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#### Know Your Species

#### Nurserymen Hold Convention, Trade Exhibition, Jan. 3-6

With an aim to make the 1966 convention and trade exhibit the biggest ever held by nurserymen in the Eastern United States, the New York State Nurserymen's Assn., and the Eastern Regional Nurserymen's Assn., have joined to achieve this goal during their Jan. 3-6 show.

Participating will be representatives of the garden center, landscaping, and garden supply segments of the industry.

Headquarters will be the Concord Hotel located in Monticello, N. Y., in the Catskill Mountains, near Lake Kiamesha.

Complete details about the convention and trade exhibit may be obtained by writing to John A. Richards, Executive Secretary, New York State Nurserymen's Assn., Inc., 415 Lexington Ave., New York, N. Y.

#### WSA to Attract Top Weed Men At St. Louis Meet, Feb. 8-11

How peoples of the world are working to combat weeds will be related by Dr. A. S. Crafts when he addresses an expected attendance of 800 persons at the annual Weed Society of America meeting, in St. Louis, Mo., Feb. 8-11, at the Sheraton-Jefferson Hotel.

Dr. Crafts, one of the nation's leading authorities on weed control, and former head of the Botany Department, University of California, has just completed a study of weed research and control practices around the world. Crafts will give highlights of his experience at the annual banquet of the Society.

Society president G. F. Warren, of Purdue University, Lafayette, Ind., says reservations already indicate about 800 persons will be present for the four-day meeting. They will represent chemical companies, public service organizations, public health and regulatory agencies, equipment manufacturers and other groups.

Dr. W. R. Furtick of Oregon State University, Corvalis, is program chairman. Drs. D. D. Hemphill and O. H. Fletchall, are handling local arrangements.

#### Snow-On-The-Mountain

(Euphorbia marginata)



Snow-on-the-mountain is also known locally as white-margined spurge. It is an annual and reproduces by seed only. It may be found along roadsides, in pastures, and waste places. It thrives in dry soil. In some areas it is cultivated as an ornamental. This plant is poisonous to livestock, and its milky sap may cause skin irritation on sensitive individuals.

Erect stems (1) grow from 1 to 3 feet tall. The stem has fine hairs on the upper part. At the ends of stems are clusters of white-margined leaves, giving the appearance of a flower. Just above the whorl of leaves is a small cluster of flowers (2) that have no true petals, but 5 white appendages substitute for petals.

When flowers mature, hairy, three-lobed seed pods (2) appear bearing three seeds. They are elevated on a small, slender stalk. The seeds (3) are rough, light gray to brown with a dark gray line on one side

Leaves are alternate on the stem, except just below flower clusters where they are whorled about the stem. Leaves are ovate to oblong. The edges are smooth. Leaves are bright green, except for margins which are white. They are 1 to 3 inches long.

Roots of snow-on-the-mountain are slender taproots.

This plant is susceptible to 2,4-D. Local infestations may be removed by mowing when plants are blooming or by pulling up the roots.

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]

# Southern Turf's 300 Acres Produce Sod for Golf Courses As Far Away As Japan, India

By PAULINE T. STEPHENS

Operation of a successful turfgrass business is divided into three parts, as E. Ray Jensen, president and operator of the Southern Turf Nurseries in Tifton, Ga., sees it: (1) know your product; (2) honesty; and (3) hard work.

"All are equally important," according to Jensen, who has been in full-time production of turf grasses for the past 10 years, and in part-time production five

years before that time.

On these three concepts he has built a business which reaches into the golf course and recreation fields, and other enterprises in the far parts of the United States, and as far away as India and Japan. He has built, from a meager beginning, a production expanse of 300 acres, and has acquired machinery valued at \$145,000, some of which he designed himself and had built to order. Jensen also has a twinengine Comanche plane, which he pilots himself. Most of his more than 100,000 miles a year of travel are by plane.

Southern Turf Nurseries is a partnership between Ray Jensen



Ray Jensen, company president, examines Tifton Dwarf hybrid bermuda on test plot at rear of Tifton, Ga. farm.



