

Figure 4. Another type of seeder in popular use showing close-up of soil pattern after seeding made by this machine.

other soil-borne insects may produce serious damage to the stand of turfgrass. Application of appropriate insecticides while preparing seedbeds will provide assurance against grubs. At present, the New Jersey Department of Agriculture requires soil insecticide treatment for interstate shipment of sod. Insecticides such as chlordane, dieldrin, aldrin, and heptachlor can provide long-lasting protection.

All soil improving materials broadcast evenly and completely on the soil surface should be thoroughly incorporated to a 6- to 8-inch depth. This will provide favorable conditions for extensive and deep root development.

Use Seed Label As Quality Guide

Select certified or registered seed of improved turfgrass varieties adapted for the location in which the sod will be produced and marketed. The seed label contains a wealth of information on the ingredients of a particular container of seed. It should be used as a guide to determine the quality of the seed selected.

Difficult-to-control weed problems may be introduced very easily into an area through poor quality seed. *Poa annua* and bentgrass are examples. Certified seed gives a considerable measure of assurance of high quality, but under present certification standards the weed

problem is not entirely eliminated.

Fortunately, sources of seed are available which provide the added assurance of freedom from *Poa annua* and bentgrass. There are special lots of certified seed known to be free from *Poa annua* and bentgrass. Sod producers should request not only certified seed, but they should shop for certified seed free of these contaminants. Under present certification standards, up to 5% (by weight) of other crop seed can be included without label listings. A 5% contamination of *Poa annua* or bentgrass can pose very serious problems because of the large number of these tiny seeds involved.

Best Planting Season

Most successful plantings are made from late spring to early fall. During this period, temperature and soil moisture conditions are most favorable for the germination and establishment of an even turfgrass stand. Furthermore, competition caused by weeds is minimal or greatly reduced. Spring seedings can be successful, but establishment at that time is more difficult because it will be necessary to devote more attention to reduce weed competition and provide adequate soil moisture for survival of the new, spring seedlings. Commonly, late summer to early fall seedings will be ready for harvesting at the same

time or even sooner than grass planted in the spring of the same growing season.

Light to medium seeding rates are suggested for best development of a vigorous rhizome and root system. The actual rate per acre will vary with the particular species of turfgrasses being seeded. In the case of Merion Kentucky bluegrass, which is popularly grown for sod, a desirable rate is 30 to 50 lbs. of seed per acre. Rates of 100 lbs. or more per acre are used primarily to shorten the time between seeding and harvest. Heavy seeding rates provide a more dense top growth sooner than the lighter rates. Rhizome and root systems from light sowing rates will not be as well developed as from heavy seeding rates. In the absence of a well-developed rhizome and root system, it is necessary to cut deeper into the soil to give harvested sod added strength.

The depth of seeding which a turfgrass can tolerate is closely associated with seed size. Certain seeds contain a pigment that is sensitive to light and controls germination. Stimulation of this pigment by light will either prevent or induce germination. Light is necessary to induce sprouting in Kentucky bluegrass, and if it is planted too deeply, sufficient light is not present to bring about the necessary reaction. Generally, depth of seeding should be within the top $\frac{1}{8}$ to $\frac{1}{4}$ inch of soil. It is very difficult to regulate depth of seeding on poorly prepared seedbeds, and poor stands or bare spots will result where seed is planted too deeply.

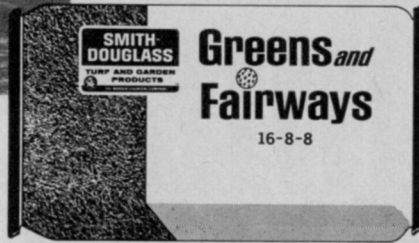
Seeding equipment in good working condition, and operated properly, is an absolute necessity in order to obtain proper, even distribution of seed as well as planting depth. Two types of seeders in popular use today and the appearance of the seedbed after seeding are illustrated in Figures 3 and 4. Conscientious operation of such equipment is necessary to avoid blank areas between the seeded swaths. Operation at speeds faster than those recommended by the manufacturer is not compatible with



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the internal mechanisms engineered for even distribution of seed.

