

USDA-Natural Resources Conservation Service

Notice of Source Identified Release

Oxeye False Sunflower

The USDA-Natural Resources Conservation Service (NRCS), the University of Northern Iowa (UNI), the Iowa Integrated Roadside Vegetation Management Program (IRVM), the Iowa Department of Transportation (IDOT), and the Iowa Crop Improvement Association (ICIA) announce the release of a Source Identified Northern Iowa Germplasm of oxeye false sunflower, *Heliopsis helianthoides*, L.

The oxeye false sunflower has been assigned the NRCS accession number 9068605.

Origin: Northern Iowa

Ecotype Description:

Oxeye false sunflower is an erect perennial .4-2 m. tall arising from a short rhizome, leaf blades ovate to lanceolate 4-14 cm. long and 1.5-8 cm. wide, the apex acute, the margins coarsely serrate, both surfaces covered with rough, siliceous-based hairs or sometimes only slightly rough. Flowers are mostly 3-7 cm. across on stout naked peduncles, rays dark rich yellow 1-3 cm. long, bisexual. The range of oxeye encompasses the eastern one half of the United States, but its occurrence is not common.

Oxeye false sunflower seeds per pound average 139,000. A seeding rate of 40 pure live seeds (PLS) in 30 inch rows for seed production is sufficient. Rates for solid seed should be (15 to 25 bulk pounds/acre). Seed should be planted 1/4 to 1/2 inch deep in a firm relatively weed free seedbed. Seedling vigor is good and stands are comparatively easy to establish where competition is controlled. Mowing above the height of the oxeye false sunflower has been used to reduce competition when weeds begin to severely encroach into the planting. This procedure is probably the best way to control unwanted weed invasion.

Seed yields are good and can be readily harvested with a combine. Yields of 250 to 400 pounds per acre have been commonly harvested on managed non-irrigated stands.

Collections of oxeye false sunflower from east to west across Iowa prevent positive assessment of all pollination or chromosome characteristics. Plants are cross-pollinated. For isolation requirements, oxeye false sunflower will be considered cross-pollinated.

Oxeye false sunflower is adapted to soils of a lower fertility level, neutral to mildly acid conditions. Oxeye is found in open or rocky woods, thickets, prairies, and along railroads. It is found in most counties of the three states served by the Plant Materials Center, Iowa, Illinois and Missouri. Collections from each zone in Iowa guarantees the adaptation of releases to the entire zone.

Site Description:

Collections were made from the following locations (see attached) and included in the composite oxeye false sunflower, Northern Iowa origin (9068605).

Climate: The average annual temperature is 48 degrees Fahrenheit. July is the warmest month with an average high of 85 degrees and low of 64 degrees. January is the coldest month with an average high of 27 degrees and low of 8 degrees. The average annual precipitation for this region is 30 inches with much of this coming during the growing season. The average frost-free growing period runs from April 30 to October 6.

Availability of Plant Materials:

Breeders material is being produced by the Plant Materials Center, Elsberry, Missouri and University of Northern Iowa (UNI) at Cedar Falls, Iowa.

References

Flora of Missouri; p. 1553; Steyermark, J. A.; Iowa State University Press, Ames Iowa, 1968.

A Field Guide to Wildflowers; p. 80; Peterson, R. T. and McKenny, M. Houghton Mifflin Company, Boston, Mass, 1968.

Forage Crops; p. 260; Ahlgren, G. H.; Rutgers University, New Jersey, 1949.

Gray's-Manual of Botany, p. 1479; Fernald, M. L.; Harvard University, Boston, Mass, 1950.

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