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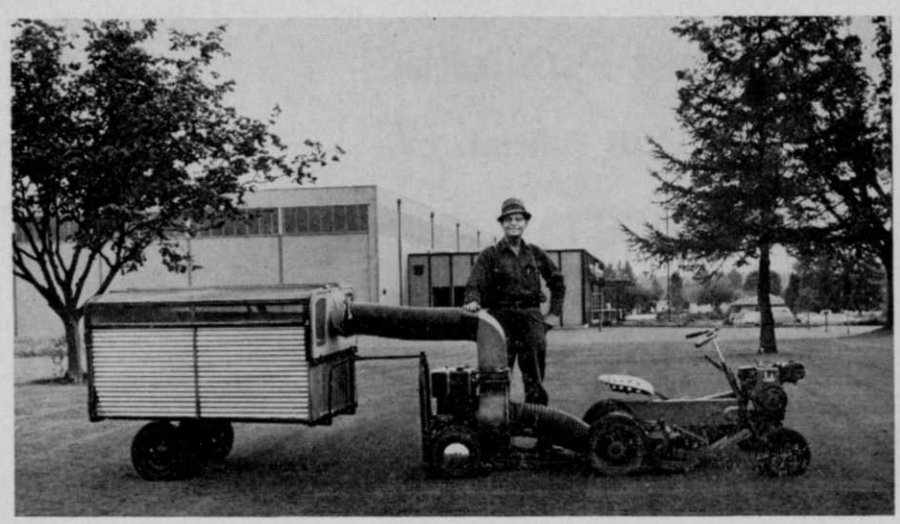


Gif-Vac #1 Lawn Mower Attachment was invented by Oscar D. Gifford as an answer to a problem he encountered in his contract lawn maintenance business. Gifford, shown above with his machine, says the Gif-Vac will soon be in production and available to other turf managers.

Landscaper, Fed Up with Clippings, Designs Own Grass Removal Machine

When landscape maintenance company owner Oscar D. Gifford discovered he'd have to cut down on time spent removing clippings after mowing to increase his profits, he turned imaginative and came up with a machine for lawns that looks so good to him he's now decided to sell it to others.

Called the Gif-Vac #1 lawn mower attachment, the new device is said to pick up, immediately, freshly cut grass clippings, while a blower simultaneously partly chops up the clippings before throwing them into a trailer towed behind the mower. Clippings are thus removed before they amass on the ground.

Gifford says the trailer can handle one cubic yard of clippings before it must be emptied. The trailer's delicate balance and maneuverability allow landscapers' crews minimum effort in emptying the trailer, Gifford adds.

Gifford operates in Olympia, Washington, under the name of Giffords the Gardeners. He says he got the idea for his new Gif-Vac eight years ago while engaged in landscape maintenance on the Washington State Capitol grounds. He later went into business for himself, and now has such accounts as Continental Can Company, whose grounds he is maintaining in the photo above.

Production and sales of the new invention are set to begin soon after a demonstration on the Capitol grounds in Olympia July 15th at 2 p.m. Those who wish advance information may write the inventor at 1003 North Central, Olympia, Washington.

U.S. Borax Has New Herbicide

Fast-killing action coupled with long residual effectiveness on all weeds and grasses is offered by a new weedkilling product designed to prevent reinfestation of treated areas.

Labeled Monobor-Chlorate Granular-D, U. S. Borax & Chemical's new herbicide is intended to reduce labor and expense in keeping fence lines, fuel storage areas, parking lots and ditchbanks free of weeds.

Diuron, an organic herbicide of very low solubility in water, has been added to a long-used borate, sodium chlorate mixture to produce the combination action. The product can be applied dry directly from the bag, or as a spray when dissolved in water. More information is available from the company at P.O. Box 75218, Sanford Station, Los Angeles, Calif.

Northwest Spraymen Organize

A new organization of chemical applicators in the Northwest was recently formed in Yakima, Wash. Named the Northwest Chemical Applicators Association, the group's membership includes basic manufacturers, distributors, ground and aerial applicators, and equipment manufacturers. Purpose of the organization is to coordinate the agricultural chemical industry in Washington, Oregon, and Idaho.

Officers elected are: Bob Cockburn, Early Bird Spray, Everett, Wash., president; John Yeats, Northwest Spray Co., Spokane, Wash., 1st vice president; Jerry Fox, Van Waters & Rogers, Seattle, 2nd vice president.

Board of directors include Henry Carsner, Northwest Weed Control, Tacoma, Wash.; Hugh Kendall, Allied Spray, Snohomish, Wash.; Hewitt Harrison, L. H. Butcher Co., Seattle, Wash.; Eldon Harvey, Snohomish Flying Service, Snohomish, Wash., and Ted Britten, Wolfkill Feed & Fertilizer, Monroe, Wash.