Raking up old turf on fairway, Southern Turf crewman readies soil for replanting new grass,

and his two daughters, Mrs. Larry Wheeler (Mary) and Anna Jensen. Ray is president and his wife helps out in the office at special times.

President Jensen has an excellent background for turf planting and growing. Before he was a turf man he was a soil scientist. Born on a small farm at Fountain Green, Utah, he earned a degree in soils and agronomy at Utah State University in 1940.

In 1941 he began work with the Soil Conservation Service in Washington, D. C. as agricultural census and land appraiser, a post he held a year. Then he trekked to Mississippi and spent a year and a half with the SCS before going to Perry, Ga., as area scientist, transferring to Tifton in 1946 in a similar position.

In 1951, while with the SCS, Jensen started in the grass business in a limited way, beginning with a few leased acres on which he planted centipede and hybrid bermudagrasses that had been developed at the Coastal Plain Experiment Station in Tifton, Ga. Working with him in this first production was Dr. B. P. Robinson, who at that time was

a research scientist at the Coastal Plain Experiment Station.

In 1951, Jensen produced the first Tifton 57 (Tiflawn), a hybrid bermuda, that had been grown away from the Coastal Plain Experiment Station, where it was developed.

#### Began With 60 Acres

In 1955 Jensen left the Soil Conservation Service and went into full-time production of centipede and bermudagrasses. He planted about 40 acres of sod in Brooks County near the Florida line, and 20 acres in Tift County near Omega (in middle south Georgia) on land he purchased.

Now he has 1,400 acres of land, most of it in Tift County near Omega, where 260 acres are in sod. In addition there are 40 acres in sod in Brooks County.

Of the total acreage of sod, about 100 acres are devoted to centipede, most of which is used to produce seed for combining. The combined seed is sold to commercial distributors. The other 200 acres are in hybrid bermudas.

Plantings of hybrid bermudas are as follows: 30% Tifton 419 (Tifway); 20% Tifton 328 (Tifgreen), and 10% Tifton 57 (Tiflawn); 10% Tifton Dwarf; and 30% Ormond bermuda.

The three first ones listed were developed at the Coastal Plain Experiment Station. Tifton Dwarf is a dark green bermuda with stump leaf which grew as a mutation from 328 Tifton bermuda at Glen Arvin Country Club at Thomasville, Ga. Ormond bermuda came out of Florida, and Jensen was the first person to grow it for certification. He obtained it from the University of Florida.

#### Uses One Room As Lab

Ray Jensen has one room of his office at 1620 North Park Ave. in Tifton which he uses as a laboratory, and also has the part-time assistance of two scientists who have experimented with soil mixtures for greens, fairways, and other turf.

Based on his knowledge of the grasses and the climatic and soil conditions under which each grows, Jensen knows where to plant the various types of grasses.

Tifton Dwarf and Tifton 328 are planted on golf greens, Tif-

ton 419 and Ormond on fairways; and 419 on tees. When there is a call for a grass for as far north as Indiana and Missouri (he recently completed a golf course in Jefferson City, Mo.), Southern Turf uses Tifton 328 and Tifton 419 because they can better withstand the rigors of the winter weather in those areas.

Tifton 419 and 328 are so versatile that they can be grown in many places, Jensen believes. He has planted them successfully in Puerto Rico. Last year he airshipped enough stolons of Tifton Dwarf to plant a large nursery for a golf course in Japan. He flew over to Japan by commercial airline to lecture to golf course superintendents and to demonstrate planting methods for them. He shipped the planting machinery over there about a month before he went himself.

#### Sells 800,000 Sq. Yds./Year

Southern Turf Nurseries estimates very roughly that it sells about 800,000 square yards, or bushels, of turf a year.

It takes out two crops a year from most of its sod. The harvester Jensen uses is so designed as to leave enough root stock to re-establish the field in new turf. Since bermudas grow very fast in this Georgia climate, the sod is ready for another harvest within 8 to 14 weeks.

Jensen sells about 85% of his grass to golf courses, 10% for residential use, 4% for athletic fields, and 1% for miscellaneous uses. He does some of his projects on a bid basis, but most of them are negotiated.

