

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
ELSBERRY, MISSOURI

And

THE IOWA ECOTYPE PROJECT AT THE
UNIVERSITY OF NORTHERN IOWA
CEDAR FALLS, IOWA

NATIVE ROADSIDE VEGETATION CENTER
CEDAR FALLS, IOWA

IOWA DEPARTMENT OF TRANSPORTATION
AMES, IOWA

IOWA CROP IMPROVEMENT ASSOCIATION
AMES, IOWA

**NOTICE OF RELEASE OF CENTRAL IOWA GERMPLASM
RIGID GOLDENROD
SOURCE IDENTIFIED CLASS OF NATURAL GERMPLASM**

The Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture and the Iowa Ecotype Project at the University of Northern Iowa (UNI), the Native Roadside Vegetation Center (NRVC), the Iowa Department of Transportation (IDOT), and the Iowa Crop Improvement Association (ICIA) announce the release of a source identified ecotype of rigid goldenrod (*Solidago rigida* L.) for Central Iowa counties.

As a source identified release, this plant will be referred to as Central Iowa Germplasm rigid goldenrod to document its original collections. Central Iowa Germplasm rigid goldenrod is released as a source identified type of certified seed (natural track). It has been assigned the NRCS accession number 9068618.

This alternative release procedure is justified because there are no existing commercial sources of rigid goldenrod collected from numerous native sites throughout this specific region. Propagation material of specific ecotypes is needed for roadside plantings and prairie restoration and enhancement. The potential for immediate use is high.

Collection Site Information: Collections were taken from native prairie remnants within the three tiers of counties located in central Iowa.

Ecotype Description: Rigid goldenrod is a native erect perennial that often occurs in clumps. The fibrous roots may penetrate the soil five feet, so it competes well with the dominant grass species. The plant may grow to a height of over three feet; even four feet may be reached in the eastern portion of its range. The leaves and stem are usually hairy, giving the plant a distinctive pale green or grayish cast. Leaves are alternate, with the lower ones long petioled and oval. The upper leaves are smaller, sessile, and ovate to oblong, they also have short petioles; they slightly clasp the stem. All are sparsely toothed and are harsh and leathery. The lower leaves form a

large basal rosette early in the season or sometimes in the previous fall, so the plant is discernible throughout the growing season. The terminal inflorescence is bright yellow, more or less flat-topped to somewhat rounded, dense, and up to several inches across. The mass of tiny, golden flowers, individually about 1/3 inch long, combine to make a large, handsome spray. Reproduction is by lateral shoots and by seed.

Rigid goldenrod can be an invader that increases in grazed pastures because it is eaten only in the early stages of its growth. It is a hardy species that is attractive in bloom, it would complement a flower garden.

Environmental Impact Assessment: Central Iowa Germplasm rigid goldenrod is a collection of naturally occurring germplasm and has been unaltered. Central Iowa Germplasm rigid goldenrod did not meet the assessment of a plant, which could become invasive based on guidelines adopted by the NRCS Plant Materials Program.

Anticipated Conservation Use: The potential uses of Central Iowa Germplasm rigid goldenrod include roadside plantings, prairie creations and restorations, landscaping, and for increasing plant diversity in prairie communities.

Potential Area of Adaptation: Rigid goldenrod is adapted to dry prairie Mesic soils, dry open wooded roadsides, and disturbed areas. It probably occurs in every tallgrass prairie biome. Collections across each zone in Iowa guarantees the adaptation of the release to the entire zone.

Availability of Plant Materials: G1 material is being produced in limited supply by the Elsberry Plant Materials Center and the University of Northern Iowa. For information contact USDA, NRCS, Plant Materials Center, 2803 N. Hwy 79, Elsberry, Missouri 63343 (573 898-2012) or The University of Northern Iowa, Roadside Office, 113 CEEE, Cedar Falls, IA 50614-0293.

References:

Flora of Missouri; p. 1498; Steyermark, J. A.; Iowa State University Press, Ames, IA 1968.

Wildflowers of the Tall Grass Prairie, The Upper Midwest, P. 243; Runkel, Sylvan T. and Roosa, Dean M., Iowa State University Press, Ames, Iowa 1089.

Prairie Plants of Illinois; pp. 226-227; Voigt, John W. and Mohlenbrock, Robert H.; Both from Southern Illinois University, Edwardsville, Illinois.

The Prairie Garden, 70 Native Plants You Can Grow in Town or Country; pp. 160-161, Smith, J. Robert and Smith, Beatrice S., University of Wisconsin Press, Madison, Wisconsin 1980.

The Tallgrass Restoration Handbook; p. 131; Jordan, R. William III., Island Press, Washington, D.C./Covelo, California, 1997.

Prepared by:

S. B. Bruckerhoff, USDA NRCS Plant Materials Center, 2803 North Hwy 79, Elsberry, Missouri 63343.

Signatures for release of:

Central Iowa Germplasm rigid goldenrod (*Solidago rigida* L.)

Roger A. Hansen
State Conservationist
United States Department of Agriculture
Natural Resources Conservation Service
Columbia, Missouri

Date

Robert Koob
President
University of Northern Iowa
Cedar Falls, Iowa

Date

Leroy Brown
State Conservationist
United States Department of Agriculture
Natural Resources Conservation Service
Des Moines, Iowa

Date

Daryl D. Smith
University of Northern Iowa
Cedar Falls, Iowa

Date

Steve Holland
Iowa Department of Transportation
Ames, Iowa

Date

Robert E. Lawson
Secretary/Treasurer
Iowa Crop Improvement Association
Ames, Iowa

Date

Richard S. White PM – NPL
For Director, Ecological Sciences Division
United States Department of Agriculture
Natural Resources Conservation Service
Washington, D.C.

Date