

December 1, 1985

USGA/GCSAA TURFGRASS RESEARCH PROGRAM

1985 SUMMARY OF RESEARCH

A. PFF

COLORADO STATE UNIVERSITY - Dr. Jack D. Butler,
Principal Investigator

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Development of Dryland Western
Turfgrass Cultivars

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1985 Grant - \$10,000 (first year
of support)

Western grasses grow successfully in arid regions on poor soil without the addition of water and fertilizer. Some of these grasses are adaptable to turf use. Changing economic conditions and water shortages have made it desirable to improve promising species to produce low maintenance turfgrasses for golf courses, parks, and lawns. The species which are receiving research attention at Colorado State University are alkaligrass (Puccinellia spp.), inland saltgrass (Distichlis stricta), blue grama (Bouteloua gracilis), and fairway wheatgrass (Agropyron cristatum).
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Field evaluation of these species is being conducted in spaced-plant nurseries composed of individuals representing the genetic diversity of up to eight western states and five foreign countries. Individual plants are being evaluated on their important characteristics in a selective breeding program for improved turf performance. In all, 198 accessions are now being evaluated for performance in turf plots under low maintenance conditions. Elite individual plants will be selected, cloned and moved to replicated isolated cross pollination plots to produce the next generation of improved progenies. This cycle of field evaluation of individuals followed by production of an advanced generation from selected parents will be continued until significant improvement is achieved. At that time, improved varieties will be released for turf use.

CORNELL UNIVERSITY - Dr. Richard W. Smiley,
Principal Investigator

Resistance of Bentgrass to Phialophora
and Leptosphaeria Diseases

1985 Grant - \$7,000 (First year of support. Dr. Smiley moved to Oregon State University as of November 1, 1985. This project is now on "hold".)