth to very slightly rough above, pubescent below. The inner bark of slippery elm is much more mucilaginous and fragrant than that of American elm. Although the slippery elm resembles American elm in general appearance, the bole is clear for a greater length and the twigs have a tendency to be more ascending.

The fruit of slippery elm is another distinguishing feature. The short-stalked samara consists of a seed surrounded by a wing with no hairs on the margin. American elm fruits are more hairy particularly around the margin of the wing. Both trees bear fruit soon after flowering in the spring. Buds of slippery elm are a dark

Whether a plant species is desirable or undesirable often depends on the situation in which it occurs. This is true of all the trees to be discussed in this series of articles on identification. For example, maple (*Acer rubrum*) is a useful ornamental in landscape plantings because of its early red flowers, pleasing growth habit, and spectacular autumn foliage coloring. It is a nuisance on the right-of-way because of its resistance to chemical treatment. Similar comments could be made about the other species to be described. They have ornamental, and economic value, but not on a utility right-of-way which must be kept clear of tall vegetation. Strong resistance to treatment makes it especially important that a few "problem" species be clearly recognized when they are encountered in clearance work. Otherwise there may be needless disappointment, and waste of time and material through inappropriate treatment. J. H. Kirch.

chestnut brown with 12 overlapping bud scales coated with rusty brown hairs. The buds of American elm are lighter in color and less pubescent.

Slippery elm is easily top killed by foliar applications of 2,4-D/2,4,5-T, ammonium sulphamate, dicamba, 2,3,6-TBA and picloram. If the phenoxy herbicides are used, best rootkill is obtained by combining them with 2,3,6-TBA, dicamba or picloram as a foliage spray, or by applying them as a dormant cane or basal spray in oil. Slippery elm is a vigorous sprouter and careful attention to thorough wetting of the root collar zone is essential regardless of the spray applied.

In basal spraying, better rootkill has been obtained by combinations of 2,4-D and 2,4,5-T alone. 2,4-D alone is very effective on elm.

Aerial sprays of 2,4-D/2,4,5-T applied as an invert emulsion have been effective in top killing this species. Repeat aerial sprays or follow-up basal sprays are needed for complete rootkill. Aerial applications of particulated sprays containing 2,4-D and picloram have given good rootkill on this species and other woody plants growing in association with it. Combinations of 2,4-D/2,4,5-T and dicamba or 2,3,6-TBA applied by helicopter also show promise.

Ammonium sulphamate is often used where crops are present along the rights-of-way. Pellet applications of fenuron or picloram are effective in controlling this species. Care should be taken not to apply these pellets over roots of trees adjacent to the right-of-way.

Classifieds

When answering ads where box number only is given, please address as follows: Box number, c/o Weeds Trees and Turf, 1900 Euclid Avenue, Cleveland, Ohio 44115.

Rates: "Position Wanted" 5c per word, minimum \$2.00. All other classifications, 10c per word, minimum \$2.00. All classified ads must be received by Publisher the 10th of the month preceding publication date and be accompanied by cash or money order covering full payment.

FOR SALE

PRIME TREE SPRAYING business located in Westchester County, New York, established 20 years ago. Gross volume approximately \$55,000 to \$65,000 a year plus considerable tree surgery work that is referred to other companies in the area. There is more than \$40,000 in equipment which ranges from office data processing machines to 600-gal. hydraulic sprayers. This also includes a modern 2-way radio network with three licensed base stations. There is approximately a \$5,000 inventory. This gross business is done in less than a seven-month period with a payroll of only \$12,500. It nets well into five figures plus other valuable considerations for its owner. The asking price is \$50,000, or we would consider selling the business and equipment separately. Terms arranged. Priced for a quick sale. List of equipment and inventory mailed on request. Mail inquiry to Mr. H. G. Widmark, Pres., Widmark Scientific Control, Inc., Drawer 151, Harrison, N. Y. 10528.

Shade Tree Project

(from page 15)

a delegate to the evaluation committee in addition to Dr. Diller and Dr. L. C. Chadwick, executive director of the International Shade Tree Conference and formerly head of The Ohio State University Division of Floriculture and Ornamental Horticulture. Also on the committee is J. Michalko, Cleveland, O., Shade Tree Commissioner. H. Mike Hill, graduate student at the Research Center, is in charge of the project, and oversees maintenance and project reports. Utilities who are sponsoring the project and their representatives on the committee are: Ohio Edison, R. J. Dreisbach; Toledo Edison, R. May; Cincinnati Gas and Electric, J. T. Farrell; Dayton Power and Light, R. D. Palmer; Cleveland Electric Illuminating, A. D. Shemitz; Ohio Power, R. E. Abbott and G. P. Mitten; and Davey Tree Expert Co., M. W. Staples. Staples is chairman of the evaluation group.

