

PENNSYLVANIA AGRICULTURAL EXPERIMENT STATION
Pennsylvania State College
State College, Pennsylvania

USGA Green Section Cooperation - Research Grant \$500, April 22, 1946.
(Terminated)

Research Fellowship \$4,500 (Jim Watson)
\$1,500 a year for 3 years, February 7,
1947. (Terminated)

Research Fellowship \$6,000 (H. L. Wagner
Grant) \$2,000 a year for 3 years, July 1,
1948. (Payment completed)

Grant Contributed through G. S. Budget \$500
Fellowship (Watson) Contributed through
Education Fund \$5,060.

Fellowship (Wagner Grant) Contributed through
G. S. Budget \$6,000.

Aerification Research Fellowship (West Point
Lawn Products) Contributed through G. S.
Budget \$2,000.

Project Workers

H. B. Musser
H. W. Thurston
F. J. Holben
Albert E. Cooper
C. K. Hallowell
R. P. Pennington
C. D. Jeffries
J. O. Pepper
L. Neal Wright
Jack C. Harper
Robert M. Means
J. P. Stanford

USGA Green Section Projects

Studies of fairway management, compaction, irrigation and aeration
Weed control
Breeding and testing of bents and fescues
Strain testing
Studies on physical characteristics of soils
Disease control
Seed production studies
Soil Aeration

Other Projects

Production of improved strains of grasses (Musser and Wright)

Creeping bent - 225 selections, 50 under test for turf quality

Study of practicability of producing seed by polycrossing

Red fescue - 75 selections, 35 under test for clipping heights at State College and Beltsville

Studies in progress to determine whether type can be held in successive seed generations of improved strains

Kentucky bluegrass - 10 selections under turf quality test

Soil relationships to turf production

Potash-nitrogen ratios. Effects on growth rates and disease incidence, Holben, Jeffries, Musser

Ureaform as source of N. Comparison with other N carriers. Effect on growth, disease, weed invasion, Musser, Stanford, Watson

Effects of excess water and soil compaction (Watson). To be continued next two years by Harper.

Trace elements on golf course soils (Pennington)

Special Projects

Crabgrass control

Association of warm and cool season grasses

Association of improved strains of cool season grasses

Pre-seeding soil treatments with herbicides for weed control in seeding turf (Musser)

Highway slope control (Stanford)

Best adapted species

Production of seed mulching materials

Off-season seedings and companion plantings of crown vetch with one and two grasses

Disease Control Studies - at State College and Philadelphia (Thurston and Means)

Extension Work - A. E. Cooper

1949 - 202 demonstrations, field meetings and tours
6,500 individual contacts

Publications, Reprints and Reports

Progress Report - Maintenance Practices on Fairway Turf. James R. Watson.

Progress Report - James R. Watson. February 10, 1948.

Progress Report - Breeding Program of Special Purpose Turf Grasses. Neal Wright. July 1, 1949.

Progress Report - Comparison of Various Organic Materials for Use in Construction and Maintenance of Golf Greens. A. C. Richer, J. W. White, H. B. Musser and F. J. Holben. September 1949.

"Fairway Renovation with Weed Control Practices." M. E. Farnham and C. K. Hallowell. June 20, 1947.

"Evaluation of Various Organic Materials for Use in Construction and Maintenance of Golf Greens."

"Comparison of 2,4-D Formulations." May 1946.

Publications, Reprints and Reports (Continued)

- "Athletic Field Renovation." A. E. Cooper.
- "Fertilizer Suggestions where Reseeding is not Necessary."
- "Availability of Nitrogen from Various Carriers." 1947.
- "Compaction and Irrigation Studies on Compacted Turf." J. R. Watson, Jr.
- "Turf Disease Control 1948." Robert M. Means.
- "Crabgrass Comments." C. K. Hallowell. August 1949.
- "Athletic Field Turf." C. K. Hallowell. November 1949.
- "Effects of Soil Acidity and Available Phosphorus on Population Changes in Mixed Kentucky Bluegrass-bent Turf." H. B. Musser. Reprint from ASA Journal, Vol. 40, No. 7, July 1948.
- "Pest Control Materials, 1949, (Pa. and Maine), Pa. Progress Report #4. D. E. H. Frear, M. T. Hilborn, A. E. Prince.
- "The Effect of Burning and Various Fertilizer Treatments on Seed Production of Red Fescue." H. B. Musser. Reprint from ASA Journal, Vol. 39, No. 4, April 1947.