



Iowa Germplasm Ox-eye False Sunflower



Source Identified
Conservation Plants
Developed by the
Elsberry Plant
Materials Center,
Elsberry, MO



North, Central and Southern Iowa Germplasm of ox-eye false sunflower, (*Heliopsis helianthoides* L.) Zone 2 was released in 1996 and Zones 1 and 3 were released in 1997.

Cooperating agencies in these releases were: Natural Resources Conservation Service (NRCS), University of Northern Iowa (UNI), Iowa - Integrated Roadside Vegetation Management Program (IRVMP), Iowa Department of Transportation (IDOT), and the Iowa Crop Improvement Association (ICIA).

The Iowa Germplasm Ox-eye False Sunflower is recommended for use in plantings on roadside re-vegetation, critical areas, wildlife food and habitat, parks, and recreational areas, and prairie restoration. Each zone is recommended for planting within its zone of origin. Zone 1 (Northern) is from the Northern 3 tiers of counties in Iowa. Zone 2 (Central) is from the Central 3 tiers in Iowa and Zone 3 (Southern) is from the Southern 3 tiers in Iowa.

Heliopsis helianthoides is a desirable component in warm-season grass mixtures. It is an excellent food source for different kinds of wildlife.

Description

North, Central and Southern Iowa Germplasm Ox-eye False Sunflower, Zones 1, 2 and 3 are short-lived, native, perennial forbs that grow 1.5 to 2.0 meters high. Smooth branching stems are covered with regularly spaced, opposite, toothed, 15 cm deltoid leaves on 1 cm petioles. Yellow blooms are borne on 6 cm stems continuously from June to October. Three cm pistillate ray flowers encircle a 2 cm disk bearing pistils and stamens, both fertile.

Origin

North, Central and Southern Iowa Germplasm of Ox-eye False Sunflower, Zones 1, 2 and 3 originate from locations in North, Central and Southern counties in the state of Iowa, thereby making these accessions well adapted to these counties.

The seed is smooth, four-sided achene, without pappus, but retaining ray at maturity.



An Illustrated Guide to Iowa Prairie Plants

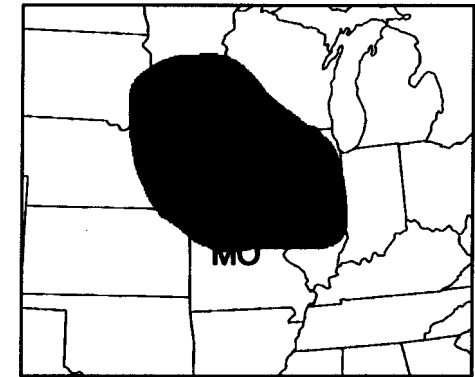
Adaptation

Ox-eye false sunflower is found in most of the tallgrass prairie region. It occurs most commonly on upland sites, prairie slopes, rocky hillsides, disturbed prairie or open woodland. It has a tendency to grow in

colonies. It prefers dryer sites, but will tolerate all but saturated soil.

The area of adaptation for the Iowa Germplasm Ox-eye False Sunflower Zones 1, 2 and 3 includes all counties located in the state of Iowa and parts of adjacent states.

Recommended Area of Adaptation Iowa Germplasm Ox-eye False Sunflower



Establishment

Ox-eye false sunflower can be easily established by using a native grass drill with a legume seed box attachment. Plant unstratified seed in late fall and stratified seed in the spring to stimulate germination. Stratifying seed requires 37 degrees Fahrenheit in moist or dry conditions for 60 days. For a solid stand seeding, plant in late fall or early spring into a firm seedbed at a rate of 11 pounds PLS (pure live seed) per acre. Seed should be planted at a depth of 1/4 inch. The number of seed per pound averages 154,000. Mixtures may be developed using Iowa NRCS Conservation Cover Standard. Ox-eye is listed at 0-1% of a mixture with suggested seeding rate at 2 ounces PLS/acre.

Management

Weed control can be accomplished by mowing over the height of the sunflower plants about one month before regular flowering. This promotes lateral bud development and greater floral display. A grass herbicide, such as 'Poast' controls grassy weeds. Little maintenance should be necessary when grown with native warm season grass species.

Ox-eye false sunflower is compatible with warm-season grasses when well established. There is moderate to strong tolerance to burning when dormant.

Commercial Production

For a solid stand seeding, plant late fall or early spring into a firm seedbed at a rate of **11** pounds PLS per acre. For optimum seed production, seeding rate should be **4** pounds PLS per acre in rows spaced **30** inches apart, or at a spacing to accommodate available equipment. During establishment, irrigate only to avoid plant stress and not at all between germination and the **4-5** leaf stage. For pure stand, 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. Application of nitrogen during the establishment year can encourage weed competition.

One year is usually necessary for stands to develop and produce. Plants will flower the first growing season and will produce seed with favorable growing conditions. Seed yields range from **250** to **350** bulk pounds per acre on a well-managed stand.

Availability

Foundation seed of Iowa Germplasm Ox-eye False Sunflower has been allocated to Iowa seed growers by the USDA-NRCS.

For More Information

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

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