

# Plant Fact Sheet

## ***Gray-headed Coneflower*** ***Ratibida pinnata* (Vent.) Barnh.** plant symbol = RAPI

Contributed by: USDA NRCS Elsberry Plant Materials Center



### Alternate Names

Drooping Coneflower  
Gray Coneflower

### Key Web Sites

Extensive information about this species is linked to the Plants web site. To access this information, go to [plants.usda.gov](http://plants.usda.gov), select this plant, and utilize the links at the bottom of the Plants Profile for this species.

### Uses

Gray-headed coneflower can be used for roadside plantings, prairie restoration, wildlife cover, landscaping, and plant diversity in prairie communities.

### Status

Please consult the [plants.usda.gov](http://plants.usda.gov) and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

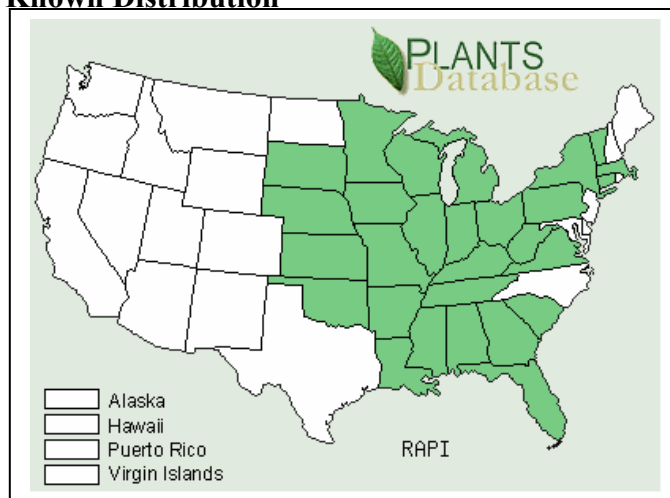
### Description

Gray-headed coneflower is a native perennial forb growing up to 4 feet tall on a hairy, slender stem. The leaves are pinnately compound, mostly with five to seven lanceolate segments with harsh and scurty surfaces (Bruggen 1976). The basal leaves are on long stalks, with the blade of the leaf up to 7 inches long. The upper leaves are smaller and often undivided. Flower heads are about 3 inches wide and on long individual stalks. Each head has a bullet-shaped disk, gray at first and then becoming brown with age. The disks less than 1 inch tall and usually taller than wide, surrounded by up to 13 downward-pointing, yellow, petal-like ray flowers. The seed heads are sharply aromatic when crushed.

### Adaptation

Gray-headed coneflower grows best in sunny locations with well-drained loam, clays and sandy soils, prefers calareous soils that are neutral pH 6-7.

### Known Distribution



## 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. Gray-headed coneflower is best **seeded in the winter** dormant **period** because the seed needs cold, moist stratification for two months at (35-40 degrees F.). This is the usual time required to break dormancy; however, a few require one month or three months. Use a planter that insures proper seeding depth and good seed and soil contact like a billion roller that is capable of handling and placing seed in a uniform manner. There are approximately 480,000 seeds in a pound of gray-headed coneflower.

## Seeding rates for gray-headed coneflower:

For seed production:

Solid stand – 40 pure live seed (PLS) per square foot or 3.6 pounds PLS per acre.

Wide row (beds) planting:

Seeding rate in 3 foot beds with 3 foot fallow between beds. 3.6 pounds PLS per acre on planted beds. Plugs can also be planted on 1 foot spacing.

Seed production at the Elsberry Plant Materials Center has ranged from 100 to 250 pounds bulk per acre.

Prairie planting: mixture 1 – 5 PLS per square foot (0.1 to 0.5) pound PLS per acre).

Apply 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.

## Management

Reduce weed competition by mowing over the height of the gray-headed coneflower plants or cultivating between the rows. Use a non-selective contact herbicide while dormant or a pre emergent herbicide to control annuals or a post emergent grass herbicide to control grass competition after the gray-headed coneflower is established. 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.

## Pests and Potential Problems

Gray-headed coneflower has been grown at the Elsberry Plant Materials Center for 3 years, and there have been no indications of problems with any kind of pests.

## Cultivars, Improved, and Selected Materials (and area of origin)

According to the publication entitled ‘Improved Conservation Plant Materials Released by NRCS and Cooperators through September 2002’, there is only one cultivar released, ‘Sunglow’ grayhead coneflower. There was no source identified, selected or tested class releases of gray-head coneflower released from the Plant Materials Program.

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May 2003

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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS <<http://plants.usda.gov>> and Plant Materials Program Web sites <<http://Plant-Materials.nrcs.usda.gov>>.

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