

USDA-Natural Resources Conservation Service

Notice of Source Identified Release

Roundhead Lespedeza

The USDA-Natural Resources Conservation Service (NRCS), the University of Northern Iowa (UNI), the Iowa Integrated Roadside Vegetation Management Program (IRVM), the Iowa Department of Transportation (IDOT), and the Iowa Crop Improvement Association (ICIA) announce the release of a Source Identified Southern Iowa Germplasm of roundhead lespedeza, *Lespedeza capitata*.

The roundhead lespedeza has been assigned the NRCS accession number 9062283.

Origin: Southern Iowa

Ecotype Description:

Roundhead lespedeza is a tall (three and a half to four feet) warm season perennial native legume. Its stems are stiffish and relatively stout, simple below or with upright branches, 0.6-1.2 m. high; petioles short; leaflets thickish; heads of flowers subglobose, subsessile or on peduncle shorter than leaves, very dense; calyces 7-13 mm. long, villous, closely overlapping, the inner ones hidden, greatly exceeding the legume; minute cleistogamous and apetalous flowers hidden among the others; corolla creamy-white, the standard with a purple spot at base.

Roundhead lespedeza seeds per pound average 154,000. A seeding rate of 40 pure live seeds (PLS) per linear foot (4.5 pls pounds per acre) in 30 inch rows for seed production is sufficient. Rates for pasture seeding should be (8 to 10 bulk pounds/acre). Seed should be planted 1/4 to 1/2 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 roundhead lespedeza has been used to reduce competition when weeds begin to severely encroach into the planting. This procedure is probably the best way to control unwanted weed invasion.

Seed yields are good and can be readily harvested with a combine. Yields of 250 to 300 pounds per acre have been commonly harvested on managed stands.

Collections of roundhead lespedeza from east to west across Iowa prevent positive assessment of all pollination or chromosome characteristics. Plants are self-pollinated. For isolation requirements, roundhead lespedeza will be considered self-pollinated.

Lespedeza is adapted to soils of a lower fertility level than the clovers and alfalfa; which makes a place unchallenged for these legumes. Although the plants are quite drought-resistant, they are not adapted to dry-land farming because they cannot take full advantage of early spring moisture supplies. The number of collections from each zone in Iowa guarantees the adaptation of releases to the entire zone.

Site Description:

Collections were made from the following locations (see attached) and included in the composite roundhead lespedeza, Southern Iowa origin (9062283).

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.

References

Forage Crops; pp. 93-101; Ahlgren, G. H.; Rutgers University, New Jersey, 1949.

Gray's-Manual of Botany, pp. 926-927; Fernald, M. L.; Harvard University, Boston, Mass, 1950.

Flora of Missouri; p. 932; Steyermark, J. A.; Iowa State University Press, Ames Iowa, 1968.

A Field Guide to Wildflowers; p. 80; Peterson, R. T. and McKenny, M. Houghton Mifflin Company, Boston, Mass, 1968.

Monomorphism, Reduced Gene Flow, and Cleistogamy in Rare and Common Species of Lespedeza (Fabaceae), pp. 567-574; Cole, Christopher T. and Biesboer, David D., University of Minnesota, St. Paul, Minnesota, 1992.

The United States Department of Agriculture (USDA) prohibits discrimination in all its programs on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write the USDA, Director, Office of Civil Rights, Room 326W, Whitten Building, 14th and Independence Avenues, SW. Washington, D.C., 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.