John G. Wilson was selected as executive secretary. The annual meeting will be held in Yakima in November. Address of the new association is 814 Second Ave. Bldg., Seattle, Wash. 98104.

Banvel-D Has Further Approval

Recent information from Velsicol Chemical Corp. states Banvel-D has been approved for control of Canada thistle and leafy spurge in noncroplands. Banvel-D, a broad spectrum herbicide, was previously approved for spring-seeded and fall-seeded wheat on a no-residue basis.

Approval was also obtained for top growth control of field bindweed and Russian knapweed on fence rows, roadways and other noncroplands. Canadian clearance has been given for control of Tartary buckwheat, wild buckwheat, green smartweed, ladysthumb and cow cockle, and for top growth control of Canada Thistle and sowthistle in spring-seeded wheat and oats. Details are available from Velsicol at 341 E. Ohio St., Chicago, Ill.

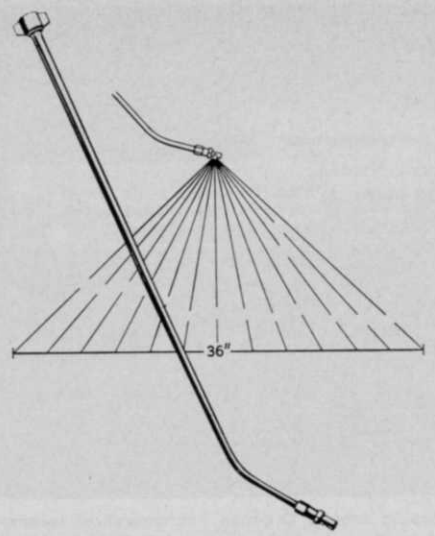
Guide to Horticulture Jobs

Information on career opportunities in horticulture is given in a new publication, "Exploring Horticultural Science as Your Career," available from the Department of Horticulture at the University of Minnesota.

Research in ornamentals and turf, plant breeding, garden store operation, and turf management are among the career possibilities listed. "Demand for professionally trained turf specialists is rapidly growing," a Department of Horticulture spokesman reports. "More than $90 million is spent each year in Minnesota alone for commercial maintenance of turf."

Field laboratories at the Minnesota U., designed for research in turf management, include a 302-acre Landscape Arboretum, 20,000 sq. ft. of research greenhouse space, and 20 acres of experimental plots.

For a free copy of the career guide, write the Department of Horticulture, Institute of Agriculture, University of Minnesota, St. Paul 1, Minn.



Hudson's new extension tube is 18 inches long, fits ¼-inch male pipe thread.

Extension/Nozzle New From Hudson

Spraying large areas of exposed surfaces, such as lawns, is said to be easier and faster with the new Hudson Broad-Spray Extension Set, recently developed by H. D. Hudson Mfg. Co.

The nozzle is said to spray a sharp, nondrift spray pattern about 36 inches wide at pressure up to 50 lbs. As an accessory on compression, knapsack, or small power sprayers, the extension is ideal for lawn weed control, the company says.

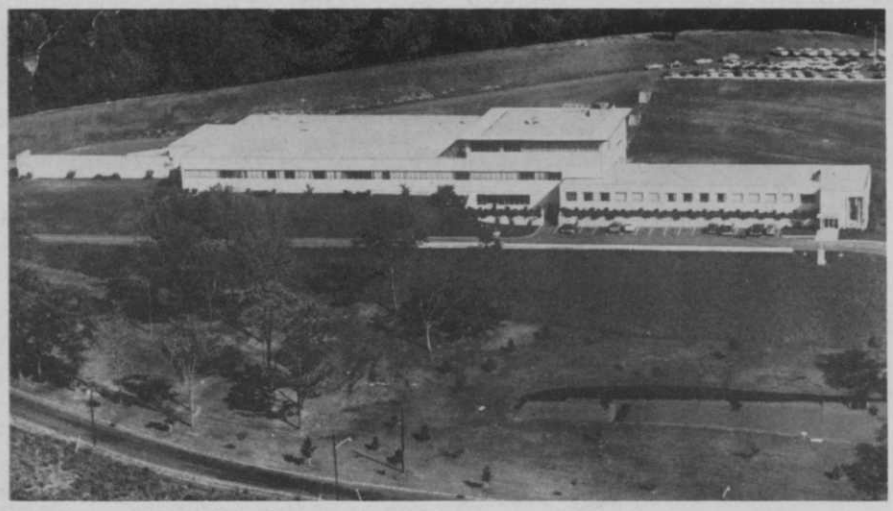
More information is available from the manufacturer at 589 East Illinois St., Chicago 11, Ill.