#### Sells, Consults, Plants

This Tifton sod grower provides three types of services. He (1) furnishes and plants certified seed, and provides consulting service; (2) furnishes and plants certified grass (without consulting service); and (3) provides planting stock.

Over the years Jensen has served as consultant to 30 or more turf growers, mostly golf clubs. He usually flies to these projects about once every eight weeks, over a period of one to two years.

He is consultant for one large hotel golf course in Puerto Rico, and on one occasion flew to Ha-

Plan to attend the

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waii to advise on planting golf courses for Laurance Rockefeller.

He has air-shipped grass to many foreign countries, including Japan, India, Italy, Malaya, Israel, South America, Spain, Ethiopia, and others.

Most of the Southern Turf's sales are directly to customers. Only a small portion is sold through distributors, except in the case of centipede seed. Since centipedegrass is strictly a lawn

truck body in a heap, and, unless the weather is excessively dry, it is not watered until after it is planted.

"Our workers try to drive to a job overnight," Jensen explained. "However, if it is too far for overnight, they simply drive in the daytime too and the grass crusts over, but it keeps well in the mass."

While Southern Turf always plants grass while it is green and fresh, a mass of grass will keep

Weed control plots at Southern Turf Nurseries help determine most effective herbicides to use on its farm. Company spends over \$2,400 on weedkillers each year; \$24,000 for fertilizers.

grass, and since Southern Turf minors in lawn sods, centipede sod is a minor part of total sales. However, it produces about five tons of centipede seed in the fall, selling it through distributors.

Jensen delivers stolons to customers by truck, whether he plants the grass, or simply sells the plants. Of course sprigs are air-shipped to foreign countries.

The stolons are dug with a specially designed harvesting machine which Mr. Jensen himself collaborated in designing and had made at Tifton Machine Works in Tifton, Ga. The only other machine like it belongs to Patten Seed Company of Lakeland, Ga.

This machine, which is attached to an 85-horsepower tractor, cuts under the turf, shreds it, and blows it through a long pipe into the dump-body of a truck.

"We can tell how many bushels are in the truck by measuring the amount dug in the field," Jensen said.

The grass is piled into the

alive for 5 to 10 days, Mr. Jensen

When solid sod is sold, which is seldom, the firm uses a commercial truck and loads the sod in layers.

#### Uses On-the-Spot Labor

Jensen has nine planting superintendents who drive the trucks with the grass to the job. They never carry labor with them, but find men to work wherever they go to set out the stolons. Southern Turf often has seven or eight jobs going at one time, and sometimes has 100 laborers at work, along with the superintendents. The superintendents use from one to 15 laborers on a job, depending on the size of the area to be planted.

"Fifteen workers can usually plant 18 greens in one to two days, or 18 fairways in two to three weeks," Jensen related.

Planting machinery is shipped on another truck separate from the truck which carries the grass stolons.

For planting, Southern Turf

uses a new self-feeding fully automatic machine, which has a hopper capacity of 300 bushels. This size makes refills infrequent. It is self-feeding from a feeding tray and rotating cylinder, scatters sprigs uniformly (eliminating broadcasting by hand), and leaves a smooth surface with track marks only at turns. It cuts the sprigs into the soil and rolls them down. With this machine an operator can put out 15 acres a day.

The next best machine to this is the "Tifton Turf Planter," which costs about \$450, and is made in Valdosta, Ga. for this sod farmer. A tobacco planter, and other new planting machines are also used.

#### 200 Bushels of Sprigs per Acre

Jensen believes in planting heavily for hybrid bermudas. He uses 200 to 300 bushels of sprigs to the acre. Heavy planting gives a good turf in a shorter time, he finds. The owner of the turf prepares the land before the grass arrives.

