

### Seeding Rate (Prairie Planting)

For prairie plantings, pale purple coneflower should be a small component of a mixture ranging from 0.1 - 1.0 pound pure live seed (PLS) per acre (0.2 - 2 PLS per square foot).

### Seeding Rate (Seed Production)

**Direct Seeding** - Seeding rates for seed production should be about 5.5 - 6.5 pounds (PLS) per acre in 30 - 36 inch rows (30 - 40 seeds per row foot). For solid stand, the seeding rates should be 12 - 16 pounds PLS per acre (30 - 40 seeds per square foot).

**Greenhouse** - Seed needs to be stratified for 12 weeks at 40 degrees F when establishing plugs in the greenhouse. Plant the seed 1/8 inch deep two months before last frost free date. Harden-off plants and transplant into bare soil in rows or weed-barrier at 8 inch intervals.

### Management

Reduce weed competition by mowing over the height of the pale purple coneflower plants or cultivation between the rows. For grassy weed control, usage of a post emergence grass herbicide can provide control, and will encourage a good stand. Remove dead plant material in the spring for faster green-up by shredding. Burning of dead plant refuge can weaken the plants unless done before it has broken dormancy.

### Availability

Foundation seed of Northern and Western Missouri Germplasm pale purple coneflower are being produced in limited supply by the Elsberry Plant Materials Center (PMC).



Northern Missouri Germplasm Pale Purple Coneflower Production Plot

### For More Information

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

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United States Department of Agriculture  
Natural Resources Conservation Service

## Missouri Germplasm Pale Purple Coneflower *Echinacea pallida* (Nutt.)



**A Source-Identified  
Conservation Plant  
Developed by the  
Elsberry  
Plant Materials Center  
Elsberry, Missouri**

Northern and Western Missouri Germplasm Pale Purple Coneflower, *Echinacea pallida*, Nutt.

Pale purple coneflower is a native forb and member of the aster family (Asteraceae). It performs best when planted with other forbs and legumes in a prairie seeding mixture.

The USDA-Natural Conservation Service (NRCS), Elsberry Plant Materials Center announces the release of source identified ecotypes of pale purple coneflower (*Echinacea pallida*, Nutt.) from northern Missouri (counties north of the Missouri River) and western Missouri counties, from Jackson to Saline, south to Jasper county and east to Greene county.

### Description

Pale purple coneflower is a native perennial forb growing to a height of 3 feet with coarse bristly hairs on the stout stems and leaves. The leaves are rough-surfaced, up to 10 inches long and 1 1/2 inches wide, and tapering at either end, with several parallel veins running along their lengths. The basal leaves are on long stalks, while the stem leaves are few, and usually lack long stalks. There is a single showy flower head at the top of each stem, with many drooping, pale purple petal-like ray flowers, each up to 3 1/2 inches long, surrounding a broad, purplish brown, cone-shaped central disk. Pale purple coneflower flowers in late spring to midsummer. Pale purple coneflower has 106,000 seeds per pound.

### Adaptation

Pale purple coneflower prefers mesic to dry mesic soil conditions well-drained upland soils, in full sun.

Pale purple coneflower occurs throughout the tallgrass prairie biome, and common on limestone glades, barren, bald knobs, fields, along railroad, and prairie, rarely in dry rocky woods..

### Availability

G1 material of Northern and Western Missouri Germplasm Pale Purple Coneflower is being produced in limited supply by the Elsberry Plant Materials Center.

In the photo to the right, seed from pale purple coneflower (increments are 1/16")



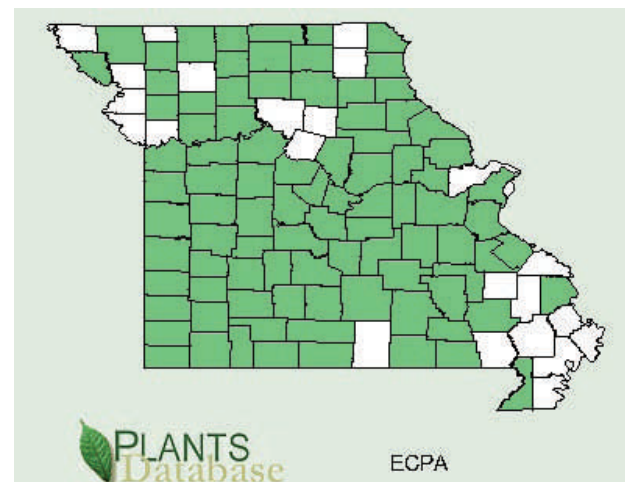
Below a seedling pale purple coneflower plant



Photos by Don Kurz

### Area of Intended Use for Northern Missouri Germplasm Pale Purple Coneflower

Northern and Western Germplasm Pale Purple Coneflower's recommended area of use are counties located in the Northern and Western Missouri. This release can also be used in other parts of Missouri, Southern Iowa and Eastern Kansas.



### Known Distribution

This map shows documented existence for pale purple coneflower within Missouri.

The range of the species is from Illinois and Michigan to Minnesota and Nebraska, south to Georgia, Alabama, Louisiana, and Texas.

### Establishment

Prepare a clean weed free seedbed by disking and harrowing or using chemical weed control. Firm the seedbed by cultipacking. Seedbed should be firm enough to allow seed to be planted 1/8 inch deep. The seed of pale purple coneflower should be dormant seeded for best results, as the seed needs cold moist stratification for two months (60 days) in a cold, moist environment (35 - 40 degrees Fahrenheit). This is the usual time required to break dormancy; however, some seed may require up to three months. Use no fertilizer the establishment year unless soil test indicates a low deficiency of less than 15 PPM of phosphorus and or less than 90 PPM of potassium. Use no nitrogen during the establishment year as this can encourage weed competition.