Ohio Short Course Draws 1850 Delegates

Over 1850 persons attended a five-day meeting in January of the 44th annual Ohio State University Short Course for Arborists, Turf Management Specialists, Landscape Contractors, Garden Center Operators and Nurserymen.

Meeting at the same time was the 31st annual meeting of the Ohio Chapter, International Shade Tree Conference and the 65th annual meeting of the Ohio Nurserymen's Association.

Speaking on the topic, "Diagnosis of Tree and Ornamental Plant Troubles," Dr. Dan Neely, Illinois Natural History Survey, Urbana, Ill. said that industry and population growth have increased the problems relating to trees. Survival of trees and other vegetation is now dependent on the care and maintenance rendered by people.

Neely said that to accurately diagnose tree problems three things are needed, the ability to observe, simple tools and background knowledge. He offered these questions to arborists and others in helping to solve a tree problem: 1. What type of abnormality exists? 2. Is the condition general? 3. Is only one species or genus affected? 4. Is the problem occurring only in one tree or is it widespread through a certain area? 5. Is necrosis complete or partial in the affected area?

Check for mechanical, chemical or thermal injury, said Neely. Leaf spotting, aerial drift, or uptake of soil-borne chemicals must be taken into consideration. Physiological diseases are also important. Deficiencies in water, nutrients, oxygen, and other essential materials can bring on tree problems.

Lastly, Neely said to check out the possibility of pathogenic diseases. These are the most difficult to diagnose.

Erik H. Haupt, The Haupt Tree Co., Sheffield, Mass. discussed spraying techniques and application methods. Noting that spraying can be hazardous, the arborist cautioned that proper chemical selection and spraying mixture was important. Spraying techniques must be effective, he said. No one uses exactly the same techniques as another. Each must be custom designed to fit the needs of the operator and the job situation. Nevertheless, equipment must be in top operating condition at all times.

Dr. John A. Weidhaas, Jr. of V.P.I. and Dr. E. B. Himelick, Ill. Natural History Survey tackled systemic insecticides and fungicides. Systemic chemicals can make important contributions to desease and insect control if the applicator understands their use, said Weidhaas. Little has been done to more fully understand the role of systemics, however. Use rates, time of application, selection of the right material and others were pointed out as areas where more research is needed.

Officers of the Ohio Chapter, ISTC are: (seated l-r) Alex Wynstra, Jr., Div. of Parks & Forestry, Columbus, past president; Kenneth H. Funk, Funk Bros. Tree Service, Ashland, president; (standing) Dr. L. C. Chadwick, Columbus, sec-trees; William H. Collins, Cole Nursery Co., Circleville, vice-pres. Not present are Gary P. Mitten, Ohio Power Co., North Canton, pres. elect; and Dr. Philip Kozel, Ohio State Univ.

Himelick said that because many materials are being phased out, the pathologist today has fewer chemicals to recommend for disease control. He pointed out that disease control is not just a matter of applying chemicals, however. Sanitation practices, natural disease resistance and application of chemicals at the right time must all be considered to combat disease effectively.

H. M. Van Wormer, Van Wormer Tree Service, Inc., Richmond, Va. said that soil drainage around transplanted trees is important to their survival. He cited overwatering, flooding, changes in the water table, clay subsoils, little aeriation, soil compaction and ball planting depth as factors which influence tree survival.

It is essential that air reach the roots of trees, he said. Without air, root hairs will not develop. The arborist recommended six-inch drains installed five feet apart between original ground level and the fill level as a countermeasure to poor drainage. In low areas, he said to plant the tree ball higher than the natural ground level.

For large tree transplants Van Wormer recommends a six-inch circular tile system be installed four inches above the base of the ball. Upright tiles should be placed in the ground at each end of the circular system to aid in aeriation of roots.

According to Ernest G. Gebhart, division of forestry and reclamation, Ohio department of natural resources and Mark Ryan, urban forester for the city of Columbus, urban forestry is becoming more important. They reported that many communities within metropolitan areas have established shade tree commissions. Mass communications media are being utilized increasingly to provide information about the care and preservation of trees.

Dr. Elton M. Smith, Jr., department of horticulture, Ohio State University, told the group what was new in research in arboriculture and landscape horticulture. He discussed nutrition, slow-release fertilizers, weed control, anti-desiccants, growth regulators and winter damage.

Smith said that the university is working with the Davey Tree Company in studying iron chlorosis in oaks. They've found that injection of iron sulfate into the trunk may be one of the better treatments as far as color recovery is concerned.

Another newer "tool" is leaf analysis. By determining what level of minerals and other nutrients are in the leaf vegetation experts can better recommend additions to correct problem deficiencies.

The extension horticulturalist reported that research on burlaps and various other container materials is underway to determine their lasting ability and their possible phytotoxicity. Polyburlaps examined after 18 months in the ground showed evidence of root penetration, he said.