Southern Turf Nurseries has a wide variety of implements in addition to the harvesting and planting machines. These include five soil shredders, four sod cutters, one vertical mower, two flail mowers, four rotary mowers, 12 spriggers, one backhoe, four power sprayers, 12 backpack sprayers, four spreader-seeders, 12 tractors, two materials handling machines, 12 utility carts and related vehicles, two combines (to combine centipede seed), and irrigation equipment designed to furnish 2,600 gallons of water per minute. There are also five large trucks and five pickup trucks.

Turf Nurseries "keeps right after" weeds on turf, using about \$200 a month in weedkillers, and \$200 in insecticides. It spends about \$2,000 a month for fertilizers.

#### **How STN Gets Business**

Ray Jensen finds good markets for his turf mostly through appearances at golf conventions, turf conferences, distribution of his newsletters, and by "word of mouth."

"There is no better advertising on earth than satisfied customers," he proclaimed.

Other sources are through articles he writes for technical magazines.

He publishes a quarterly four-

page newsletter called, "Southern Turf Newsletter," which he mails to golf course superintendents, recreation representatives, and others. He has also written a new publication on Tifton Dwarf.

The Newsletter not only keeps turf operators who are customers or prospective customers informed, but it helps to bring in business.

Southern Turf's president believes the turf business is on the uproad. He estimated that there are now about 100 turf grass companies in the nation to supply the demand, which is growing with the trend toward more leisure and more recreation.

He sees this trend in the United States and in foreign countries as well. Japan, as an example, is a country in which golf courses are increasing steadily, and he believes this is true of other countries as well.

## Northeastern Weed Control Conference Observes 20th Anniversary at New York Meeting, Jan. 5-7

In an address titled, "Our Weed Control Conference Over the Last 20 Years," Dr. Charles Hovey, tenth president of the Northeastern Weed Control Conference, will review the achievements of the organization when he addresses the meeting at Hotel Astor in New York City, Jan. 5-7.

While the meeting will spotlight conference accomplishments over the past 20 years, delegates will be treated to dozens of sectional papers reporting on '65 research projects.

In a talk by Dr. W. R. Furtick of Oregon State University, entitled "Two-Season, Two-Hemisphere Weed Research," weed problems on the southern half of the globe will be compared with those in the U.S.A.

Arborist Richard E. Abbot of the Ohio Power Co., will offer his experiences in a talk, "Growth Retardants With Emphasis on Inhibiting Regrowth of Trimmed Trees." For those interested in sales and education a representative from the East-

#### **Ohio Short Course Slated**

Arborists, turf management specialists, landscape contractors, garden center operators, and nurserymen will gather at the Sheraton-Columbus Hotel, Columbus, Ohio, Jan. 24-27, to attend a four-day short course. Sponsor is the Ohio Nurserymen's Assn.

Also scheduled to take place simultaneously is the 59th annual winter meeting of the association. man Kodak Co. will tell how to prepare slides and charts.

Total scope of next month's conference covers horticultural crops, agronomic crops, industrial weed and brush control, public health, aquatics, turfgrass, conservation and forestry; ecology, physiology and soils, and new products from industry.

For more detailed information about this meeting write to Dr. John A. Meade, Secretary-Treasurer, Northeastern Weed Control Conference, Agronomy Department, University of Maryland, College Park, Md. 20742.

#### 1200 Expected at Illinois Spray School, Jan. 26-27

Advance information from the College of Agriculture, University of Illinois, Urbana, indicates that an attendance in excess of 1200 persons is anticipated for the 18th Annual Custom Spray Operators' Training School, Jan. 26-27. It will be held in the Illini Building.

According to H. B. "Pete". Petty, program chairman, over 1,000 attended last year's sessions. Program for the up-coming conference promises to be of even greater interest with the most current information based on latest tests, studies and experiments.

Details on the forthcoming school may be obtained by writing to H. B. Petty, Chairman, Custom Spray Operators' Training School, College of Agriculture, University of Illinois, Urbana, Ill.

## Meeting Dates



Connecticut Nurserymen's Assn. Annual Meeting, Hotel Statler-Hilton, Hartford, Dec. 30.

North Carolina Nurserymen's Assn. Annual Meeting, North Carolina State University, Raleigh, Jan. 3-4, 1966.

