

UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE CAPE MAY PLANT MATERIALS CENTER CAPE MAY COURT HOUSE, NEW JERSEY

NOTICE OF RELEASE OF MONARCH GERMPLASM SEASIDE GOLDENROD SOURCE-IDENTIFIED CLASS

The Natural Resources Conservation Service, U.S. Department of Agriculture announces the release of Monarch Germplasm seaside goldenrod (*Solidago sempervirens* L.). Monarch Germplasm is composite of six source identified ecotypes. Monarch Germplasm has been assigned the NRCS accession number 9081217.

Collection Site Information: Monarch Germplasm is a composite of six accessions collected from New Jersey, Delaware, and the eastern shore of Virginia in 1997.

Collection sites:

Kent County, Delaware assigned Accession number 9002802. Collected near Sandy Beach on the Delaware Bay.

Cape May County, New Jersey assigned Accession number 9027032. Collected on the beach in the town of Cape May.

Cape May County, New Jersey assigned Accession number 9027045. The site was located at 118th Street, Stone Harbor.

Cape May County, New Jersey assigned Accession number 9027051. The site was at 52nd Street in Sea Isle City.

Sussex County, Delaware assigned Accession number 9030157. Collected from Fenwick Island.

Accomack County, Virginia assigned Accession number 9030159. Collected at Chincoteague Island National Wildlife Refuge.

Description: Seaside goldenrod is a native perennial forb; member of the Aster family. The plant may reach six feet at maturity but is typically around 2-4 feet in height. Fleshy, dark green, oblong, lance shaped leaves are produced alternately along the entire length of the stem. The leaves at the base are up to 8 inches long and ½ to 1½ inches wide tapering to less than one inch at the top of the stem. Seaside goldenrod reproduces both vegetatively and by seed. In established stands, new stems arise from short, stocky rhizomes in late February to early March. From August to early October, bright yellow flowers are produced in abundance. The terminal or upper axillary flowering heads are dense, the lowest branches somewhat recurved. Winter identification is made by observing the bleached skeleton of the woody-like stalk and dried asterlike flower parts.

Method of Breeding and Selection: Vegetative propagules from each parental line were started in the greenhouse and transplanted to a crossing block in a Latin Square design located at the Cape May PMC. Equal numbers of plants were installed in rows and rows were randomized to encourage cross pollination. Seed heads have been harvested by hand; however using a sweeper type harvester is an option for large production stands. No selections were made in order to maintain the broadest possible genetic pool.

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Ecological Considerations and Evaluation: An Environmental Evaluation of Plant Materials Releases which included a Scoring of Criteria for Impact, Management, Need and Biological Characteristics was conducted.

The resulting determination indicated that Monarch Germplasm material can be recommended for use within proximity of the collection location of the accessions used to produce the composite.

Conservation Use: This plant is intended for use in USDA Conservation Programs including the Conservation Security Program (CSP), Conservation Reserve Enhancement Program (CREP), Environmental Quality Incentives Program (EQIP), and Wildlife Habitat Incentives Program (WHIP). Monarch Germplasm may be beneficial in any planting designed to enhance plant diversity on sand dunes and as pollinator habitat.

Area of Adaptation: Monarch Germplasm seaside goldenrod is adapted to coastal southern New England and the Mid-Atlantic regions. (Plant Hardiness Zones 6a, 6b, 7a, 7b) It is highly tolerant of excessively well-drained soils to somewhat poorly drained soils, acid to alkaline conditions, and textures ranging from sand to sandy loam. This species is highly salt tolerant. Monarch Germplasm should be used in areas defined by the source identified accessions used to make up the composite population.

Availability of Plant Materials: Foundation seed is available by contacting:

USDA NRCS
Cape May PMC
1536 Route 9 North
Cape May Court House, New Jersey 08210

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References:

Brown and Brown. 1984. Herbaceous Plants of Maryland. Port City Press, Inc. Baltimore, Maryland.

Graetz, Karl. 1973. Seacoast Plants of the Carolinas. USDA-Soil Conservation Service

Radford, Ahles and Bell. 1968. Manual of the Vascular Flora of the Carolinas. University of North Carolina Press Chapel Hill.

Silberhorn, Gene. 1999. Common Plants for the Mid-Atlantic Coast: A Field Guide. John Hopkins University Press. Baltimore, Maryland.

Skaradek, William. 2001 Propagation protocol for production of Solidago sempervirens: USDA-NRCS-Cape May Plant Materials Center, Cape May Court House, New Jersey. In: Native Plant Network. Moscow. ID, University of Idaho, College of Natural Resources

USDA, NRCS. 2010. The PLANTS Database (http://plants.usda.gov, May 2010). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

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Signatures for release of:

Monarch Germplasm Germplasm Seaside goldenrod Solidago sempervirens L. A Source Identified Release

Thomas Drewes

State Conservationist

United States Department of Agriculture Natural Resources Conservation Service

Somerset, NJ

8-24-10

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Date

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Washington, D.C.

9-22-2010

Date