

Florida Nurserymen's Annual

The 1400-member Florida Nurserymen and Growers Association has just completed its largest show and short course. This annual event this year registered \$300,000 in sales at the show itself, held at Hollywood-By-The-Sea.

Important in addition to the show is the short course. Newly featured this year was a presentation by Dr. P. L. Neel. He discussed the pros and cons of staking young trees.

Dr. Neel is a newcomer to the Agricultural Research Center at Fort Lauderdale. A Pennsylvanian, he recently arrived in Florida from California, where he completed the requirements for his Ph.D. For the past four years, Dr. Neel has been the Graduate Research Fellow of the International Shade Tree Conference.

His findings indicate that trees grown with little or no staking have larger trunk diameters close to the ground, but are not as tall as trees rigidly staked.

Dr. Neel doesn't recommend staking when trees are properly grown in a nursery; they may actually become dependent upon the stakes for support, even when later planted in the landscape. Yet, minimal staking at an early age "often prevents vandalism."

A treelet, he said, which is rigid enough to stand upright by itself, and has the ability to give with the wind and later returns to an upright position, can justifiably be called a strong tree. He stressed, however, that the production of such a tree requires disease and pest control, proper fertilization, watering and adequate space for lighting the lower branches. He discouraged pruning; trim only enough to maintain "apical dominance" and tree form.

Dr. Neel described "improperly grown" as can to can, causing serious crowding and shading. Result is, treelets grow tall and spindly and lower branches are shaded out.

He has found, he said, that un-staked, unpruned trees grow less in height but the most in diameter, and with greater taper, vs. trees staked and the lower branches pruned, which tends to make trees grow taller, with less taper and trunk caliper.

In one of his stake-experiments, it was noted that trees supported by 1" x 1" redwood stakes bent away



Honored for his many years of services to Florida's horticultural industry, Jim Griffin, executive vice-president, FNGA, receives award of eminence from Hal Jones, director, Div. of Plant Industry, Gainesville. Griffin's name will be inscribed on the Award of Eminence honor roll in the Doyle Conner Building at Gainesville, Florida.



Spearheading program were, left to right, Joseph Welker, president of FNGA, Duval Landscaping, Jacksonville; Dr. James Strobel, Ornamental Horticulture, University of Florida; and Dr. P. L. Neel, Agricultural Research Center, Fort Lauderdale.

from the trunks when untied. A subsequent experiment was run to determine whether it was the shading of the trunk by the stake or the pressure against the stake which caused the bending. Results indicated that the unilateral shading was the apparent cause of the bending. On the other hand, treelets supported with plexiglass stakes, with sunlight reaching the trunk, stood upright when untied.

Another featured speaker, Julius Richmond, Electronic Data, Inc., of Houston, speaking on inventory control, warned of the cost of stagnant inventory. Every dollar of inventory

must earn at least 5% to 7% each week to pay for its share of fixed expenses, which include overhead, maintenance, lighting, etc., but not the cost of labor and capital investment.

If inventory is stagnant, and fixed expenses are going on, it will cost money to keep an item, plus what you already lost by not allocating its space to another faster moving plant.

Inventory control tells you during periods of demand, the quantity of plants by size, type and quality that can be produced and sold at a profit. Also important, he stressed is to

know the total useable nursery space, as well as the allocated space available for each block of plants. This information permits better and quicker decisions.

Also, by maintaining intelligent inventory levels, a severe problem is bypassed, namely, "Out of Stock." Nothing sours a customer quicker than being told "we're out of hibiscus." Not only is a sale lost, but in many cases competition gains another customer.

Speaking on weed control in nursery cans, Prof. Carl Whitcomb, Dept. of Ornamental Horticulture, University of Florida, stressed that sanitation is the crux of keeping down weeds. "And," he said, "Don't be lulled by size, even the wee ones can go to seed; don't allow it."

Sanitation can be expensive, he pointed out, but not as much as overgrown weeds which compete for food and water. Herbicides are only a tool, and not the ultimate answer in weed control, but when used properly will give good service. One of its values is that it doesn't leach. Container stock needs more water because of the concentrated root system (plants can be stunted), compared with plants in the field.

He warned against uneven distribution of herbicides; spraying is temporarily okay, drenching is best, and granules are poorest. The latter will decompose from light and volatilise, while an irrigation system can carry the chemical too deep, too quickly, and is not the answer because of uneven application and subsequent waste.

The rate of application is important, and a shaded soil surface will protect the chemical from deteriorating and evaporating.

Jim Griffin, Jr., vice president of FNGA, was honored with an Award of Eminence by Hal Jones, director of Florida's Division of Plant Industry. Mr. Griffin's name will be inscribed on the Award of Eminence Honor Roll in the Doyle Conner Building in Gainesville.

More than 2100 persons attended the show and short course, which broke all previous records.

More than \$2,000 in prizes, including cash, weekends at plush resorts, etc., went to lucky exhibitors and attendants. An armed guard presented a \$1,000 bill to Nick Locante, Nick's Garden Center, Boca Raton; and \$500 to George Russell, Russell, Inc. Miami. Also, Bob Plyler, Arvida Nurseries, Miami took home a \$50 bill, and a color TV set went to Ralph Jones of Kerr-McGee Co., (formerly Wilson-Toomer Fertilizer Co.) of Jacksonville.