Western Association of Nurserymen Annual Convention, Hotel Continental, Kansas City, Mo., Jan. 3-5.

Garden Living Industries of the Eastern United States, Convention and Trade Exposition, Concord Hotel, Monticello, N. Y., Jan. 3-6.

Rutgers Winter Turf Course, College of Agriculture, New Brunswick, N. J., Jan. 4-Mar. 11.

Northeastern Weed Control Conference, The Hotel Astor, New York, Jan. 5-7.

Indiana Arborist's Assn., Annual Midwinter Conference, Claypool Hotel, Indianapolis, Jan. 5-7.

Iowa Nurserymen's Assn. Annual Convention, Hotel Roosevelt, Cedar Rapids, Jan. 7-9.

National Landscape Nurserymen's Assn. Convention, LaSalle Hotel, Chicago, Ill., Jan. 8-9.

North Carolina State Annual Pesticide School, North Carolina State University, Raleigh, Jan. 10-11.

First Annual Pennsylvania Shade Tree Symposium, Nittany Lion Inn, University Park, Jan. 11-13.

8th Annual Agricultural Pesticide Conference, Purdue University, Lafayette, Ind., Jan. 17-18.

Rutgers Lawn and Utility Turf Short Course, College of Agriculture, New Brunswick, N. J., Jan. 17-19.

Maryland Nurserymen's Assn. Annual Meeting, Washingtonian Country Club, Gaithersburg, Jan. 18-19.

18th Annual California Weed Conference, Sainte Claire Hotel, San Jose, Jan. 18-20.

Southern Weed Conference, Hotel Robert Meyer, Jacksonville, Fla., Jan. 18-20.

Rutgers Golf and Fine Turf Short Course, College of Agriculture, New Brunswick, N.J. Jan. 20-21.

Rocky Mountain Turfgrass Conference, Colorado State University, Fort Collins, Jan. 26-27

# Broad Scope of Turf Knowledge Brought Into Focus as 2500 ASA, CSSA and SSSA Members Meet for 57th Time

Plant analysis, soil tests, pesticide effects on soil and water quality, soil classification, and land use all were topics of reports given during 80 sessions at the 5-day, annual scientific conclave of the American Society of Agronomy held in Columbus, Ohio, Oct. 31 to Nov. 5. Members of the Crop Science Society of America and the Soil Science Society of America joined the ASA at the triple meet. Nearly 2,500 scientists gathered to hear latest factual reports numbering over 500 and representing the work of 1,000 authors.

#### Nutrients Affect Plant Disease Resistance

"Calcium-deficient nutrition produced plants with significantly heightened disease susceptibility independent of other nutrient elements, soil, air temperature, season, or variety," Dr. Houston B. Couch, Virginia Polytechnic Institute, Blacksburg, Va., revealed. He explained that in studies involving interactions of various environmental factors with different nutrient regimes, nitrogen nutrition also influenced disease susceptibility. Unlike calcium, however, its influence was linked with other factors, both inherited and environmental. Highland and Seaside bentgrass, Rainer and Pennlawn creeping red fescue, and eight varieties of Kentucky bluegrass were studied to test susceptibility to fungal parasites.

#### Straw Mulches Best For Roadside Turf

During a joint CSSA and ASA "Roadside Turf Management" session, Dr. James Beard, Michigan State University, E. Lansing, described tests where eight mulch treatments were compared on slopes of newly constructed highway rights-of-way for turf establishment and erosion control. "Straw alone and straw with asphalt and with Mulchnet were the best. Mulches were measured by visual turf

quality ratings, density counts, and number of erosion rills." The key advantage of thick straw mulch is the favorable climate it produced in terms of soil moisture and relative humidity.

Dr. O. N. Andrews, University of Illinois, Urbana concluded, "Alfalfa and fescue are best adapted to establish rapidly along roadsides of species found in southern Illinois. More than 100 species were tested and evaluated as roadside turfgrasses."