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INDEX TO ADVERTISEMENTS

John Bean Division, FMC 3rd Cover	
Brillion Iron Works, Inc.	3
Buffalo Turbine Agricultural Equipment Co., Inc.	31
The J. J. Dill Co.	6
Elanco Products Co. ...28a, 28b, 28c, 28d	
Finland Turf Cut Division, Finneyfrock's	36
Friend Manufacturing Corp.	35
Hadfield Sod Roller Co.	50
Hercules Incorporated ...2nd Cover and 4	
Howard Rotavator Co., Inc.	37
International Harvester Co. ...16, 17	
Locke Manufacturing Companies, Inc.	53
Merion Sod Farms, Inc.	49
The F. E. Myers & Bro. Co.	33
John Nunes Mechanical Harvesting Company ...4th Cover	
S. B. Penick & Co.	51
Robert B. Peters Co., Inc.	49
B. G. Pratt Co.	20
Rowco Manufacturing Co., Inc. ...	50
Ryan Equipment Co.	7
South Dakota Kentucky Bluegrass Association	26
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The Vandermolen Co.	34
Whitney Seed Co., Inc.	24

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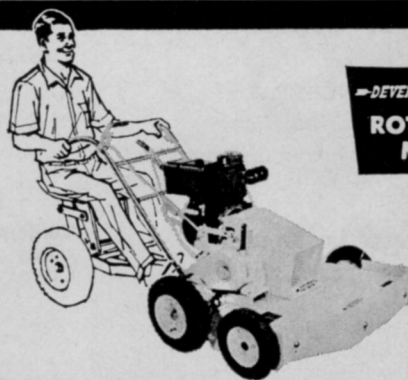
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Insect Report

WTT's compilation of insect problems occurring in turfgrasses, trees, and ornamentals throughout the country.

Turf Insects

NORTHERN MASKED CHAFER

(*Cyclocephala borealis*)

Maryland: Larvae heavy and damaging 2 bluegrass lawns in Silver Spring, Montgomery County.

SOUTHERN CHINCH BUG

(*Blissus insularis*)

California: Moderate on St. Augustine grass in Whittier, Los Angeles County. This is a new state record. **Florida:** Killed 5 acres of 80-acre St. Augustine grass pasture at ranch near Bell Glade, Palm Beach County; controls required.

A MARCH FLY

(*Dilophus orbatus*)

California: Adults heavy on turf lawns at Salinas, Monterey County.

AN OLETHREUTID MOTH

(*Bactra verutana chrysea*)

California: Larvae heavy in nutgrass at Wasco, Kern County.

Insects of Ornamentals

PINEAPPLE SCALE

(*Diaspis bromeliae*)

California: Adults heavy on bromeliad nursery stock at Valley Center, San Diego County.

A FALSE SPIDER MITE

(*Brevipalpus russulus*)

Florida: Taken on Thanksgiving cactus (*Zygocactus* sp.) in greenhouse at St. Augustine, St. Johns County. This is a new Department of Plant Industry state record and new host record. Taken on 75 of 100 Thanksgiving cacti at San Mateo, Putnam County, for new county record.

FULLER ROSE WEEVIL

(*Pantomorus cervinus*)

California: Adults heavy, damaged pyracantha leaves at Pacific Grove, Monterey County.

A JAPANESE WEEVIL

(*Pseudocneorhinus bifasciatus*)

Maryland: Adult damage heavy to *Mahonia* sp. in Howard County.

Tree Insects

APHIDS

Maryland: *Lachnus salignus* heavy on weeping willows at several locations

throughout state. *Longistigma car- yae* heavy, laying eggs on sycamore trees at College Park, Prince Georges County.

BARK BEETLES

Virginia: Increased greatly past month but not epidemic. Spot infestations totaled 35 in Chesterfield County and 40 in Henrico County. *Ips* spp. and *Dendroctonus* spp. involved in death of loblolly pine in stands throughout Sussex district. *Ips* spp. on up to 70 trees in scattered areas of Westmoreland, Caroline, King and Queen, and Richmond Counties. *Ips* spp. and *D. frontalis* active in most counties in Richmond district; most numerous (15 spots) in Hanover County. Active in Notoway, Lunenburg, Mecklenburg, Halifax, and Charlotte Counties; *Ips* spp. dominant. *Ips* spp. and *Dendroctonus* spp. involved in death of 2 acres of Virginia pine at 3 locations in Louisa County; active in few spots in Henry, Pittsylvania, Roanoke, and Patrick Counties.

FALL CANKERWORM

(*Alsophila pomataria*)

North Dakota: More numerous than in 1966; adults and egg masses evident on buildings, trees, and tangle-foot bands in Fargo area, Cass County.

RED-HUMPED CATERPILLAR

(*Schizura concinna*)

California: Heaviest ever recorded in state. Continues to defoliate trees.

RED-HEADED PINE SAWFLY

(*Neodiprion lecontei*)

Virginia: Young larvae defoliated shortleaf and Virginia pine at 4 locations in Wise County and 2 locations in Scott County.

