

THE
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

AND

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE

AND

NORTH DAKOTA AGRICULTURAL EXPERIMENT STATION

AND

MINNESOTA AGRICULTURAL EXPERIMENT STATION

AND

SOUTH DAKOTA AGRICULTURAL EXPERIMENT STATION

ANNOUNCE THE
RELEASE OF 'FORESTBURG' SWITCHGRASS

'Forestburg' switchgrass (Panicum virgatum L.) was collected by the USDA, SCS, Plant Materials Center, Bismarck, North Dakota, and was developed and evaluated in cooperation with the USDA, ARS, Mandan, North Dakota. Forestburg was tested as SD-149(PI-478001) and jointly released with the North Dakota Agricultural Experiment Station, North Dakota State University, Fargo, North Dakota; the Minnesota Agricultural Experiment Station, University of Minnesota, St. Paul, Minnesota, and the South Dakota Agricultural Experiment Station, South Dakota State University, Brookings, South Dakota.

Forestburg is a composite of four accessions collected in Sanborn County near Forestburg, South Dakota, by John McDermid, SCS Plant Materials Specialist. Accession numbers of PM-SD-203, -205 and -206 were collected in 1956. PM-SD-62 was collected in 1961. Initial evaluations were conducted at the Bismarck Plant Materials Center 1957 through 1963. In 1963, seed was collected and composited from the four accessions. An initial increase field 0.5 acre was established in 1964. The phenology, forage yield and quality, animal performance and wildlife habitat potential have been documented in advanced evaluation studies and field plantings located in North Dakota, South Dakota and Minnesota.

Forestburg has demonstrated superior winter hardiness and persistence, seed production ability, and earlier maturity than other accessions. Forage production exceeds that of the northern seed source NDG-965-98 and is equal or greater than 'Nebraska 28' when grown at northern latitudes. Cultivars from southern sources ('Summer', 'Pathfinder', 'Blackwell' and 'Cave-in-Rock') initially produce more forage. However, pressures resulting from grazing, drought and winter injury, eventually reduce stands and decrease forage production of the southern cultivars. Except for higher seed yields, Forestburg is similar in performance and adaptation to 'Sunburst'. Animal performance (average daily gain) resulting from Forestburg is slightly higher than Pathfinder.

Mean flowering date (anthesis) for switchgrass has a northwest to southeast gradient in the northern Great Plains. Phenology evaluations at Fergus Falls, Minnesota, indicate Forestburg to be 24-27 days later than the northern source NDG-965-98. It is up to 3 days earlier than 'Nebraska 28' and 'Sunburst' and 21-30 days earlier than the southern cultivars 'Pathfinder', 'Blackwell' and 'Cave-in-Rock' which do not consistently produce viable seed at northern latitudes.

The primary area of adaptation and use of Forestburg is on sites where switchgrass is recommended for range and pasture seedings, wildlife habitat, natural area development, and revegetation of surface mines, critical area (waterways) and transportation corridors in North Dakota, South Dakota and Minnesota.

Breeder seed of Forestburg will be maintained at the USDA ARS, Northern Great Plains Research Laboratory, Mandan, ND 58554. Foundation and certified generations of seed increase beyond breeder seed are authorized. Foundation seed will be available from the USDA SCS, Plant Materials Center, Bismarck, ND 58502.

Release date for publicity purposes shall be effective on the date of final signature of the release notice.

Robert R. Shaw 2/6/87
 Acting Chief Date
 Soil Conservation Service
 Washington, D.C.

T. B. Kenney / MAR 10 1987
 Administrator Date
 Agricultural Research Service
 Washington, D.C.

August Stamburgh 12/10/86
 State Conservationist Date
 Soil Conservation Service
 Bismarck, North Dakota

H. R. Lund 12-10-86
 Director Date
 Agricultural Experiment Station
 Fargo, North Dakota

Deanne Johnson Acting 12-22-86
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 St. Paul, Minnesota

Richard J. Aasen 12/22/86
 Director Date
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