#### Low N-P-K Rates of Bentgrass Greens Tested

"During one year, 224 lbs. of nitrogen (N), 19 lbs. of phosphorus (P), and 137 lbs. of potash (K) were recovered from bentgrass clippings removed from one acre," Dr. Roy L. Goss, Washington State University, Pullman, Wash. reported. Clippings were collected from bentgrass turf for one year to determine how much N, P, and K were removed in the cut turf. Plots had received 0, 522, and 870 lbs. of N; 0 and 77 lbs. of P; and 0, 145, and 290 lbs. of K per acre. "From the amount recovered, the higher application rates of both N and K were somewhat excessive, and lower rates were better utilized without sacrificing quality," Goss added.

#### Phosphorus Alters Herbicide Effect

Effects of seven different phosphorus levels on herbicide control of poa annua were discussed by Felix V. Juska, Agriculture Research Service, U.S. Dept. of Agriculture, Beltsville, Md. "Five herbicides were evaluated at two planting dates, 48 days apart. Trifluralin gave complete control at both planting dates, while Zytron was second best. At both dates, phosphorus reduced the effectiveness of calcium arsenate. Plants that survived Zytron and Dacthal treatments were more vigorous at high phosphorus levels.

The number of seedlings that survived after Betasan, Zytron, and Dacthal treatments increased slightly when phosphorus was added at the second planting date."

#### Researchers and Educators Awarded

Three of the four highest awards made by the ASA for superior contributions to agronomic research, education, and service were received by members of the Agronomy Department at the Univ. of Ill.: Dr. John B. Hanson (Crop Science Award); Dr. Arnold Klute (Soil Science Award); and Dr. Samuel R. Aldrich (Agronomic Education Award). Dr. Willard H. Garman of the National Plant Food Institute received the Agronomic Service Award. These outstanding members were honored at a special awards banquet in the Sheraton-Columbus Hotel, Nov. 3.

#### 1966 Officers Announced

New CSSA President is Dr. Jack R. Harlan, Agronomy Dept., Oklahoma State University, Stillwater, and President-Elect Angus A. Hanson is with the Forage Crops Div., ARS, USDA, Beltsville, Md. Both will guide the activities of the 2,250-member Society during the next year and will arrange for its 1966 annual meeting at Stillwater, Okla., Aug. 21 to 26.

Dr. William P. Martin, Professor and Head of Soil Science Dept., University of Minnesota, Minneapolis, is the newly elected president of the nearly 3,150-member Soil Science Society of America. He will direct the Society's activities for the next year and also arrange for the 1966 meet in Stillwater.

Proceedings of the Oct. 31 to Nov. 5, 1965 tri-association conclave, Agronomy Abstracts, are available for one dollar from American Society of Agronomy headquarters, 677 S. Segoe Road, Madison, Wis. 53711.

#### 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.

#### HELP WANTED

LAWN CONTROL salesman, supervisor and serviceman. If you are experienced in any of the above, then you are eligible for a position with the fastest growing exterminating company in South Florida. Send a résumé including background, education and salary history to Mr. S. A. Tendrich, National Exterminators, Inc., 2990 N.W. 40th St., Miami, Fla. 33142. All applications will be thoroughly reviewed and acknowledged.

WEED CONTROL supervisor needed. Well-established company working in New York and New England States on roadside, utility and industrial spraying. Give experience, education and salary desired in reply to Box 11, Weeds Trees and Turf magazine.

AMBITIOUS sales/serviceman, experienced in turf, weed and ornamental pest control. Excellent opportunity for the right man. Reply: Hydrex Pest Control Co. of California, 3073 Long Beach, Blvd., Long Beach, Calif. 90807. Phone: 213 + 426-7644.

#### FOR SALE

1—Tree spraying rig, 60-gpm, 500 gal., Wisconsin air-cooled engine, \$1,700. 1—Tree spraying rig, 37-gpm, 500 gal. LeRoy engine, \$1,500. 1—Lawn spraying rig, 275 gal., 15-gpm, on wheels, \$300. 6—Hand weed booms, for lawn weed spraying, aluminum, on wheels, minimize drift, quick hand shut-off @ \$45.00. 4—Lufkin measuring wheels, professional accordian-type @ \$35. 15 5-gal, cans All-Wet wetting agent @ \$45.00. Write Box 14, Weeds Trees and Turf magazine.

