

## PLANT MATERIALS TECHNICAL NOTE

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### BLANKETFLOWER *Gaillardia aristata*

#### A Native Conservation Wildflower for Use in the Northern Great Plains and Rocky Mountains

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**Figure 1. Meriwether Germplasm blanketflower seed production field at the Bridger Plant Materials Center.**

#### General Description

Blanketflower is a native, perennial, tap-rooted wildflower with showy yellow ray flowers surrounding the central reddish-brown disk flowers. The pubescent plants vary from 10 to 24 inches in height. Leaves are arranged alternately along the stem and are 3 to 6 inches long with margins that are coarsely-toothed and deeply divided. It has an extensive bloom period beginning in June until seed set in mid- to late summer.

#### Adaptation or Range

Blanketflower is found from south-central Canada to southern Colorado, east to the Dakotas and west to the Cascade Mountains of Washington and the Blue Mountains of Oregon. In Montana, presence of blanketflower has been documented in all 56 counties, including in the following nine riparian community types (Hansen et al., 1995): Rocky Mountain juniper/red-osier dogwood; black cottonwood; sandbar willow; ponderosa pine/chokecherry; Drummond's willow; resin birch/beaked sedge; shrubby cinquefoil/tufted hairgrass; fleshy hawthorn; and Wood's rose. Blanketflower is present in the mountain and foothill environments of more than half of the 23 counties in Wyoming. It is adapted to many different soils, including loams to rocky to gravelly-sandy textures; and it

prefers a pH range from slightly acidic to mildly alkaline. It occurs at elevations from 1,300 to 9,000 feet in areas receiving annual precipitation of 10 to 30 inches.

### **Conservation Uses**

Blanketflower is a native, perennial wildflower that may be used to add species diversity in native plant seed mixes for rehabilitation of disturbed sites. It may have application in the production of native wildflower sod for restoration of native plant colonies. Blanketflower is suitable for use as an ornamental wildflower in low maintenance or naturalistic landscapes. It has utility as a cover and food source for pollinators, wildlife, and livestock.



**Figure 2. Blanketflower in full bloom.**

### **Ease of Establishment**

Blanketflower establishes readily when seeded in the spring. Transplants from divided root crowns may also be successful.

### **Seeding Rate**

The seeding rate for a pure stand is 7 pounds pure live seed (PLS) per acre. For conservation seed mixtures, the full rate should be multiplied by the percentage recommended in the mix. There are 3.6 PLS per square foot at 1 pound PLS per acre; for commercial seed growers it is approximately equivalent to a full seeding rate for a 24-inch row spacing of 3.5 pounds PLS per acre (25 seeds per row-foot). The number of seeds per pound ranges from 157,000 to 221,000, depending on seed source.

### **Stand Establishment**

Prepare a firm, weed-free seed bed. For drill seeding, calibrate the drill to deliver 7 pounds PLS per acre using 12-inch row spacing at a depth no greater than ½-inch. In a seed mix, alternating rows with grass and forb species is recommended. For a broadcast seeding, roll or drag after seeding to promote good seed-to-soil contact. In a wildflower mix, it is advisable to reduce the percentage of blanketflower to prevent it from becoming the dominant species.

## Limitations

Blanketflower has no serious insect or disease problems. Root rot may be a problem in poorly-drained soils, especially during extended periods of heavy rain. Powdery mildew may be present at times of elevated humidity, but usually does not have a long-term negative impact on the plants. The species generally is susceptible to aster yellows and fungal leaf spot disease and is slightly susceptible to oat blue dwarf virus. A skin rash or irritation may develop following contact with the juice or sap in the foliage.



**Figure 3. Blanketflower seed head (left) and seed with bristly pappus (right).**

## Releases

Meriwether Germplasm blanketflower was released in 2011 by the Bridger Plant Materials Center in cooperation with the agricultural experiment stations of Montana State University and the University of Wyoming. Meriwether Germplasm is a composite of seed collections from 14 Montana counties and one county in Wyoming. The germplasm is named in honor of Meriwether Lewis (Lewis and Clark Expedition), who, on July 7, 1806, collected a specimen of blanketflower along the Blackfoot River in Montana.

## Additional Information

Seeding Rates and Recommended Cultivars. USDA NRCS Plant Materials Technical Note Number MT-46. Available at <http://www.mt.nrcs.usda.gov/technical/ecs/plants/technotes/pmtechnoteMT46.html>.

Creating Native Landscapes in the Northern Great Plains and Rocky Mountains. USDA NRCS Montana State Office, Bozeman. Available at <http://www.mt.nrcs.usda.gov/technical/ecs/plants/xeriscp/index.html>.

Plant Fact Sheet for blanketflower *Gaillardia aristata*; pending electronic availability at <http://plants.usda.gov>.

Plant Guide for blanketflower *Gaillardia aristata*; pending electronic availability at <http://plants.usda.gov>.

Hansen, Paul L., Robert D. Pfister, Keith Boggs, Bradley Cook, John Joy, and Dan K. Hinckley. Classification and Management of Montana's Riparian and Wetland Sites. 1995. Montana Forest and Conservation Experiment Station School of Forestry, University of Montana, Missoula. Miscellaneous Publication No. 54.