



United States Department of Agriculture
Natural Resources Conservation Service
Plant Materials Program

'Sunglow' Yellow Coneflower

Ratibida pinnata (Vent.) Barnh.

A Conservation Plant Release by USDA NRCS Manhattan Plant Materials Center, Manhattan, KS

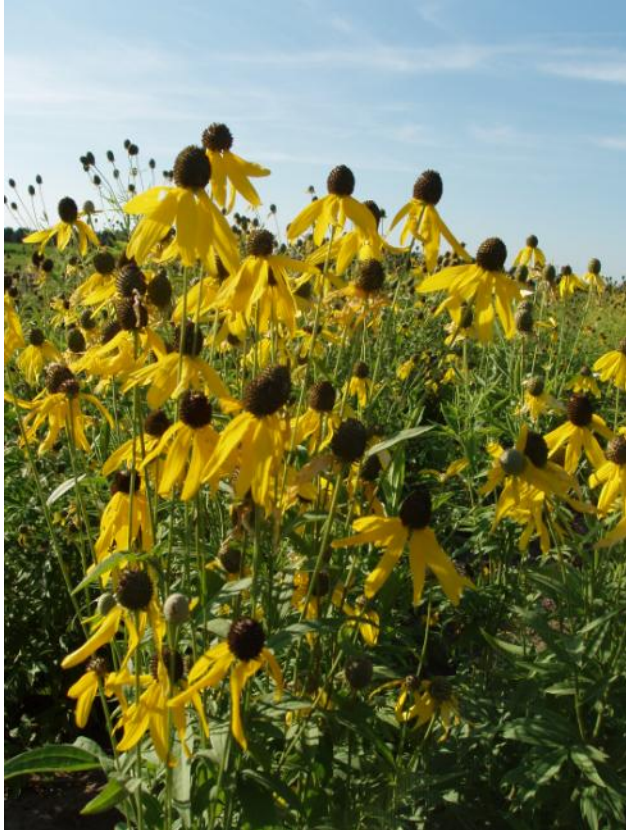


Figure 1. Field of yellow coneflowers in full bloom.
Photograph by R. Alan Shadow, East Texas PMC.

'Sunglow' yellow coneflower (*Ratibida pinnata*.) is a cultivar released in 1978 in cooperation with the Nebraska Agricultural Experiment Station.

Description

Yellow coneflower is a member of the *Asteraceae* family. It is a native, perennial wildflower with erect, grooved stems that are either single or clustered. Leaves are alternately attached to the stem with long stalks below and nearly sessile higher up the stem. The pinnately divided leaves have from three to seven lanceolate segments. The stems grow from 2 to 5 feet tall and are topped by an inflorescence of ray and disk flowers. The flowers have between 5 to 10 yellow petals (ray) that droop down toward the stem with the distinct "cone" or disk flowers in the center. The fruit is an achene which are short, flattened, containing tips without bristles or scales and enclosing a small seed.

Source

Sunglow was collected in 1967 in Greenwood County, Kansas and tested as PMK-1153. Plants of PMK-1153

consistently rated excellent in vigor. PMK-1153 was selected for further evaluation in 1972 because of overall consistent performance and vigor.

Conservation Uses

Yellow coneflower is used for roadside plantings, park beautification, prairie restorations, landscaping, wildlife food and cover, and to increase plant diversity in natural and man-made prairie communities. The yellow coneflower flowers attract native pollinators throughout the summer, and its seeds are sought by birds in the late fall. When juvenile the plant provides good grazing; however with age the stems become woody and are less palatable to livestock.

Area of Adaptation and Use

Sunglow is adapted to the eastern 1/3 of Kansas and Nebraska and the southeastern portion of South Dakota, northeastern Oklahoma, and western Iowa and Missouri. It is most abundant on moist, alkaline soils.

Establishment and Management for Conservation Plantings

Stands of this species can be readily established from seed. Plantings can be made either in the spring or fall of the year. Spring seeding may require the seed to be stored at close to the freezing point for at least 30 days. Thus for best germination the seed should be stratified when sown in the spring. The planting will require a clean, firm, weed-free seedbed for best results. A mowing treatment may be required to reduce annual weed competition in new plantings. A 6 to 8 inch mowing height should check vigorous annual weed growth and still allow sunglow to grow and survive. To plant a diverse prairie restoration or a wild flower planting a seeding rate of 2 ounces per acre with an overall ¼ to ½ pound of total forb seed per acre should plant a very diverse species mixture. Application of fertilizer the establishment year is discouraged unless the soil levels of potassium and phosphorous are extremely low. Absolutely no nitrogen fertilizer should be applied since it will, in large measure, promote annual weed growth.

Ecological Considerations

The plant has relatively few insect and disease problems. It is used for food in the fall by many bird species which can cause problems for seed producers.

Seed and Plant Production

Propagation of Sunglow is best accomplished by planting seed or achenes. A prepared firm, clean, weed free seedbed should be prepared by disking, harrowing and cultipacking the site prior to the planting date. Perennial

weed problems should be eliminated from the site prior to seeding. In fact a fallowed site with no perennial weeds and no chemical residue would be ideal. A drill equipped with a legume box and depth bands should be used to precisely place seed at ¼ to ½ inch deep in the soil. A monoculture planting in 24 to 36 inch rows at 30 pure live seeds per linear foot of row should provide a good stand. Harvest in the fall with a standard combine and clean with a fanning mill to produce saleable seed. A ten year average of seed production at Manhattan, Kansas yielded 129 pounds of Sunglow seed per acre. The average purity of those seed lots was 90.12% with an inert component of 9.87%. Germination percentage of seed from that same 10 year cycle had an average germinated 86.4% with a hard or dormant seed percentage of 1.5. The field seemed to lose its seed production ability at the end of the ten year cycle.

Availability

For conservation use: This cultivar is available commercially from seed vendors, but probably not a certified version of the seed.

For seed or plant increase: Breeder and foundation seed can be obtained from the Manhattan Plant Materials Center. There is no registered class of Sunglow yellow coneflower available.

For more information, contact:
Manhattan Plant Materials Center,
3800 South 20th Street
Manhattan, KS 66502
(785) 539-8761 FAX (785) 539-2034
<http://www.plant-materials.nrcs.usda.gov>

Citation

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For additional information about this and other plants, please contact your local USDA Service Center, NRCS field office, or Conservation District <<http://www.nrcs.usda.gov/>>, and visit the PLANTS Web

site <<http://plants.usda.gov>> or the Plant Materials Program Web site <<http://www.plant-materials.nrcs.usda.gov>>

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