Stop Oyster Shell Scale

Oyster shell scale, an insect that attacks trees and shrubs, can be controlled with malathion, nicotine sulphate, or DDT applied as sprays, according to William Hantsbarger, extension entomologist at Colorado State University, Fort Collins.

Insect attacks such shrubs and trees as ash, cotoneaster, poplar, lilac, dogwood, and willow. Oyster shell scale is identified as similar in texture and color to an oyster shell, as its name implies.

For complete control, two sprays are usually necessary, spaced 10 to 14 days apart, Hantsbarger recommends.



Aerial view shows the effect of good landscaping around Organon Pharmaceutical Laboratories, West Orange, N. J. Trees, turf and pond create a favorable impression to visitors and make the factory a good neighbor in this community.

N. J. Applicator Installs and Maintains Grounds of New Suburban Research Center

Attractive grounds surrounding the new Organon Pharmaceutical Laboratories in West Orange, N.J., demonstrate how a contract applicator both installs and maintains the entire landscape for a suburban research complex.

This 7½-acre plot was produced "from scratch" by Alfred J. Luciano, owner of A-L Services, Whippany, N.J. The original construction of Organon's facilities left buildings perched on an unsightly rock pile, a far cry from the present vista of turf, trees, and even a fresh-water pond.

After filling in topsoil, grading and planting, Luciano selected a number of specialized chemical herbicides to help maintain the "well-groomed" look of several portions of the tract.

Full-season weed control in the parking lot is achieved with Amizine herbicide, a soil-sterilant said to effect top kill of standing weeds and to prevent resprouting of weed and grass seeds.

Guard rails along the driveways and narrow border strips around the buildings also receive this treatment to reduce the labor and cost involved in close trimming.

The steep embankment descending to the pond is covered with a well-established stand of honeysuckle vines to prevent erosion.

Like many "CAs," Luciano finds it practical to offer suburban centers like this a full line of vegetation maintenance services.

Weed-eating Beetle Found

Scientists have found a flea beetle in South America that eats only alligatorweeds. They plan to import the beetle in an effort to control alligatorweeds in this country.

The experiment, headed by U. S. Department of Agriculture scientists, will be conducted in the Savannah (Georgia) Wildlife Refuge and in alligatorweed-infested waters north of New Orleans.

Adkins-Phelps Building Plant

The Adkins-Phelps Seed Co., North Little Rock, Ark., is building a new pesticide and herbicide manufacturing plant. The 25,000-square-foot plant is being erected in the LeFevre Industrial Park and is expected to be completed Nov. 15.

Adkins-Phelps is a major distributor of farm chemicals in Arkansas and the new plant marks a first venture in the manufacturing field.

Skyworker Has Hydraulic Tools

Recent developments have made available a line of open-center hydraulic tools for use with Skyworker hydraulic aerial lifts, according to Glen W. Way, Skyworker president.

"There are many off-the-ground operations where hydraulic tools are indicated," Way said. "In certain tree trimming and utility line work applications, these tools provide the desired extra power."

The company can now meet requests that specify hydraulic aerial lifts be equipped for hydraulic tools, Way reported.

For more information write to Dept. WT, Hughes-Keenan Div., U. S. Air Conditioning Corp., Delaware, Ohio.

Florida Approves Scope

The new insecticide, Scope Lawn Chinch Bug Killer, was recently approved for use on lawns and other outdoor areas by the state of Florida, announces Chemagro Corp. of Kansas City, Mo.

A carbamate, the insecticide is designed as an outdoor insecticide for the control of chinch bugs, earwigs, ants, cockroaches, mosquitoes, and other insects. Residual control lasts 6 to 8 weeks.

This Pocket pH Meter will give accurate, rapid pH measurements in the laboratory, plant, or field, says the manufacturer. Powered by flashlight batteries, the meter is operated by inserting an electrode into soil which in turn delivers the pH reading. Meter range is from 2 to 12 pH, readable in 10ths. For further information write Joe Hauber, Beckman Instruments, Inc., 2500 Harbor Blvd., Fullerton, Calif.

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New Controls to Help Combat Dutch Elm Disease; North Carolina Reports Spread of Elm Problem

A new chemical compound, Vapam, can now be used to kill roots halfway between trees and effectively stop movement of Dutch elm fungus from infected to healthy trees through the root systems.

Another new development is the use of a systemic insecticide, Bidrin, to control the elm bark beetle. The insecticide is injected into the trunk, moves throughout the tree, and kills the beetle when it feeds on the tree.

Bidrin holds considerable promise that it may be the answer to the control of the elm bark beetle, according to Herbert Johnson, extension plant pathologist at the University of Minnesota. Large-scale tests are currently being conducted in Wisconsin. Although not available at present, Bidrin may be ready after the tests.