Moist Soil Hastens Germination

Maintaining a moist soil condition helps reduce the time necessary for germination and obtain a more uniform stand. Any supplemental irrigation should be a constant program of light, frequent sprinkling with as fine a droplet as possible. Daily sprinkling would be desirable but prohibitive from the standpoint of portable irrigation systems.

Mulching with a weed-free, salt hay or grain straw can be very helpful by yielding quicker germination as well as a uniform stand. The need for watering becomes greatly reduced because the moisture retained by a mulch is held at the soil surface. From an economical standpoint, large scale mulching may not be economical.

Successful establishment of a turfgrass or mixture of turfgrasses does not, in itself, insure uniformity of stand. Once established, it must be developed and protected with a maintenance program. Close and constant attention must be devoted to fertilization, mowing, irrigation, and also weed, insect, and disease control. Each of these factors influences turfgrass stand uniformity which is a significant criterion in determination of sod quality.

Rocky Mountain Conference (from page 27)

with no flexibility. This can be costly to the contractor. Establish a clear understanding on all phases of work, soil preparation, final grading, and other requirements. Highway sod is laid faster, depending on thickness which can be unreasonably thick. Water requirements are another concern; you may have to haul it. It is very important to consider every possible cost item when bidding on highway sod work.

Weed Control in Turf

One of the big factors in chemical weed control failures is poor



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timing. An understanding of plant growth habits is essential, Eugene Heikes said when attention was directed to weed control. Keeping ahead of weeds is the key to success of a good lawn, and is the hardest job. Most weeds can be controlled with chemicals, except for coarse grasses, Heikes continued, but chemicals should be supplemented with good management practices.

It takes 4 to 6 years of testing after a new variety of grass is developed to determine its disease resistance, Dr. Jack Altman, plant pathologist, said in discussing turf diseases. Studies by the U. S. Department of Agriculture show that single strains of bluegrass, such as Newport and Merion, make a better appearing lawn in the first 3 to 4 years. However, after 4 years the common Kentucky bluegrass has the best appearance when disease problems develop in the single strain.

Merion bluegrass still appears to produce the best quality lawn in Colorado, Jack May reported. He reviewed findings of a study with 20 grass varieties at Fort Collins.

"But we may not have the whole story yet, in view of USDA findings," May cautioned. "The CSU plots have been established since 1962 to study effects of herbicides in different varieties." In describing favorable characteristics of several desirable

grasses, May reported Merion bluegrass to be the best quality turf which can stand shorter mowing, offers strong competition against weeds, and has a dark color. It is susceptible to rust, but rust is not a major problem in the Rocky Mountain region.

Ryan "Mole" Goes Underground

"Mole," a new, inexpensive tube-laying device, chews through ground as deep as 7 inches but does not disturb the surface turf as it installs flexible or semi-flexible tubes, pipes or cables, according to its manufacturer, Ryan Equipment Co. "Mole's" uses are said to include fast, one-man installation of underground sprinkling systems, gas lines for yard lights and other purposes and telephone and electrical cables.

"Mole" consists of a vertical cutter blade with a bullet-like terminal to which tubing, piping or cable up to 1 1/4 inches in diameter is chain-attached. The Sod Cutter then pulls the tubing beneath the surface and through the ground at speeds up to 100 feet per minute. A slit in the turf which soon disappears is the only visible evidence of the installation. Radii as tight as 2 feet are possible.

Complete information about "Mole" is available from Ryan Equipment Co., 2055 White Bear Ave., St. Paul, Minn. 55109.

"Mole" leaves only a narrow slit in the turf as proof of its work. The slit quickly disappears, though, and there is no trace that Ryan's "Mole" has installed underground pipes, cables or tubes.