AN ERIOCOCCID SCALE

(*Eriococcus araucariae*)

California: Heavy on Norfolk Island-pines at Solana Beach, San Diego County.

FALL WEBWORM

(*Hyphantria cunea*)

New Mexico: Moderate to heavy on elm, poplar, and cottonwoods in Luna County (Hare); damage heavy on same hosts in most of Dona Ana County.

PINE WEEVILS

Virginia: *Pissodes strobi* damage extensive to white pine in Floyd and Montgomery Counties. *Hylobius pales* damaging 36-acre loblolly pine plantation in Stafford County; loss 5 percent.

Compiled from information furnished by the U. S. Department of Agriculture, university staffs, and WTT readers. Turf and tree specialists are urged to send reports of insect problems noted in their areas to: Insect Reports, WEEDS, TREES AND TURF, 1900 Euclid Ave., Cleveland, Ohio 44115.

Trimmings

Tetanus Shot Lately? Studies show only about one quarter of the population has had a tetanus booster during the past 3 years. This, despite the fact that tetanus organisms are present in the soil at all times. Though most common in farm and garden areas, and where soil has been treated with animal manures, the organisms are also found on city streets, play areas and in the home. Protection amounts to the basic 3 shots with a booster every five years. The emergency horse serum protection is good for only 10 to 14 days, and some people react to this.

* * *

Mayflower Trees For 800 Cities. Aero Mayflower Transit Company which headquarters at Indianapolis, Ind., is sponsoring a tree planting program in the 800 cities where the company has agents. Mayflower has picked the English Hawthorn for plantings, the blossom of which was the emblem of the ship, "Mayflower," which brought the Pilgrims to America, and which has long been popularly known as the Mayflower tree. Aero Mayflower President John Sloan Smith reports the company goal is to plant 5000 trees yearly.

* * *

With Tongue In Cheek. We have a question for our good friend Clarke W. Davis, executive-secretary for the National Arborists. Our backyard gardener neighbor feels that with all the new holly plantings in our community there's little need for everyone to buy the male holly. He suggested that everyone buy females for their beauty and that we grow a male in a wheelbarrow which could be transported around the community as needed. Clarke just sent out a helpful news release on such dioecious plants, but he didn't touch on this. How about that Clarke?

* * *

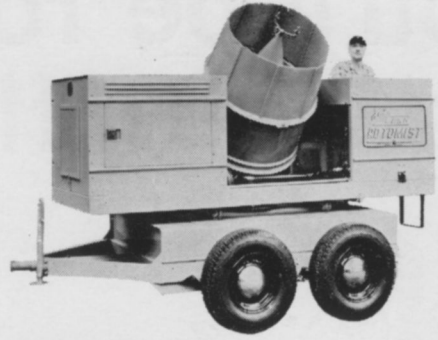
S.O.S. To Spraymen. St. Louis spraymen are missing a bet, though it's a bit late in the season for this year. City director of parks, recreation and forestry, Louis Buckowitz, reports his inspectors have found 900 violations involving weeds, trash and rubble. Many of the reports had to do with overgrown lots and areas between walks and curbs. He also reports the heaviest concentration of nasal distress from mold spores and ragweed pollen in years. Unless property owners handle the job, Buckowitz will have his department do the work and place liens against the property. This winter might be a good time for operators in the business to introduce the negligent property owners to the benefits of growth regulating chemicals.

* * *

Safety For Sissies? We don't think so and neither does the Smith Welding Equipment Division of Tescom Corp., Minneapolis, Minn. They have just published a comprehensive brochure on using oxygen-fuel gas equipment. It is for anyone who uses welding, cutting and heating techniques and tells how to handle oxygen-fuel gas equipment. Write them for a free copy.

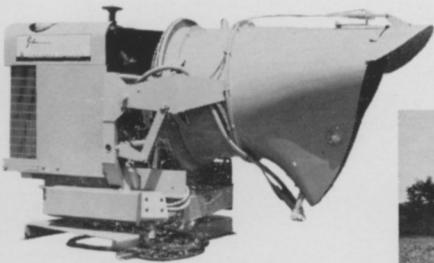


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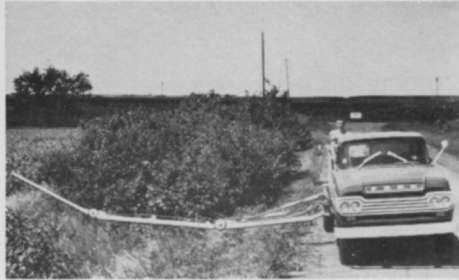
MODEL 303T ROTOMIST biggest performer among mist-type shade tree sprayers. 40" fan, 60,000 CFM air volume.

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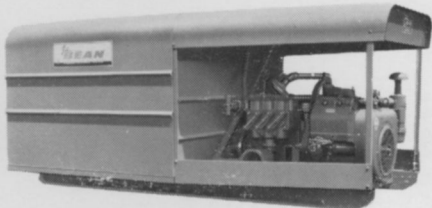
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