Several N.C. Counties Hit

Reports from North Carolina indicate that Dutch elm disease has now spread to several other counties. It was first discovered last September at Greensboro. The disease has since been found as far west as Davidson county, north to Rockingham and Caswell counties, northeast to Northampton and Halifax, and east to Edgecomb and Nash.

Known to exist in these widely separated counties, the area encompassed is not yet blanketed by the disease, explains Fred Whitfield, extension forestry specialist at North Carolina State College.

"The infection is spotty within this area," Whitfield said. "But no comfort can be found in this fact since it spreads rapidly and can't be completely controlled."

North Carolina is following sanitation practices in its effort to contain Dutch elm disease. However, it is found that in many cases individual property owners won't take the responsibility to destroy infected elm wood. "Because of this," Whitfield says, "it becomes necessary for local officials to recognize the danger elms are in and take action on a community basis."

At the University of Minnesota, Herbert Johnson reminds arborists that of the many things that can happen to elms, most are not related to Dutch elm disease. Dutch elm and other wilt diseases have fairly distinct symptoms.

If wilting is noted, take a section about a half inch in diameter and make a clean cut across it. If there is wilt fungus present, a brown line or series of dots in the white wood appears just under the bark.

A laboratory test is needed to determine whether it is Dutch elm or some other wilt fungus. This test can be made at most experiment stations.

The most effective method to control Dutch elm disease is sanitation—destruction of all dead and dying elm wood. Control of the elm bark beetle consists of dormant spraying in the spring or fall. Spraying should be done only on elms in a radius of 300 to 500 feet from locations of known infected trees.

The bark does not show Dutch elm symptoms. Miscellaneous insect tunnels under the bark may be caused by several insects. The distinctive tunnels of the elm bark beetle are easily identified. Elm wood containing such tunnels should be destroyed immediately, Johnson advises.

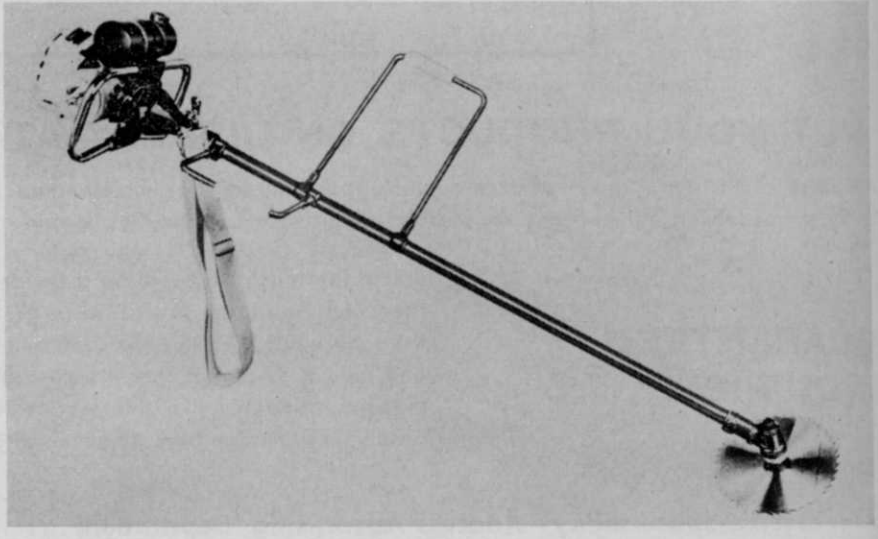
Illustrations and descriptions of Dutch elm symptoms are in Minnesota Extension Folder 211, "The Dutch Elm Disease," available from the Bulletin Room, Institute of Agriculture, St. Paul, Minn. 55101.

Gas Co. Enters Fertilizer Field

Entry into the fertilizer business, with plans to construct a fertilizer complex, were announced recently by Lone Star Producing Co., a wholly owned subsidiary of Lone Star Gas Co., Dallas, Texas. An investment of more than $20 million is planned, the firm revealed.

Newly-formed Chemical Division of Lone Star Producing Co. will become a basic producer of nitrogen products, made from natural gas, for use in agricultural fertilizers, a company spokesman stated. Fertilizer complex will be located in the heart of the Texas Blacklands area.

"We expect to begin operation of the complex in approximately 18 months," Roy E. Jury, vice president in charge of the Chemical Division, reported.



This medium-duty brush cutter is powered by a 2½ hp, 2-cycle gasoline engine and is said to cut through growth two inches in diameter with a scything motion. It will saw through trees five inches in diameter. An all-position diaphragm carburetor permits tipping the unit to prune low branches overhead, Rowco Mfg. Co., the producer, says. Named the Brushking Model 330, the machine's carrying weight is 28 pounds. Additional information is available by writing Dept. 330, Rowco Mfg. Co., 48 Emerald St., Keene, N. H.

