

ANNOUNCING THE RELEASE OF
BISMARCK GERMLASM PURPLE PRAIRIECLOVER
SELECTED CLASS OF NATURAL GERMLASM

by

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
BISMARCK PLANT MATERIALS CENTER
and

NORTH DAKOTA
AGRICULTURAL EXPERIMENT STATION

SOUTH DAKOTA
AGRICULTURAL EXPERIMENT STATION

MINNESOTA
AGRICULTURAL EXPERIMENT STATION

The United States Department of Agriculture, Natural Resources Conservation Service (NRCS); the North Dakota Agricultural Experiment Station; the South Dakota Agricultural Experiment Station; and the Minnesota Agricultural Experiment Station announce the release of a selected class of purple prairieclover (*Dalea purpurea* Vent.).

As a selected release, this plant will be referred to as **Bismarck Germplasm purple prairieclover**. It has been assigned the NRCS accession numbers ND-1481 and 9006032. The Plant Introduction Number is PI-599339. Bismarck Germplasm is released as a selected class of certified seed.

This alternative release procedure is justified because existing commercial northern sources of purple prairieclover are inadequate. There is a high demand for a northern source for increased diversity in range seedings, range renovation, wildlife habitat and related conservation practices benefiting from the addition of a native forb component. There are no northern adapted cultivars of purple prairieclover.

Collection Site Information: Bismarck Germplasm purple prairieclover originated from one pound of seed collected by Tom Pozarnsky in 1975 from Lyman County, located in south central South Dakota, approximately 5 miles east of Presho.

Description: Bismarck Germplasm purple prairieclover is a warm-season native perennial legume that will reach heights of 1-2 feet. It can be distinguished by its alternate, pinnately compound leaves and multiple, upright stems that arise annually from a woody crown. Flowers are purple and born on terminal spikes that are cone-shaped and supported by an extensive taproot system. Reproduction is by seed. It initiates plant growth in May, flowers between July and August with seed maturing in September (Sedivec and Barker 1997).

Method of Selection: Bismarck Germplasm purple prairieclover was compared to ten purple prairieclover collections from North Dakota and South Dakota. The Bismarck Plant Materials Center evaluated the 11 accessions for vigor, foliage abundance, and seed production. Bismarck Germplasm purple prairieclover was evaluated from 1977 to 1982 and was selected for its superior vigor and foliage abundance and above average seed yield.

Environmental Impact Assessment: Bismarck Germplasm purple prairieclover is a selection of naturally occurring germplasm that has been unaltered from its original collection. This selection is not invasive based on the assessment worksheet and guidelines set forth by the NRCS Plant Materials Program.

Conservation Use: Bismarck Germplasm purple prairieclover is designed for use as a legume in range and pasture seeding mixtures, wildlife habitat development or enhancement, native rangeland restoration, prairie landscaping, and many other vegetative practices promoting diversity. It is nutritious and palatable forage for many species and classes of livestock and wildlife.

Potential Area of Adaptation: The area of adaptation has not been tested. Bismarck Germplasm purple prairieclover is expected to perform well on those soils/sites suitable for the species where naturally occurring in North Dakota, South Dakota, Minnesota, northern Nebraska and eastern portions of Montana and Wyoming. Bismarck Germplasm purple prairieclover is adapted to a wide variety of soil types, preferring well drained, shallow to thin upland sites on ridges and steep slopes. It is adapted to areas that receive a minimum of 12 inches of annual precipitation.

Availability of Plant Materials: Generation 1 (G1) seed will be maintained by the Bismarck Plant Materials Center and is available in limited quantities for commercial seed increase. Seed will be distributed through the North Dakota State University Foundation Seedstocks Program as a selected class (green tag) of natural germplasm. Certification is limited to four generations.

References:

Sedivec, K. K., and W. T. Barker. 1997. Selected North Dakota and Minnesota Range Plants. North Dakota State University Extension Service Publication EB-69, Fargo, ND. 270 pp.

Prepared by:

Wayne L. Duckwitz, USDA-NRCS, Plant Materials Center, 3308 University Drive, Bismarck, North Dakota 58504.

Approvals for Release of:

Bismarck Germplasm purple prairieclover (*Dalea purpurea* Vent.)

Director, Ecological Sciences Division
United States Department of Agriculture
Natural Resources Conservation Service
Washington, DC

Date

State Conservationist
United States Department of Agriculture
Natural Resources Conservation Service
St. Paul, MN

Date

State Conservationist
United States Department of Agriculture
Natural Resources Conservation Service
Bismarck, ND

Date

State Conservationist
United States Department of Agriculture
Natural Resources Conservation Service
Huron, SD

Date

Director
University of Minnesota
Agricultural Experiment Station
St. Paul, MN

Date

Director
North Dakota State University
Agricultural Experiment Station
Fargo, ND

Date

Director
South Dakota State University
Agricultural Experiment Station
Brookings, SD

Date