

Scientific Progress Toward Landscape Beauty

Highlights U. of California Conference

New findings from research and field experience in turf, landscape tree, and nursery production were featured during a special conference on the University of California campus at Davis, Feb. 23-25.

Converging on the campus for the three-day meet were almost 500 golf course and park superintendents, city landscape officials, nurserymen, and others.

Durable Turf

Agronomist from the University of California, Victor P. Youngner, described UC studies which indicate that *Puccinellia*

distans, hybrid bermudas, and *st. augustinegrass* are most tolerant to adverse conditions. He also cited recent studies which have listed salt tolerance of various bermudagrass varieties.

"Requirements for special soils such as putting greens are fairly well understood, although there are different ways of solving the problem," commented UC Landscape Horticulturist John Madison.

"Our principal ingredient in this mix is going to be sand, but we need at least 10% clay if we are going to grow the best grass with the least trouble," he con-



Representatives from all areas of the landscape tree and turf field converged on the University of California campus for the three-day conference.



Booming turfgrass industry in California was topic of Turf Day chairman Robert Lateer (left), of the Loamite Division, Pope & Talbot, Inc., San Francisco. In the center, salinity tolerance in turfgrasses is described in studies presented here by UC agronomist Victor B. Youngner. Sod Industry growth in California as related to ready-to-use yards for new buildings was described by Edward Mutoza (right), of California Turfgrass Nursery, Inc.



Landscape representatives at the conference were (l. to r.): Ed Price of San Francisco, president of the Western Chapter, International Shade Tree Conference; Austin Carroll, Sacramento arborist; Tom Wilson, director of Richmond Recreation and Parks Dept.; and G. P. Robinson of Sacramento, program chairman for the landscape tree event, and chairman of the Western International Shade Tree Conference.

tinued. "More than 15% clogs the pores; less than 10% upsets the soil chemistry." Madison added that 10 to 20% organic matter will provide better fertility and water-holding capacity.

He pointed out that there are other, as yet untried, possibilities of solving the soil compaction problem in areas of heavy traffic.

"For example, we could try using lumps of clay suspended in a sand matrix. Or we could build a green of alternate vertical columns of sand and soil. The sand columns could carry the weight, the water and the air; while the soil could provide the fertile growing medium," he theorized.

The business of growing vigorous turf, then stripping off the sod and selling it by the square foot is booming in California, noted Ed Mutoza of the California Turfgrass Nursery during another "Turf Day" talk. Mutoza, of Patterson, Calif., said the industry is expanding rapidly and cited heavy use by golf courses, and demand for finished landscaping along with new homes, motels, and apartment houses, as the chief causes of growth.

"A number of turfgrasses, mostly varieties of bluegrass,

fescus, and bentgrass, are grown as sod in California," Mutoza noted.

Home Pools Damage Trees

Careful study of the tree and its environment, plus close contact with specialists in plant pathology and other sciences, is vital in troubleshooting with landscape trees, Sacramento arborist Austin B. Carroll reported.

"Swimming pools on the downhill side of a tree can increase soil moisture, and at times enough to damage trees," explained Carroll.

Systemic insecticide implantation in some landscape trees will be commercially feasible, forecasted entomologist Carlton S. Koehler from UC, Berkeley.

Steam Sterilization

California nurserymen should make more general use of sterilization of soil by aerated steam, UC Plant Pathologist Kenneth F. Baker advised. He presented



Examining a tree section above are (l. to r.) entomologist Carlton S. Koehler, landscape horticulturist Andrew Leiser, and turf and landscape specialist William B. Davis.

research on the process along with UC Extension Engineer Robert Brazelton.

"It appears that the use of aerated steam to sterilize soil batches is a relatively simple process for which equipment can be constructed locally and at a low cost exclusive of the steam source equipment," Brazelton explained.

ISTC's Western Chapter Sets May 15-18 for Its 33rd Annual Meeting in Fresno, Calif.

"Trees . . . Living Symbols of Our Natural Beauty," is the theme toward which discussions and studies will be directed during the 33rd annual meeting of the Western Chapter, International Shade Tree Conference, May 15-18.

Ed Price, chapter president, announces the four-day meeting will take place at the Del Webb Town House, Fresno, Calif. Price, who is assistant to the president of Davey Tree Surgery Co., San Francisco, says that final arrangements are now progressing toward a highly educational program.

Subjects to be presented include: "Highway Beautification—The Federal Interest," "Quality in Trees," "Beautification—The Arborist's Obligation and Opportunity," and "Street Problems at 50° Below—100° Above."

Arborists attending this convention will be given a complete presentation of Fresno's Fulton Mall renewal project. Speakers

will give details on the planning, construction, and economic aspects of this well-known urban redevelopment program.

Greater national interest in highway beautification, transformation of drab city streets to tree-lined avenues of splendor, use of more trees in parks, industrial sites, and in every area where land improvement can be realized, will be topics of the convention.

Following the established custom, a past president's breakfast will be held early in the morning, May 16. A luncheon and the annual dinner are to be highlighted with speeches of pertinent interest. Visits to the region's parks, renewal areas and a post-convention tour of Yosemite Park are also planned.

Participating in various parts of the convention are: Jack Rogers, vice president, Western Chapter, ISTC; Brian Fewer, Municipal Arborists Committee, San Francisco; Riley Stevens,

Book Review

Insects in Relation to Plant Diseases

by Walter Carter, John Wiley & Sons, New York, N.Y., 1962, 705 p., \$25.00.

Describing explicitly the insect's relation to plant disease, this three-part volume will be of special interest to learned contract applicators and nurserymen.

In his well-arranged, generously documented book, *Insects in Relation to Plant Diseases*, Dr. W. Carter has revealed many mechanisms by which fungi, bacteria, and viruses are transmitted by insects. Characteristics of disease conditions caused by insect feeding or egg-laying, insect infestations, and salivary toxins are meticulously described and clearly exemplified by numerous illustrations.

Of the 13, technically written chapters, seven deal with plant viruses. These chapters provide basic, up-to-date information on the biological nature, classification, vector relations, and ecology of viruses which cause plant diseases.

Chemical, cultural, biological, and insect vector control are methods explained in the last chapter which is devoted to control of viruses and virus diseases of plants.

Diseases of various plant groups are covered. Diseases of ornamental, shade, and fruit trees are discussed, and many agronomic crop diseases are included.

Readers interested in how organisms cause disease conditions in plants and how insects expedite plant infection are certain to benefit from this technical volume.

chapter past president; James Poindexter, of Sacramento, Utility Arborists Committee; Roy Wells, chapter past president; and Austin Carroll, Commercial Arborists committee, of Sacramento.

More information and reservations can be obtained by writing to the Parks and Recreation Department, City of Fresno, 890 W. Belmont Ave., Fresno, Calif. 93728, Att. Sam Setencich.