Maryland U. Entomologist Tells of Hemlock Scale Control

The range of Fiorinia externa Ferries in Maryland is restricted to the city of Baltimore and certain adjacent sections of Baltimore county. It is a serious insect pest of the hemlock. Waxy secretions produced by the scales of this insect give heavily infested trees a whitewashed appearance. The feeding of the insects causes needles to turn pale.

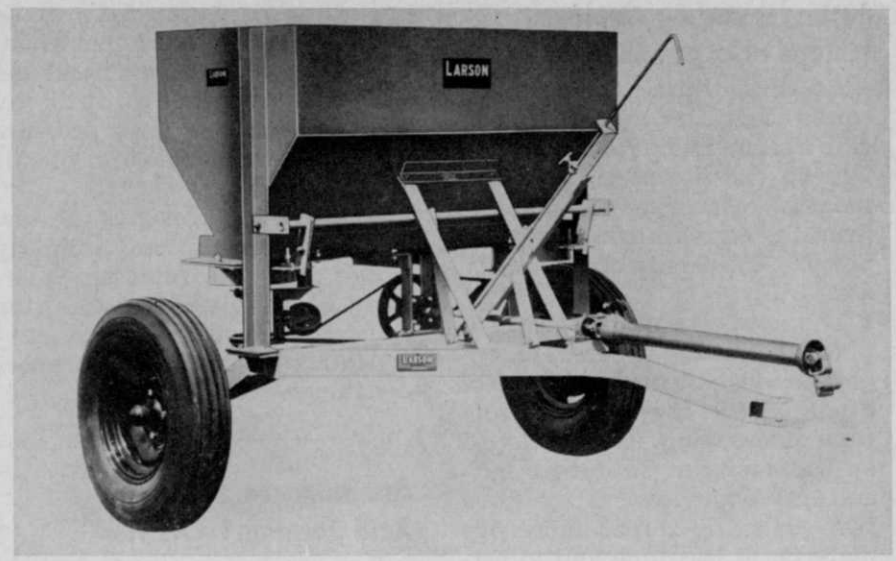
The adult female lives within the cast skin of the last immature molt. She is further protected by the hard outer covering which is typical of all armored scales, explains Charles W. McComb, University of Maryland Entomology Department. After the last molt, she begins to lay eggs and eventually fills the posterior portion of the scale with eggs.

Young scale, known as crawlers, hatch from the eggs and escape from under the female covering. These are active insects with legs and antennae which can be seen clearly only with the aid of a magnifying glass. After spreading over the tree, they settle down, insert their mouthparts into the plant, and begin to feed on the plant juices. After molting, the insects lose their legs and antennae and become fixed in one place. Crawlers occur in greatest numbers in the spring and fall.

The insecticide Dimethoate has been found to give excellent control of this pest, killing not only by contact, but by penetrating the foliage and killing by systemic action. When the spray is applied all parts of the trees, especially the underside of the needles, should be drenched with the spray, but do not apply beyond point of runoff, McComb says.

Spray should be applied in late May and if trees are heavily infested a second spray should be applied 30 days after the first. In heavily infested areas treatment should be repeated each year to prevent reestablishment of the scale.

In applying the insecticide, read the label on the container carefully and be sure to follow all directions. An alternate spray schedule, using oil and DDT-malathion sprays, is also available. For information on this alternate schedule, write to the Department of Entomology, University of Maryland, College Park, Md.



A new blade design has proved highly effective for positive spread under the most difficult and variable field conditions, reports L. L. Larson Machine, Inc., Princeville, Illinois. Exhaustive testing of numerous blade designs has resulted in a new prototype for the Larson BroadCaster spreader-seeder, shown here. Another advancement is a telescoping on-off feed control which is adjustable to fit the most convenient position for the operator. Details are available from Larson.

New Brochure on Urox

How to destroy unwanted vegetation on industrial, railroad, highway, and noncrop farmland sites is explained in a new brochure from Allied Chemical's General Chemical Div.

Titled "How to Use Urox Weed Killers," the brochure discusses risks involved in letting unwanted vegetation flourish. It also describes which of the seven Urox herbicides are most effective against particular weeds. Application rates are included. Applicators may obtain a copy by writing General Chemical Div., P.O. Box 70, Morristown, N. J.

Soil Steaming Data Offered

Technical information on methods of heat treatment of soil through the use of mobile steam boilers is available in a large booklet from the Clayton Mfg. Co., El Monte, Calif.