TREE SPRAYING Business for sale. Long Island, New York. Write Box 15, Weeds Trees and Turf magazine.

#### How to Sell and Lose Weed Control Jobs

(from page 9)

ing prospective buyers will show the difference between a reputable businessman and a fast-buck artist. Every job which is underpriced will come back to haunt the whole industry.

Businessmen who want to stay in business will offer nothing but service perfection. If service is anything less than perfect, customers lose faith in weed control altogether, and in the end, no one gets the business.

Lest I sound as if I'm against competition, let me say I'm not. Competition which keeps me on my toes is great; it keeps me alert to new products and techniques. Competition which is less than ethical will brand the industry with a bad name, because customers will sour on our service which is truly a real boon to industrial maintenance.

## One Engine Provides Drive For 11 Solo Power Tools

A three-horsepower engine that weighs 11 pounds, said to be easily removed from a rotary mower and attached to a cultivator or any one of 11 implements all powered with the same engine, is being introduced by Solo Industries, Inc., Woodside, N. Y.

Designed for the man who needs a variety of machines at a minimum investment, Solo has developed a rotary mower, chain saw, water pump, electrical generator, cultivator, lawn sweeper, circular saw, snow thrower, air compressor, high-pressure piston-type pump and an outboard motor, all of which can be powered with the same engine.

Engine requires but an easy turn of the hands to attach to or detach it from any of the above implements, Solo claims. The engine reportedly operates effi-

#### Rohde Heads New Kansas Christmas Tree Association

John T. Rohde, of Edwards-ville, was elected president of the newly formed Kansas Christmas Tree Association, during a meeting held at Kansas State University, Manhattan, recently. Also elected were D. C. Wesche, Manhattan, vice president; and John P. Slusher, Manhattan, secretary-treasurer. They also serve as directors.

Other directors of the new association are Cecil Delp, St. John; Harold Gallaher, Manhattan; Dr. Ralph Herrman, Seneca; L. B. Stants, Abilene; Ira Wheeler, Manhattan; and Ken McGinness, Olathe.

#### -Advertisers-

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ciently at maximum power in any position.

Vandermolen Export Co. . . . 14

With several implements powered by one engine, a substantial saving may be realized since engines need not be purchased for each unit. Another advantage is that an extra engine would eliminate downtime that is possible with fixed-engine equipment. An extra engine can easily keep all compatible equipment in operation if one needs to be serviced.

Complete details on the master engine will be sent on request from Solo Industries, Inc., P.O. Box 128, Woodside, N.Y. 11377.

### Michigan Enacts Compact Law

A new Pest Compact Law passed by the 1965 Michigan Legislature, allows the Michigan Department of Agriculture to join forces with other states to fight plant pests.

Under the provisions of Public Law N. 187 of 1965, Michigan will enter into a compact when four or more other states have passed similar legislation.

## Nematode Diseases, Weed Control on Program of North Carolina U. Pesticide School, Jan. 10-11

A plant pathology session is to be included in North Carolina State University's Pesticide School, being held Jan. 10-11 on campus in Raleigh.

To set the tempo of the class and focus attention on the growing importance of the use of pesticides in today's society, the university staff has engaged Dr. Nyle Brady, to address the school: his subject will be "Pesticides In Our Environment." Dr. Brady is director of research with New York State College, Cornell University. He has also served two years in Washington, D. C., as director of science and education with the United States Department of Agriculture.

Lead-off speaker in the pathology session will be D. E. Ellis who will discuss "Origin and Purpose of Pilot Project on Nematode Assay Service." Several other experts will emphasize control procedures for this blight.

According to Howard R. Garriss, Extension Professor in Charge, Plant Pathology Extension, and Chairman of the 1966 Pesticide School, it is impossible to cover all aspects concerned

#### **Green Lawn Expands**

New expansion of facilities at Green Lawn Laboratories now makes it possible for this formulator and packager of private label products to economically service the needs of small independent dealers and distributors.

