

Missouri Germplasm Prairie Coreopsis

Prairie coreopsis, *Coreopsis palmata* Nutt., is a native perennial forb which grows 1 to 3 feet high. Many alternate, simple leaves, each 2 to 3 inches long, grow along the stiff stem with yellow flowers on top. Each leaf has three long, narrow lobes, giving it the appearance of a crow's foot. The rootstock is horizontal.

Cooperating agencies in these releases are Natural Resources Conservation Service (NRCS), Missouri Department of Conservation (MDC), and Missouri Audubon Society (MAS).

Missouri Germplasm Prairie Coreopsis is recommended for use in plantings for prairie restoration, Crop Reserve Program (CRP) diversity, wildlife food and habitat, roadside revegetation, parks, and gardens. Zones 1, 2, 3, and 4 are recommended for planting within their zones of origin.

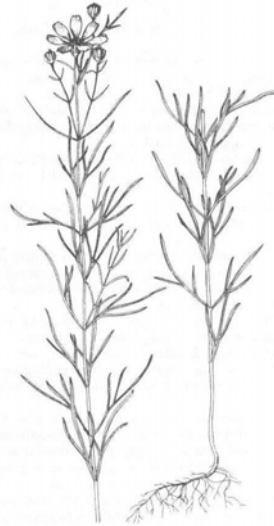
Coreopsis palmata is a desirable component in warm-season grass mixtures. It is an excellent food source for a wide variety of wildlife species especially turkey.

Description

Prairie coreopsis is a moderately long-lived native perennial forb that grows 12 to 28 inches tall. Each plant has several bushy stems arising as a clump from several short rhizomes. Stems are copiously branched and woody textured. Leaves are opposite, sessile, deeply three-lobed, linear, oblong like the footprints of a shore-bird. Leaves are alternately arranged and crowded on the stem. The flowers, which bloom from late May to August, are yellow. Pistillate ray flowers are .2-.4 inch and toothed, surrounding a .3-.4 inch yellow staminate flower disk on a .4-2 inches stem. Fruits are brown, oblong and flat, about .1 inch broad.

Origin

Collections were made from within geographic zones. Zone 1 is the Missouri Glaciated Plains (all counties within the political boundaries of Missouri north of the Missouri River); zone 2 is the Osage Plains region in western Missouri; zone 3 represents the Ozark region in central and southern Missouri and zone 4 are counties located in the Bootheel.



Flora of Missouri
Julian A.
Steyermark,
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Garden
St. Louis, Mo.

Adaptation

Prairie coreopsis is native to the northern tallgrass prairie region. It prefers well-drained upland sites, but will tolerate all but saturated soils. This species is scattered through all but the northernmost tallgrass region, from eastern South Dakota to northeastern Oklahoma and east through northwestern Indiana into Michigan.

Missouri Germplasm Prairie Coreopsis originated from counties located within its corresponding zone. Each zone serves as the geographic area represented by the genetic material of the parent seed. The

potential market of the end product is commercially available Missouri Ecotype seed.

Recommended Area of Use of Missouri Germplasm Prairie Coreopsis



Establishment for Commercial Production

This species germinates well if seed is planted in the field in the fall (November-December). Planting at a rate of 4 seeds per row foot at a depth of .1 inch is advised. If production plot is to be started from seedling plants, seed needs stratification for 8 weeks. Spread seed on a germination tray and place in refrigeration (35° to 40°F) for about 8 weeks. Remove and place in a sunny location where the soil temperature will rise to 77°F. When seedlings grow 2-3 sets of true leaves, remove and pot in containers at least 3-4 inches deep and 1.5-2 inches across or in plug tubes. Check seedling soil for root filling after about 6 weeks in the greenhouse. Plant the potted seedlings in the ground about 12 inches apart. Irrigate after planting.

Management

In seed production plots, weed control can be accomplished by mowing over the height of the coreopsis plants or cultivating between the rows and with grass herbicides. This species is fairly drought-tolerant. The plants spread not only by seed, but by underground shoots. Older plants

form large colonies. Irrigate only during drought conditions at the time the plants are in mid flower and when they are setting seed. Too much water will cause the root to rot. Remove dead plant material before new growth emerges in subsequent years.

Prairie coreopsis can be included in CRP and prairie planting mixtures at <1% or 1 seed/2sq ft. Number of seed per gram averages 400 which extrapolates to 181,600 per pound. Some seed will germinate the first season and some the second. When included in a short or tall grass planting, burning during the dormant season is the only maintenance necessary. Mowing after maturity will scatter seed.

Availability

G0 and G1 seed of Missouri Germplasm Prairie Coreopsis has been allocated to Missouri seed growers by the USDA-NRCS.

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For More Information

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

USDA-NRCS
Elsberry Plant Materials Center
2803 N Hwy 79
Elsberry, Missouri 63343
Phone: 573-898-2012
Fax: 573-898-5019

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