The booklet, titled "Low Cost Soil Sterilization," illustrates methods of steam application to soil areas. Much of the material, it is said, has been prepared by leading authorities in this field, and should be of value to private companies offering soil sterilization services, as well as nurserymen, and vegetation maintenance supervisors.

The booklet, Form No. C-1459, is available from the company at the address above.

Crabgrass "Cane" Marketed

Spot eradication of crabgrass is facilitated for homeowners with a new "cane" crabgrass killer, according to the manufacturer, Judd Ringer Corp.

Operating on the same principle as the pill-shaped "Kartridges" that have been used for eradication of dandelions, plantain, and other broad-leaved weeds, the dry, capsule-like "Kartridge" is placed in a "Killer Kane" tube which is then filled with water.

"Dissolving rapidly, this capsule produces an effective herbicide which is released in measured squirts when weeds are touched with the spray tip of the cane," a company spokesman claims.

For more information on the crabgrass killer, designed for resale to do-it-yourselfers, write the Judd Ringer Corp., 3355 Republic Ave., Minneapolis 26, Minn.

Better, Faster Ag Airplane Is Hope of U. of Cal. Team

An agricultural airplane that squirts fertilizer, seed, or pesticide rearward out of its wings will be test-flown within a few months, according to reports from the Agricultural Extension Service, University of California, Davis.

The new concept of aerial application, using a separate engine to blast air backward out of a long slot in the upper trailing edge of the wing, was developed by University of California agricultural engineers. They have two goals: To spread more dry material in less time and to better control distribution patterns.

These goals, of course, could reduce overhead expenses, and thus increase profits, for custom aerial applicators.

Ground tests of the new "controlled-distribution" wing have encouraged UCD engineers, Norman Akesson and Wesley Yates. The plane itself, as well as the flight design of the wing, is the brainchild of Kenneth Razak, dean of the University of Wichita (Kansas) college of engineering. Razak heads a private group now building a prototype plane for flight tests in Northern California late this year.

The new wing, with internal ducts delivering a precisely controlled stream of air outward along most of its length, is designed for:

1. Faster and more efficient spreading of fertilizers and other dry material. By forcing the material out with the stream of air, tremendous volumes—as high as 50 lbs. per second—are possible. This, the engineers predict, will permit operating speeds up to 140 miles per hour. The wide swath made possible by delivery through the wing will also boost acreage per hour, the California report maintains.

2. More uniform spreading of both dry material and sprays. By controlling pressure and distribution of the air jet, as well as flight speed and other factors, the engineers can lay a relatively even blanket of material across the ground. If necessary, the rearward air flow can be adjusted to match the plane's speed—so dry material can be launched into the air without forward motion, to be spread and carried onto the ground by whirling vortices of air pressure created by the plane and the air jet.

These advantages give the new plane, which is only slightly larger than the familiar Stearman biplane, about twice the Stearman's potential productivity in acres per hour, the report concludes.

Are Nitrogen Fertilizers Acid Forming? CAs Ask

Frequently contract applicators ask whether or not nitrogen fertilizers are acid forming. It all depends on the source of the nitrogen, according to researchers at the University of Maryland Extension Service.

Many different sources of nitrogen are used successfully on crops, including turf, Dr. James R. Miller, Maryland Department of Agronomy head reports. These include anhydrous ammonia, ammonium nitrate, ammonium sulfate, calcium cyanamide, nitrogen solutions, sodium nitrate, urea, and others.

Many of the nitrogen fertilizers used on crops are indeed acid forming. However, when one considers the amount of nitrogen applied to most crops, the acidity is small and can be corrected with a good liming program. For example, for each 20 lbs. of Nitrogen (N), supplied from anhydrous ammonia, ammonium nitrate, or nitrogen solutions of urea, it takes 36 lbs. of lime (calcium carbonate) to neutralize the acidity created by the fertilizer.

Suppose 60 lbs. of nitrogen is applied per acre, Dr. Miller says. This means that 108 lbs. of lime would be required to neutralize the acidity formed by the nitrogen compounds mentioned immediately above.

The nitrogen fertilizers that are basic forming (opposite of acid) include calcium cyanamide, calcium nitrate, potassium nitrate, and sodium nitrate. For example, an application of 60 lbs. of nitrogen from calcium cyanamide forms basicity (base) equivalent to 171 lbs. of lime. In the case of sodium nitrate, the same amount of nitrogen forms basicity equivalent to 108 lbs. of lime.

Meeting Dates

American Association of Nurserymen Annual Convention. Statler-Hilton Hotel, Boston, Mass., July 18-22.

Southern Nurserymen's Assn. Meeting. Queen Charlotte Hotel, Charlotte, N.C., Aug. 2-4.

