

Establishment

Reno Germplasm is established from seed. The recommended seeding rate is 2 1/2 pound PLS per acre for a pure stand. For rangeland and critical area treatment, 1 pound PLS per acre is recommended for inclusion within the seeding mixture. Seed should be planted at a depth of 1/2 to 1 inch. The seed should be inoculated with Desmanthus Spec. 1 type of inoculum. Scarification of the seed that may improve germination, particularly where "hard" seed comprises a large percentage of the lot. Seedlings may be made in early spring or late fall. A late fall seeding may prechill and stimulate better emergence of hard seed. Non-hard seed normally germinates in 7 to 14 days. Seedling vigor is very good.

Availability

Generation 1 seed, equivalent to foundation seed, is available from the USDA, NRCS Plant Materials Center at Manhattan, Kansas. Contact your local USDA, NRCS Field Office or the Manhattan Plant Materials Center for a list of commercial vendors who handle the material.

Plant line drawings reproduced from *Legumes for Erosion Control and Wildlife, USDA, Miscellaneous Publication No. 412.*

For More Information

Visit our Plant Materials Internet site at <http://Plant-Materials.nrcs.usda.gov> to find more information on solving conservation problems using plants.

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Reno Germplasm Illinois bundleflower



An improved conservation plant developed by the Manhattan Plant Materials Center, Manhattan, KS



Reno Germplasm Illinois Bundleflower

Reno Germplasm Illinois bundleflower [*Desmanthus illinoensis* (Michx.) MacM.] was released as tested class material in 1999 by the Natural Resources Conservation Service (NRCS).

Reno Germplasm is recommended for use in rangeland, wildlife habitat improvement, critical area seeding treatments, and in roadsides, parks, and recreation areas for stabilization and beautification.

Description

Reno Germplasm is a native, warm-season, perennial legume. Plants are deep rooted, upright, spreading, and grow to a mature height of 2 to 4 feet. Somewhat woody in the lower stem, the leaves are compound with 20 to 30 pairs of small linear leaflets. Growth begins in late spring with flowering occurring from June through



September. The seed pods are grouped into round, dark brown bundles with pods 3 to 4 times as long as wide. Each pod contains 2 to 6 beans that may burst open when mature to disperse the seed. There are approximately 85,000 seeds per pound.

Palatability and nutritious quality for the species is rated as good for livestock and wildlife. The seeds are used by numerous species of wildlife.

Adaptation

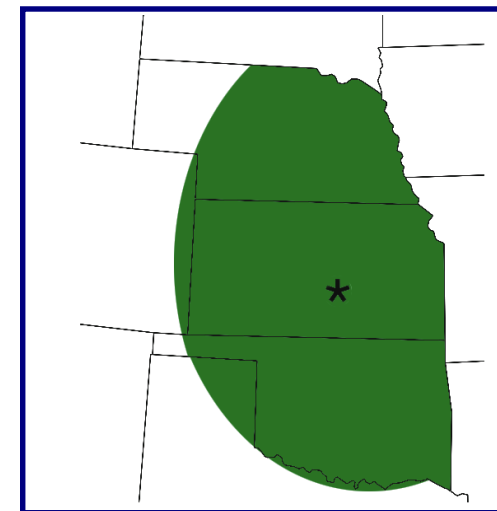
This species is found through much of the Great Plains from North Dakota south through eastern Colorado to New Mexico and Texas and east to Ohio and Florida. It is adapted to most soil types, but does not tolerate coarse sands and dense clays. It has good drought tolerance, but performs best in areas with at least 16 inches of annual precipitation. It is most commonly found in moist depressions and tolerates moderate flooding. It can tolerate moderate salinity and alkalinity levels. Reno Germplasm has application for use in Oklahoma, Kansas, and Nebraska. The projected area of adaptation for Reno Germplasm is represented on the map. Although the potential range of adaptation may be greater than that shown, performance outside of the shaded area has not been adequately tested.

Origin

Reno Germplasm Illinois bundleflower originated from seed collected from native plants growing near Lake Cheney in Reno County, Kansas (USDA Plant Hardiness Zone 6a). Annual precipitation for Reno County is approximately 29

inches. The growing season is 181 days with the average daily maximum temperature of 68.2 F. and the average daily minimum temperature of 43.7 F.

Origin* and Projected Area of Adaptation



Management

Plantings may take two full growing seasons for full establishment and production. Weed control is essential during the establishment period. Seed fields may be harvested by direct combining.

Plantings should be well established before livestock grazing is permitted. The species responds to grazing as a decreaser, rapidly declining under too intense defoliation. Tolerance to burning is fair while in a dormant state. The species is compatible with climax dominants of tallgrass prairie.