Threat to Florida's Palms

LETHAL YELLOWING

A new palm tree disease, called lethal yellowing, is slowly killing coconut palms in southern Florida. To date, no cure has been found.

The disease currently is damaging trees in West Africa, has been known in the West Indies for a century, and has been sporadic in attacks in Key West, Fla., for some 35 years. Recently it has been found for the first time at Key Largo and Little Tork Key, Fla. But the first occurrence on the U.S. mainland was some two months ago at both Coral Gables and Miami. First danger sign is dropping of small, premature coconuts.

When attacked, the foliage of trees begins to turn yellow, starting with the lower fronds. No fruit will set. Male flowers will be dead and black. The vegetative bud dies, as do all leaves. Finally, the dead top falls away in the wind, and only the tall, naked tree trunk remains. This is a fatal series of events, and occurs within a three to six-month period after affliction.

Lethal yellowing destroys all coconut palms in its path but moves slowly. It is an infectious disease, presumably restricted to coconut palms in Africa and America. According to Dr. Daniel A. Roberts, Professor of Plant Pathology, Institute of Food and Agricultural Sciences (IFAS), most scientists believe a virus is the agent, though viral particles have not been discovered yet in diseased trees. "We have strong evidence that other known plant pathogenic agents—bacteria, fungi, nematodes—are not associated with lethal yellowing," says Dr. Roberts. "The agent is most likely carried from diseased to healthy palms by insects with piercing-sucking mouthparts."

Scientists working with the Food and Agricultural Organization of the United Nations and with the Coconut Industry Board and Ministry of Agriculture in Jamaica obtained evidence that a species of whitefly may transport the pathogen. Research on transmissibility has been conducted at the U.S. Naval Station in Key West by scientists from the Division of Plant Industry, Florida Department of Agriculture and Consumer Services, and from the Plant

Pathology Department, Institute of Food and Agricultural Sciences, University of Florida.

Many questions concerning the disease are still unanswered. Thorough and immediate research is needed. The best corrective now, according to Dr. Roberts, is to destroy all coconut palms the moment they show symptoms and replace them if possible with resistant lines of Malayan palms. Ordinary coconut palms can be planted in their place on the chance they'll escape infection until after the disease has run its course in the region.

An alert citizenry may be able to check the spread of destruction by learning to recognize lethal yellowing and by making the sometimes hard decision to sacrifice swiftly the already diseased palms in the interest of those that have thus far escaped. Both IFAS and the Division of Plant Industry are prepared to assist in every possible way to get rid of the lethal yellowing already in Florida palms and to check its dreaded distribution to the plants that still enjoy good health.

New Book Features Diseases of Trees

A new and comprehensive book which was 10 years in the making, "Diseases of Forest and Shade Trees," is now available.

Published by the Forest Service of the USDA, the new publication is authored by Dr. George H. Hepting, noted forest pathologist. Until his recent retirement, Dr. Hepting was Chief Plant Pathologist at the S.E. Forest Experiment Station, Asheville, N. C.

The book includes pathology of more than 200 trees, important in the nation. Most are native, but many introduced species used for shade or ornamental use are included, as were some orchard trees. The Forest Service expects the new book to find ready use as a standard text and reference work.

Cost is \$4 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20412.

classifieds



When answering ads where box number only is given, please address as follows: Box number, c/o Weeds Trees and Turf, 9800 Detroit Ave., Cleveland, Ohio 44102.

Rates: "Position Wanted" 10¢ per word, minimum \$3.00. All other classifications 20¢ per word, minimum \$4.00. 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. Bold-face rule box: \$25.00 per column inch.

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USED EQUIPMENT

69 SKYWORKER 1044-A, 45 ft. mounted on F-600 Ford with hydraulic controls from crow's nest and 14 cut. ft. dump box. Asking \$10,800.00, excellent condition. Also 12" Asplundh chipper, rebuilt 6 cylinder engine. Asking \$1,800.00. 63' Dodge 4-wheel drive ideal for mounting tree spade. Asking \$1,200.00. Wanted: Series #5 truck mounted National crane. Edwards Tree Service, 3190 Cooper Foster Park Rd., Vermilion, Ohio 44089. Call 216 967-6750 or 933-6750.

RECONDITIONED brush chippers, sprayers, log splitters, stump routers, bucket trucks. Let us know your needs. Equipment Sales Company, 5620 Old Sunrise Highway, Massapequa, New York 11758. Phone 516 799-7619.

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1968 ASPLUNDH 16" V8 Brush Chipper, \$2550.00. Very good condition and very clean. Kasik & Sons Landscaping Contractors, Riverside, Illinois 60546. (Div. of KAGO, Inc.) 312/447-7393.