Meeting Dates

- Western Weed Control Conference, Westward Ho Hotel, Phoenix, Ariz., Mar. 15-17.
- 36th Annual Michigan Turfgrass Conference, Kellogg Center, Michigan State University, East Lansing, Mar. 16-17.
- Conference on Community Development, on campus, University of Iowa, Ames, Mar. 18-19.
- Wisconsin Turfgrass Conference, Wisconsin Center, Madison, March 22-23.
- Wisconsin Park & Recreation Assn. Annual Meeting, Hotel Eau Claire, Eau Claire, March 23-25.
- West Virginia Weed Control Assn., First Annual Conference, Daniel Boone Hotel, Charleston, March 30-31.
- Northern California Turfgrass Council, 2nd Annual Turfgrass Exposition, Santa Clara County Fairgrounds, San Jose, March 31-April 1.
- New Jersey Society of Certified Tree Experts, Meeting, Andrew Wilson Co., Springfield, April 18.
- New Jersey Society of Certified Tree Experts, Annual Dinner, Rock Spring Corral Inn, West Orange, April 12.
- 5th Annual Florida Turf-Grass Trade Show, Plantation Field Research Laboratory, Ft. Lauderdale, April 28-29.
- Florida Nurserymen and Growers Assn., Convention, Sheraton's British Colonial Hotel, Nassau, May 12-14.
- 18th Annual Nurseryman's Refresher Course, Cal-Poly College, San Luis Obispo, Calif., June 7-8.
- International Shade Tree Conference, Western Chapter, Annual Meeting, Miramar Hotel, Santa Barbara, Calif., June 20-23.
- New Jersey Society of Certified Tree Experts, Meeting, Essex County Highway Dept., Verona, June 20.
- American Association of Nurserymen, 91st Annual Convention, Palmer House, Chicago, Ill., July 16-20.
- Midwest Turf Field Days, Purdue University, West Lafayette, Ind., Aug. 15-16.
- Texas Assn. of Nurserymen, Annual Convention, Nursery and Garden Supply Show, Dallas Memorial Auditorium, Dallas, Aug. 21-24.
- Penna. Grassland Council, Materials Handling Field Day, John Rodgers (Plum Bottom) Farm, Belleville, Aug. 26.
- Hawaiian Turfgrass Management Conference, University of Hawaii, Honolulu, Aug. 25-26.
- International Shade Tree Conference, 42nd Annual Convention, Sheraton-Cleveland Hotel, Cleveland, Ohio, Aug. 28-Sept. 2.

Turfmen Must Be Treemen, Too

(from page 22)

elements to provide the best environment for their grasses. This was the reason for having Professor R. E. Schmidt, from the Department of Agronomy at Virginia Polytechnic Institute, address another GCSAA educational session.

There are turfgrasses which grow best under high temperatures (so-called warm season grasses) and those which grow best at lower temperatures (cool season grasses).

"It has been known for some time that grasses adapted to the cool region have a lower minimum and optimum growth temperature than those adapted to the warm region. For the most part, optimum temperature for root growth is lower than for herbage growth of both warm and cool season grasses," Schmidt revealed.

"Natural grass adaptation is based on the extremes of the environment," he continued. "With proper management these extremes may be minimized so that grass will tolerate, at least for a time, unadapted conditions. For example, raising the bentgrass clipping height during the summer will provide more insulation and thereby lower the soil temperature to improve turf quality."

Crabgrass Controls

Most turfmen are vitally interested in crabgrass control, so delegates were especially attentive when Dr. Jess L. Fults, chief botanist at the Colorado Agricultural Experiment Station in Ft. Collins, listed some of the controls he has found effective.

Among the pre-emergence crabgrass killers, he mentioned chlordane, lead arsenate and other inorganic arsenic compounds, calcium cyanimid, allyl alcohol, Dowfume, and Vapam.