Wisconsin Park and Recreation Society Meeting. McKay Nursery, Waterloo, Wis., Aug. 13.

Rutgers University Turfgrass Field Days. New Brunswick, N. J.: Lawn and Utility Turf, Aug. 12; Golf and Fine Turf, Aug. 13.

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

Iowa Nurserymen's Assn. Meeting. Town House, Cedar Rapids, Iowa, Aug. 20-21.

Florida Turf-Grass Assn. 12th Annual Turf Conference. Gainesville, Aug. 25-27.

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

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

Ohio Agricultural Experiment Station. Lawn and Ornamentals Day, Columbus, Ohio, Sept. 15.

Illinois Turfgrass Foundation Field Day. University of Illinois, Urbana, Sept. 18.

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

Central Plains Turf Grass Foundation Meeting. Umberger Hall, Kansas State University, Manhattan, Oct. 21-23.

Northwest Chemical Applicators Assn. Annual Conference. Chinook Hotel, Yakima, Wash., Nov. 30-Dec. 1.

Machine Removes Water Weeds

Every type of aquatic weed, in fresh or salt water, in lakes, streams, or irrigation canals, can be effectively controlled with an Aquatic Harvester, according to Aquatic Controls Corp., which makes the machine.

Harvester is actually a self-propelled water vehicle which cuts and harvests weeds up to a depth of 5½ ft. Excess water is pressed out, and weeds are lifted hydraulically to the rear. When the Harvester is loaded, weeds may be dumped on a service barge, and taken to trucks for disposal on land.

Treated water is immediately usable, and the Harvester can work early in the season, when many plants have reached one-half of maximum growth, the manufacturer claims.

For more information on the machine, write to Aquatic Controls Corp., Hartland, Wis.

Aquatic Harvester is said to control water weeds in lakes, streams, and canals by cutting submerged weeds up to a depth of 5½ ft., and depositing them in a service barge. Machine, manufactured by the Aquatic Controls Corp. in Hartland, Wis., can harvest a full acre of weeds per hour, the firm claims.

Sprays and Dusts Both Have Advantages, Partyka Says

Which is best, spraying or dusting? If done correctly, both will do a good job controlling plant diseases, according to Dr. Robert Partyka, extension plant pathologist at Ohio State University, Columbus.

Many factors, such as area to be treated, weather conditions, type of plants, fungicides to be used, and time available, influence decision. Sometimes both methods should be used, the OSU specialist states.

Dusts are easy to apply, can be put on rapidly, and duster does not have to be cleaned after using, Dr. Partyka points out. Apply dusts when there is little wind, such as early morning or evening. Slight moisture is desirable on plants so dust will stick. But dusting plants wet with rain or dew may produce long-lasting splotchy areas. A dusty film will dull the glowing color of many flowers or plants if applied too heavily, Dr. Partyka cautions contract spraymen.

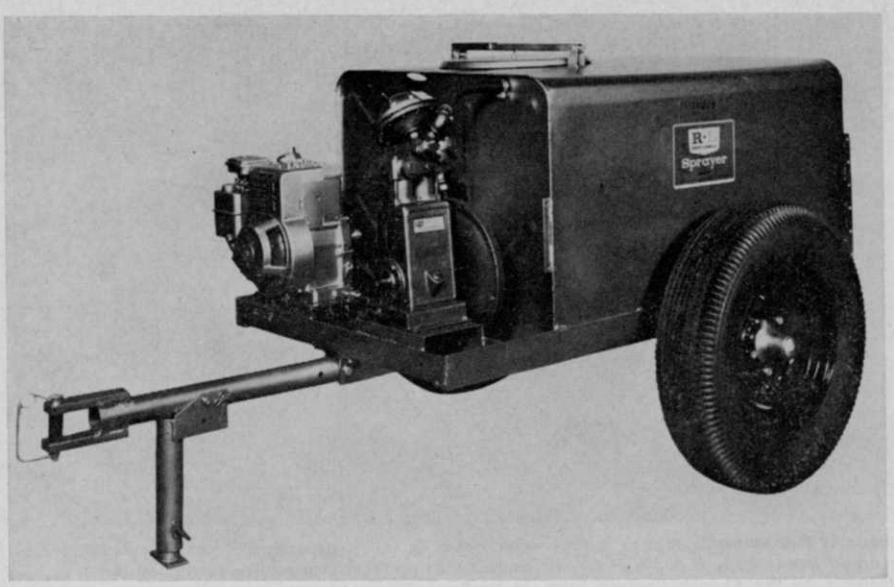
Sprays can be applied on windy days and on slightly wet foliage without a splotchy effect remaining, the pathologist notes. However, sprays must dry on the foliage before heavy dews or rain occur; otherwise protective material will be washed away. Rinse sprayers between each kind of solution and wash them out at the end of the day or spray period, Dr. Partyka recommends. Occasionally sprayers must be taken apart and thoroughly cleaned. Unless a liquid fungicide is used, sprays must be constantly agitated to prevent material from settling out, he says.