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MISCELLANEOUS

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Trimmings

SYNTHETIC TURF promises to become a mainstay in the American life style whether or not it continues to be used extensively for athletic fields. New markets are developing or being developed in both consumer and industrial markets. Indications are that Monsanto's consumer sales this year (including doormats) will exceed commercial sales. New markets for synthetic turf (by American Biltrite, 3M, Ozite, Chevron, Lee & Mohawk and others) include synthetic ground coverings around motels, gas stations, shopping centers, highway medians, and homes. One report even has Astro-Turf being used to cover Hawaiian cemetery plots owned by Chinese whose religion permits them to attend grass on plots only two weeks of the year.

* * *

ROADS AND STREETS in this country now total 3.7 million miles, surprisingly up only slightly in the last 15 years from about 3.4 million. And only about 15 percent of this total is municipal mileage. The balance is rural. Further, the Federal government has jurisdiction only of roads in National Forests, Parks, etc. This amounts to about 5 percent of the total (188,000 miles), the balance being under state or local control.

* * *

SODIUM appears the chief cause of damage to plant growth where plants are subjected to high concentrations of household laundry. Study by two VPI scientists showed other soluble salts along with the sodium delayed emergence of seedlings in corn plants. Abnormal growth was also common including bending, abnormal constrictions across leaves, discoloration, and in some cases death of the corn plants in less than three weeks. Phosphorus was not a factor, apparently because it is a prime fertilizer element which improves plant growth.

* * *

A MOVIE produced by the National Agricultural Chemicals Association entitled "Norman Borlaug: Revolutionary," is gaining popularity. It was selected to receive a Golden Eagle Award by CINE, the Council on International Nontheatrical Events, plus an Award of Merit in the '71 American Horticultural Film Festival. Dr. Borlaug, Iowa-born agronomist, Nobel Peace Prize winner (in 1970 for developing new wheat strains), and director of an international wheat research program at Mexico City, has become a

national news figure of late. His testimony at hearings of the Environmental Protection Agency recently at Washington, D.C. scored all efforts to ban DDT because, he testified, "Without DDT and other important agricultural chemicals, our goals are simply unattainable—and starvation and world chaos will result." He said that we used 290 million acres of farmland last year to produce food for ourselves and other nations. "With the technology used 30 years ago—when most of today's pesticides and fertilizers were nonexistent—we would have required nearly 600 million acres..." Dr. Borlaug also appeared last month before 1000 delegates from 125 countries attending the 16th Governing Conference of the United Nations Food and Agricultural Organization. He literally scored environmentalists for their anti-DDT campaign and won strong support for his position from the world FAO group. Replies can be expected shortly, especially from specific groups including what he termed the "new legal arm of the movement," the Environmental Defense Fund.

* * *

SCIENTISTS IN INDIA are working on a research project to find ways to speed the tree growth, with U.S. funds. A foreign currency grant is for a basic study of dormancy and growth control of Himalayan spruce, similar to U.S. spruces. Conifer seedlings grow continuously for up to 10 months. Then a terminal bud forms and dormancy sets in. When the bud opens, growth begins again for a few weeks; then, another bud is formed and dormancy again occurs. Indian scientists will seek ways to make trees grow for several months each year.

* * *

BOOK REVIEW

THE MODERN GOLF COURSE SUPERINTENDENT, a primer of history and experiences by a veteran golf course superintendent, Richard Viereger.

The book is soft cover, 8½x11 inches in size and has a plastic spiral binding. It is 186 pages in length and contains many illustrations. Price is \$9.50.

The book contains the ideas on golf course management and maintenance gained by Mr. Viereger during many years in the profession. Whether learning to manage a golf course, or already on one, the book is interesting and worthwhile. The publisher

PARATHION was the subject of controversy last year when two deaths and many illnesses in North Carolina were blamed on the chemical used to control aphids and flea beetles on flue cured tobacco. Florida growers of cigar wrapper tobacco, an earlier crop than the northern flue-cured tobacco and one on which six to 10 times more parathion is normally used, had reason for concern and welcomed studies by Florida's Dr. William Tappan, university researcher. He supervised checks of 45 tobacco workers over a 6-week period. Despite contact with parathion residues, no illnesses occurred though one worker did experience slight depression effects. Parathion is a very dangerous material, Tappan reports, and must be used with extreme care. Yet regular blood and urine sample indicated no problems where the chemical was used as recommended.

Barrows Is Named Consulting Arborist

At its recent meeting in Montreal, Canada, the American Society of Consulting Arborists voted Walter J. Barrows into active membership. The Society with members throughout the United States and Canada is composed of men who are recognized for their professional abilities in the care, treatment, and maintenance of trees in the landscape.

These men are particularly skillful in the technical aspects of arborist culture, tree appraisals, tree surveys, and the evaluations of the effects of trees in our environment.

Barrows, Ventura, California, has been employed by the Ventura County Parks Department as Landscape Coordinator for the past three years.

recommends it for classroom instruction. Tips given in this book are directed specifically toward the golf course business.

Segments of the book include superintendent responsibilities, training and administration of workmen, structure of the superintendents crew, educational needs, maintenance of property, communications, how to apply for the position, and even the duties of the superintendent as a citizen.

Available from Tomson Publications, P.O. Box 50160, Indianapolis, Ind. 46250.

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