"It has been generally assumed that when pre-emergence crabgrass herbicides are applied at 'reasonable herbicide rates', either to established turf or to a prepared seedbed prior to seeding perennial grasses, there is no significant long-lasting residue,"



New GCSAA executive team for the coming year are all smiles over success of conference and show last month in Kansas City. These top three officers stopped for the camera just after their election. In the middle is GCSAA president Edward Roberts, Jr., of Chatham, N.J. On his left is the new vice president, Walter R. Boysen, Oakland, Calif., and at the right is John J. Spodnik from LeRoy, Ohio, who was reelected secretary-treasurer.

Dr. Fults explained. "The general assumption seems to be that the 'microbial activity' in the soil has the capacity to break down almost any applied chemical into 'inactive' products, as far as their effects on the growth of perennial turfgrass is concerned. Our long time observations and measurements in the case of two commonly used pre-emergence crabgrass herbicides (chlordane and certain inorganic type arsenicals) would indicate that this assumption is open to serious question."

Actidione for Rust

Dr. M. P. Britton, of the University of Illinois in Urbana, told a group of 31 sod growers during their own divisional meeting that his experiments have shown Actidione RZ to be the most effective chemical tool to combat rust fungus. It usually takes two to three applications, at seven-day intervals, to wipe out the disease which attacks the base of Merion bluegrass, he said.

Companion speaker on the commercial cultivated turf seminar was Dr. Ray Keen of Kansas State University, Manhattan, who spoke on grasses for the crabgrass belt. The area in which this nuisance grass predominates stretches from Wichita to Washington and is from 300 to 500 miles wide, he said. In desperation, he admitted, most growers regularly switch between blue-

grass and bermudagrass on a routine basis, jumping back and forth from one to the other when climatic and temperature conditions "wear out" the species that's in at the time. Keen admitted none of the 46 test plots in his seven-acre experimental turf area has provided the satisfactory, hardy grass turfmen and their customers are looking for in the "crabgrass belt."

Next year's satellite sod section is also to be held in conjunction with the golf superintendents' show, but there is a possibility the group may rotate future meetings to join with other associations. Dr. Britton reported some growers felt they should associate with such groups as those centering on agronomy, landscape architecture, and highway beautification, to acquaint these fields more effectively with what the cultivated sod industry has to offer.

Dr. Henry W. Indyk, at Rutgers University in New Brunswick, is heading up program arrangements for the sod group's meeting in Washington next February during the GCSAA conference.

Convention site for '67 is the Washington Hilton Hotel in Washington, D. C. with the dates set at Feb. 5-10. In 1968, the association will meet in San Francisco for its mammoth trade show and educational conference.

**"Methods of Soil Analysis"
Published by Agronomy Soc.**

A hardbound, 1,572 page, 2-part monograph, entitled "Methods of Soil Analysis," was recently published by the American Society of Agronomy (ASA) in a joint effort with the American Society for Testing and Materials (ASTM).

With more than 200 figures and 50 tables, both principle and practice are explained in the text.

Part 1, entitled "Physical and Mineralogical Properties, Including Statistics of Measurement and Sampling," is composed of 51 chapters and 770 pages. Six sections deal with statistics of measurement and sampling, and 37 sections cover the measurement of physical properties of soils (15 on water, two on gases, five on thermal properties, and 15 on soil mechanics and properties of soil particles and aggregates). Eight sections on mineralogical properties discuss both pretreatments and methods of analysis, and include data on such mineral analysis techniques as the petrographic, microscope, thermal analysis, and infrared spectrometry.

