

**USDA-NATURAL RESOURCES CONSERVATION SERVICE
NOTICE OF SOURCE IDENTIFIED PLANT RELEASE
PURPLE PRAIRIE CLOVER**

The USDA-Natural Resources Conservation Service (NRCS), the University of Northern Iowa (UNI), the Iowa County Integrated Roadside Vegetation Management Program (IIRVMP), the Iowa Department of Transportation (IDOT), and the Iowa Crop Improvement Association (ICIA) announce the release of source identified (Southern Iowa) germplasm of purple prairie clover, *Dalea purpurea*.

The purple prairie clover has been assigned the NRCS accession number 9068609.

Origin:

Southern Iowa Counties

Ecotype Description:

Purple prairie clover is a native, warm season legume, erect, and typically grows to a height of 30 to 90 cm. Several stems may grow from a single base. The flowers are pinkish-purple on elongated spikes which are 2 to 4 cm. long. The flower head at the end of wiry stem in cylindrical, with a fringe of rosy petals on a partly bare cone. Purple prairie clover flowers the last of May through September. The leaves are divided into 3-5 narrow leaflets which may be sparingly hairy; leaflets are usually less than 1 inch long and about 1/8 inch wide, with a slight fragrance when crushed; leaves are alternate and compound.

Purple prairie clover occurs in prairies, rocky open glades, along railroads, and rocky or open woods. It ranges from Indiana to Saskatchewan and Montana, South to Tennessee, Arkansas, Texas and Mexico; also in Alabama and introduced east to New York. It is most abundant in upland of the true prairie. It also occurs in sand prairies, hill prairies, and gravel-hill prairies.

Management:

Purple prairie clover seeds per pound average 300,000. A seeding rate of 2.5 pounds of pure live seeds (PLS) is adequate for a 30" row in seed production plantings. Plants are cross-pollinated. For isolation requirements, purple prairie clover should be spaced a minimum of 900 feet from any other different purple prairie clover selection. Seed should be planted 1/4 inch deep in a firm relatively weed free seedbed. Seedling vigor is good and stands are comparatively easy to establish where competition is controlled.

Mowing above the height of the purple prairie clover has been used to reduce competition when weeds begin to severely encroach into the planting.

Available chemical sprays for use in the establishment of purple prairie clover are limited. Post-emergence broadleaf sprays have been used during purple prairie clover establishment.

Seed yields are good and can be harvested with a combine. Yields of 200 (PLS) pounds per acre have been commonly harvested on managed stands.

Site Description:

Purple prairie clover is adapted to dry or Mesic prairie soils throughout the tall grass region. The number of collections from each zone in Southern Iowa guarantees the adaptation of releases to the entire zone.

Collections of purple prairie clover from east to west across Iowa prevent positive assessment of all pollination or chromosome characteristics.

Climate:

The average annual temperature is 48 degrees Fahrenheit. July is the warmest month with an average high of 85 degrees and low of 64 degrees. January is the coldest month with an average high of 27 degrees and low of 8 degrees. The average annual precipitation for this region is 30 inches with much of this coming during the growing season. The average frost-free growing period runs from April 30 to October 6.

Availability of Plant Materials:

Breeders material is being produced by the Plant Materials Center, Elsberry, Missouri and the University of Northern Iowa (UNI) at Cedar Falls, Iowa. Source identified seed will be released to interested commercial seed growers.

Release Approved By:

Roger A. Hansen, Chairman, PM Advisory Committee, NRCS Missouri State Conservationist	7/27/98
Robert D. Koob, President, UNI	8/17/98
Daryl D. Smith, Program Director, IRVM	8/25/98
Leroy Brown, Iowa State Conservationist, NRCS	8/31/98
Robert E. Lawson, Secretary/Treasurer, ICIA	8/27/98
Steve Holland, Representative, IDOT	8/25/98

References

Prairie Plants of Illinois; pp. 226-227; Voigt, John W. and Mohlenbrock, Robert H.; Both from Southern Illinois University, Edwardsville, Illinois.

The Prairie Garden, 70 Native Plants You Can Grow in Town or County; pp. 160-161, Smith, J. Robert and Smith, Beatrice S., University of Wisconsin Press, Madison, Wisconsin 1980.

Wildflowers of the Tallgrass Prairie, The Upper Midwest, p. 243; Runkel, Sylvan T. and Roosa, Dean M., Iowa State University Press, Ames, Iowa 1989.

Flora of Missouri; p. 1498; Steyermark, Julian A., Iowa State University Press, Ames, Iowa 1963.