

BREEDING, EVALUATION AND CULTURE OF BUFFALOGRASS

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The following items are important to the long-term success of the buffalograss development project. This summary updates status on a new cultivar for release in 1989 and methods for propagating or marketing a new cultivar.

A. 1987 Synthetic for 1989 Turf-Type Buffalograss Cultivar.

A synthetic planting was made in June, 1987, using plant material selected for turf-type characteristics. This synthetic will be allowed to grow during 1987-1988 and seed will be harvested from all female clones. This seed will be available for testing either in late 1988 or early 1989.

B. Buffalograss Evaluation and Demonstration Plots.

Replicated tests have been initiated in Nelson, Nebraska and Stillwater, Oklahoma. Additional tests will be conducted in cooperation with the NCR-10 Regional Turfgrass Committee at regional sites and also at Cornell, Rutgers, Michigan State, Texas A&M-Dallas, and Colorado State. Demonstration plantings (non-replicated) have been made in Yuma, Arizona; Madras, Oregon; Marysville, Ohio and Bettendorf, Iowa.

C. Evaluation of Caryopses Time and Storage Conditions.

The caryopses in cold storage had a slightly lower germination than those stored at room temperature at 15 months. The high germination of the caryopses stored at room temperature will encourage further study into removal of the caryopses from the burr. (Caryopses: A small, dry, one-seeded fruit that remains joined with the seed in a single grain.)

D. Plug Prerooting Requirements.

The 1986-87 data shows that prerooting, as little as two weeks, will increase establishment rates for buffalograss allowing establishment during a single growing season.

E. Plug Fall Planting Study.

Plugs were planted September 4 and 16, and October 6 and 28, 1986. Observations from this study showed more rapid cover and better overall establishment with plots planted in September.

F. Collections.

Buffalograss was collected in seven south-central counties of Nebraska on July 7-8, 1987, in the counties of Iowa bordering on the Missouri River and in Missouri. Additional collections will be made in 1988 throughout the area of buffalograss adaptation.