The second volume, "Chemical and Microbiological Properties," has 62 chapters and 802 pages. Its sections on chemical analysis are divided into five on applications of modern techniques such as spectrography, photometry, spectrophotometry, and polarography; five on ion exchange properties, one on soluble salts, 28 on the analysis for total ele-



Roxy Mower Model UM21-3W has been approved for all Wheel Horse Standard Chassis Tractors, including 1966 models, Roxy-Bonner announces. The three gang mount cuts a 58 inch swath and reportedly keeps wheel tracks to a minimum. Other models of the mower are available for various lawn and garden tractors. Drags cutting 60 to 96 inches, and 50%-heavier drags for 72 to 132 inch swaths are also produced. Roxy-Bonner, Inc., 2000 Pioneer Road, Huntingdon Valley, Pa. 19006 has details.

ments and for 22 separate elements, one on carbonate, six on organic matter, and 16 on microbiological properties. The sections on microbiology include microbial populations, types, and physiology, plus algae, protozoa, nematodes, and mites.

The work can be ordered as a set or individually from American Society of Agronomy, 677 So. Segoe Rd., Madison, Wis.

Price in the United States to ASA members is \$30.00 per set, or \$17.50 per single part. For active or graduate student members of ASA and active voting members of ASTM, a personal copy is \$25.00 per set, \$15.00 per single part. (For USA orders not prepaid add \$1.00 per set or single volume.)

All countries outside the USA add \$1.00 per set or single part to above prepaid prices. All orders from outside USA must be prepaid in USA dollars.

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.

Dutch Elm Disease. Publication No. 130, 1965, Extension Bulletin Room, University Station, Brookings, S. Dakota 57007.

The Zoysia Grasses, by J. C. Lowery. Circular No. 620, 6 p., Auburn University Extension Service, Auburn, Alabama.

Deer-Resistant Plants for Ornamental Use. Leaflet No. 167, 1965, Agricultural Publications, 207 University Hall, University of California, Berkeley, Calif.

Principles of Selective Weed Control. Publication No. C 505, 1965, Agricultural Publications, 207 University Hall, University of California, Berkeley, Calif.

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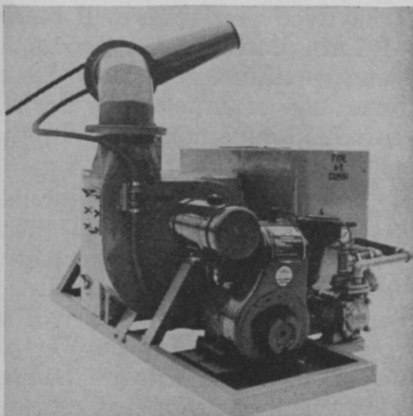
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YARROW (*Achillea millefolium*)



Yarrow (7) is widespread throughout North America and is found in most parts of the world. It is seen commonly in meadows, along fence rows, and in waste places growing on thin topsoil where more desirable plants do not survive. In the U. S., it is known also as milfoil, bloodwort, and thousand-leaf. Seldom does it grow in cultivated fields.

This species is perennial and reproduces by underground rootstocks (4) and seeds (5). Branching underground, the taproot system sends out lateral runners. Each runner may produce several stems from its crown at ground level. Livestock seem to avoid the plant; it has an offensive odor and a bitter taste. Historically, it was used by Achilles to cure his wounds, hence the generic name *Achillea*.

Stems, branched at the top, grow from 1 to 2 feet tall. They grow erect and are covered with many grayish-green hairs.

Leaves are finely divided and fern-like (6). They are covered with soft, fuzzy hair. Leaves near the base of the plant are longer than those near the stem tips. They range from 1 to 10 inches long and sprout alternately from the stem.

Flower heads can be seen easily from a distance. Each head is composed of 5 to 10 white ray (3) flowers (2) and yellow disk flowers (1). These flowers form a flat-topped cluster at the top of the branched stems. The clusters range from 1 to 4 inches in diameter. In the South, yarrow blooms in June, and in more northern sites it flowers in September. Typically, but not frequently, pink flowers are produced.

More than 200 white or gray seeds may be produced by one head of clustered flowers. The tiny, oblong seeds are flattened and slightly curved.

Yarrow is little affected by 2,4-D or hormone chemicals, and large scale control may be difficult. In lawns, repeated applications of 2,4-D will control this weed, and its tough rootstocks can be pulled when lawns are wet and soft. Silvex or dicamba give some control when applied at 1 to 1½ lbs. per acre.