Company president, Donald J. Arenberg, announced recently his firm is now fully equipped to handle formulating and packaging of a full line of lawn and garden products. Included are insecticides, fungicides, herbicides, fertilizers, selective weedkillers, soil conditioners, etc.

Formulations can be adjusted, Arenberg claims, to meet special product needs of particular

For further information, write Green Lawn Laboratories at 4844 Main St., Skokie, Ill., 60076.

with chemical and other methods of plant disease control. It is planned to emphasize fungus diseases and fungicides in the 1967 school.

Of special note is the subject by J. B. Weber: "General Considerations of Herbicide Residues in Soils," which should add more light on a question that has attained considerable impor-

Those in the sod industry have not been overlooked by the university staff. Dr. G. C. Klingman reports on "Status of Sod Planting-Research", and C. K. Martin will further amplify the subject with sod demonstrations.

Other categories of the school include discussions of entomology, zoology (wildlife) and agricultural engineering.

Registration is scheduled for 8:15 am, Monday, Jan. 10, Union

Bldg. lobby.

#### More Mechanization Up for Study at Calif. Conference

An unreliable labor supply, which is turning the contract applicator's attention toward more mechanization, will be a major topic of discussion when weed specialists meet for the 18th Annual California Weed Conference in San Jose, Calif., January 18-20, at the Sainte Claire Hotel.

Industrial weed control specialists will be particularly interested in a report on new methods developed by the California aircraft industry.

Also scheduled for review before the assembly are the many problems associated with, or that have been created by, Federal and local regulations. These will be aired for general consideration and solution.

To accommodate San Francisco Bay area nurserymen and landscape architects, a panel will discuss weed control on ornamentals and ground-covers.

More details will appear in next month's issue of Weeds Trees and Turf.

### -Trimmings-

Between Seasons Income. Ray Leary, president of Arrow Tree Spraying Service in Commack, Long Island, N.Y., has found a way to earn extra income in between the spring and fall spraying seasons. He rents thatching machines, aerators, lawn roto-tillers, etc. Wonder how long it'll be before he'll be using this equipment himself by expanding his own services?

Iowa Nurserymen in Washington. Nursery firms in southwest Iowa recently presented an oil painting to Congressman John R. Hansen, of the State's 7th District, in a ceremony on the Capitol steps in Washington, D. C. Bob Lederer, executive associate of the American Assn. of Nurserymen, made the presentation. The painting depicts a typical southwest Iowa nursery farm, and Congressman Hansen now has it hanging in his offices where all visitors can become aware of the industry's importance in his District. Guess so! It employs over 1500 people and has a better than \$3 million payroll.

Figure Skating Hort Man. New face on the Purdue campus is that of James E. Browning who's just joined the university's department of horticulture. A native of Indian-apolis, the Michigan State graduate is a figure skating champion. Jim will assist in the direction of the school's new four-year program in landscape architecture. He'll have plenty of thick ice to skate around on in Lafayette this winter. know, we've slipped our way, and frozen our ears many a time on the Hoosier's campus during those "de-lightful!?" below-zero months at P.U. conferences.

No Stranger. Dick Morrow, field representative for Cal-Turf, large turfgrass growers in Camarillo, Calif., tells us everyone seemed to know him on a recent eastern trip he made. Even strangers. He wrote us: "The wide impact of your publication in the turf industry was recently brought home to our group on a tour of turf installations in the and when we attended the Florida Turf Conference. I wish I could tell you how many times people mentioned reading about our Field Days in Weeds Trees and Turf, as we would introduce ourselves. Let me express our deep appreciation for the fine exposure to a young industry in the West." Thank you, Dick. for letting us know how thoroughly WTT is read from coast to

Problems the Same All Over. Have just been reading of opinion differences operators are having up in Canada. They raise the question about just how much a treeman or sod grower or nurseryman or anyone else who plants something for his customer is expected to guarantee its future health when they have no control over watering, weather, etc. They wonder at the logic of guaranteeing something which is completely in the hands of nature and the consumer. Sound familiar?