

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.