*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)

MSU Invites Turfmen to 36th Annual Conference

Simultaneous sessions will be conducted during the first day of the 36th Annual Michigan Turfgrass Conference to better serve the needs of two specialized fields of turf endeavor: sport turf management and the sod industry, it is reported by Dr. Milo B. Tesar, chairman of the conference. The conference, to be held at Michigan State University's Kellogg Center for Continuing Education, will take place March 16-17, East Lansing.

An introductory talk, "The Role of MSU in the Turf Industry," by Dr. Sylvan J. Wittwer, and reports by MSU turfgrass research men will be followed by the annual business meeting of the Michigan Turfgrass Foundation. President Ernie Wohlfeil will preside. The meeting is open to guests of members.

Dr. Harold A. Henneman, MSU Dept. of Crop Sciences, will reveal plans for a new turf short course program at MSU.

Turfmen will be entertained during the annual luncheon by Dr. Maynard Miller, of The National Geographic Society. He will lecture on a recent Mt. Kennedy Yukon expedition.

In two afternoon sessions, turfmen will attend either the Sports Turf or the Sod Industry section meetings. Specialists in both these fields are prepared to present new developments of interest to the golf course superintendent or the sod grower.

While golf course managers gain information on meeting the golf cart problem and, how to prepare a course for tournament play, sod producers will receive information on sod production and certification in New Jersey, and use of muck soils for sod production, among many other subjects.

The final day's meeting will be conducted on a general theme providing important information on all phases of turf production and maintenance. This will include research reports on soil warming from Purdue University and results of turf research projects at Rutgers University.

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.

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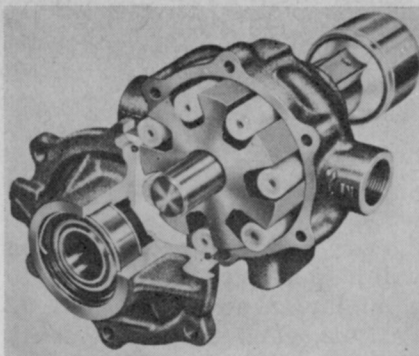
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Hypro Has 7-Roller Sprayer

Hypro's Series 7700 sprayer pumps are designed to handle wetttable powder suspensions, company spokesmen announce. The 7-roller pumps have scoopless rotors and special wide roller slots which reportedly prevent powder suspensions, slurries, and similar liquids from clogging the roller.

The ball-bearing construction pump comes in cast-iron or Ni-



New scoopless rotors with re-designed wide roller slots prevent powder suspensions, slurries and similar liquids from clogging the roller, Hypro, Inc. reports.

Resist housings and delivers up to 15 gpm at 550 rpm, Hypro adds. Mounting adapters for direct tractor PTO are available. Contact Hypro Engineering, Inc., 700 39th Ave. N.E., Minneapolis, Minn. 55421 for details.

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Massachusetts Requires Seed Test; Honest Packaging

"All seed intended to be sold for seeding purposes in Massachusetts must be tested and properly labeled," reminds William N. Rice, director of the State Seed Laboratory, University of Massachusetts. "False or misleading statements or pictures that imply the seed is better than it is will be considered violations of the state seed law," Rice said.

Typical statements considered misleading are "all-purpose," "unconditionally guaranteed," "engineered for you," or "no finer seed for your money." A picture of a beautiful lawn on a package containing coarse or hay grass seed is misleading and unlawful.

The State Seed Laboratory in Amherst, as part of a campaign to encourage proper and truthful labeling of seeds, will examine labels and printed materials on all seed packages and will analyze contents to see if they meet the requirements of the law. Grass seed labels must show germination percentage and the date of test. The purity percentage must be stated for all field crops or lawn seeds.