New MEMMI for Turf Ills

An emulsifiable liquid concentrate turf fungicide known as MEMMI .8EC has been introduced by Velsicol Chemical Corp. MEMMI is said to afford low-cost protection against such turf diseases as dollar spot, brown spot, copper spot, and melting out.

Velsicol says the formulation mixes in immediately, needs no constant agitation, doesn't clog nozzles, and leaves no sediment to clean out of spray tanks.

Details and use information is available from Velsicol at 341 E. Ohio St., Chicago, Ill. 60611



Root-Lowell's new "Durapower" sprayers are said to have a wide range of applications in vegetation maintenance.

Root-Lowell's New All-Purpose Durapower Sprayer Introduced

Introduction of a new, all-purpose power sprayer line to be marketed under the name of "Durapower" Sprayers has been announced by the Root-Lowell Corp. of Lowell, Mich.

Company officials say the new sprayers feature an all-new two-cylinder positive piston pump in choice of 5 or 10 gpm models, said to produce smooth, pulsation-free discharge at working pressures to 400 psi.

Operating features include a prepressurized accumulator that will not become waterlogged, leakproof piston shield that prevents lubricant dilution, self-flexing pump cups in ceramic cylinders, and an automotive-type oil splash lubrication system.

Tank capacities range from 50 through 300 gallons in both wheel and skid-mounted models, so that the machines may be used for lawn and shrub spraying, weed and brush control, and tree applications.

Descriptive literature and prices are available from Root-Lowell Corp., Lowell, Mich. 49331.

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.

Herbicide-Soil Stabilizer Mulch Combinations for Weed Control of Horticultural Crops, Bulletin B-601, Agricultural Experiment Station, Oklahoma State University, Stillwater, Okla.

Industrial Weed and Brush Control, Information Kit, Chipman Chemical Co., Inc., Bound Brook, N.J.

Field Bindweed, Bulletin L-48, Agricultural Extension Service, University of Wyoming, Laramie.

Recommendations for Commercial Lawn Spraymen. Bulletin S-121A. University of Florida Experiment Station, Gainesville.

Weed Control Practices for Home Lawns. Bulletin 61-7. 8 pp. 1961. College of Agriculture Extension Service, University of Connecticut, Storrs.

Prevention and Control of Crabgrass in Lawns. Bulletin 642. 8 pp. 1961. Connecticut Agricultural Experiment Station, New Haven.

Bindweed: How to Control It. Bulletin 366. 40 p. il. Kansas Agricultural Experiment Station, Manhattan.

Carolina Lawns, Extension Circular No. 292, 16 p. il., Agricultural Extension Service, University of North Carolina, Raleigh, N.C.

Chemical Control of Crabgrass in Lawn Turf, 4 p., Agricultural Experiment Station, University of Delaware, Newark, Del.

Suppliers Personnel Changes

Amchem Products, Inc., Ambler, Pa., has appointed Richard C. Miller as lawn and garden products sales representative in Michigan and Indiana, according to marketing vice president M. B. Turner. Amchem says Miller has nine years experience in the chemical industry in Indiana.

The Ansul Company has just named a new product sales manager for its line of agricultural chemicals. He is Robert E. Lucas, who was formerly product manager for the firm's arsenicals. Lucas is a graduate of the University of Minnesota and has been with Ansul since 1962. He will be headquartered in the company's home offices in Marinette, Wis.

Diamond Alkali Co. has selected Dr. H. D. Woofter as its new Senior Agricultural Chemicals Specialist in the firm's Development Department. Woofter's Ph. D., which is in agronomy, was obtained at Ohio State University. He has also been a County Agricultural Agent in West Virginia, according to Diamond's Director of Development, A. G. Kridl.

Whip Club Gall in Conn.

The insect responsible for a deformity called dogwood club gall was controlled in 1963 with repeated sprays of either DDT or Sevin in experiments at the Connecticut Agricultural Experiment Station, according to test results just released.

Station staffer John C. Schread, who conducted the tests, said the gall is a problem in only one Connecticut location, but occurs elsewhere in ornamental plantings of dogwood and on trees growing naturally.

Complete control of the gall-inducing insect, a tiny midge, was effected with six sprays of Sevin or DDT at weekly intervals from late May through June. Three sprays did not give satisfactory control, while five gave nearly complete control.

More information on dogwood club gall and its control is given in Circular 225A, available from Publications, Box 1106, New Haven, Conn.