Seeds for testing should be identified properly, packed in strong envelopes, wrapped securely and sent to the Massachusetts Seed Laboratory, University of Massachusetts, Amherst. Fee schedule, a summary of the

seed law, and current seed inspection bulletin are also available from the laboratory.

Prompt Care Avoids Cankers

Prompt treatment of tree wounds caused by storms, lawn-mower bumps, or construction will help keep canker diseases to a minimum, according to R. E. Partyka, Ohio State University Extension plant pathologist. Cankers, a local disease caused by several fungi, originate when specific organisms enter trees through wounds in the bark.

Cankers are often recognized by water-soaked areas that are darker than the surrounding healthy bark. Edge of the diseased area cracks and as woody tissue grows under the cracks, it becomes infected and dies. Concentric rings of dead tissue accumulate eventually and when this canker completely surrounds a trunk or branch, the portion above dies.

If cankers are not too large, they can be cut out and the exposed wood treated with a tree-wound dressing. Large cankers may necessitate removal of an entire branch. Good fertility level in the soil promotes vigorous growth of the trees and helps reduce cankering. Cankers are found on birch, elm, linden, black walnut, chestnut, crab apple, dogwood, hemlock, maple, mountain ash, oak, poplar, redbud, spruce, sycamore, and willow trees.



A hydraulic tiller, said to be the first in the compact tractor field, has been added by the J. I. Case Co. to its line of implements available with its garden tractor. Named the Case Hydrastatic-Drive Tiller, it provides a smooth, powerful rotor action to work the toughest soils, the company says. Only one pump is required to drive the tractor and the tiller. Control valve for the tiller actually controls the ground speed of the tractor. This gives operator finger-tip control of rotor speed to work soil to desired texture. Tiller has 40-inch cutting width. Six 14-inch diameter tines work soil to 9-inch depth. Rotor is reversible. For complete details on this equipment write J. I. Case Co., Racine, Wis.

WTT Mailbox

Last month *Weeds Trees and Turf* was among the 600 who attended the National Academy of Science's Public Symposium on the Scientific Aspects of Pest Control in Washington, D. C. All major pesticide firms were represented, along with top-level government and university authorities on pesticidal chemistry and toxicity, and those developing new control techniques. We talked with Dr. Warren Shaw, and the new President of the Northeastern Weed Control Conference, Dr. Richard Ilnicki, and scores of others, but were disappointed not to see more representatives of other trade groups in the vegetation maintenance and control field. To date, official talk about alleged pesticide toxicity and residue hazards has been focused primarily on the agricultural and structural segments of the pest control field, but decisions affecting these areas have a direct relationship to what weed, tree, and turf men will be permitted to do in the future. It won't be too long before applicators in the urban/industrial vegetation control and maintenance complex will also be regulated by legislation which has, for the most part, omitted specific reference to them. Some 36 experts addressed the conference, held in the State Department Auditorium, and there seems to be a changing attitude on the part of many who now feel there really isn't the kind of hazard from pesticide residues so many have claimed as an eventuality, a la Rachael Carson. While the advantages of pesticides far outweigh any claimed ill effects, proper use of them is absolutely necessary, just as it is when taking a drug, or driving an automobile, for that matter. This was the theme that ran through the symposium. Wish more of our industry had been there.

* * *

With all due respect to one of our good advertisers, we do believe the "what shall we call it" department of Smith-Douglass outdid itself recently when it came up with a name for its new extruded turf food. It's to be known as TLC. And, dear reader, do you know what these initials stand for? TLC is an abbreviation for "Tender Loving Care"! The turf food is bright pink, cylindrically shaped, and packed in polyethylene bags. A 20-lb bag is said to be enough to feed 5,000 sq. feet of turf ... with tender loving care, of course.

* * *

Bright Future. According to the Stanford Research Institute Report on Pest Control, which is going the executive rounds these days, clearance of brush and weeds along rights-of-way costs more than \$97 million annually, and railroads spend a total of \$30 million. This market may increase, SRI says, at a faster rate than other segments of the overall pest control market.



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