

GRAY GOLDENROD

Solidago nemoralis Aiton

Plant Symbol = SONE

Contributed by: USDA NRCS National Plant
Materials Center, Beltsville, MD



Janet Novak, used with permission

Alternate Names

Old Field Goldenrod, Prairie Goldenrod, Dwarf
Goldenrod

Uses

Landscaping and Wildlife: Grey goldenrod is a beautiful plant in flower and creates an effective groundcover in dry, harsh, sunny conditions. For these reasons it is often used in native landscapes, rock gardens, butterfly gardens and meadow plantings. It also has potential as a component of conservation mixes. A wide range of insects visit the flowers for pollen and nectar, including long-tongued bees, short-tongued bees, Sphecid and Vespidae wasps, flies, butterflies, moths and beetles. Bee pollinators include honey bees, Little Carpenter bees, Halictid bees and Plasterer bees. Fly pollinators include Syrphid flies, Tachinid flies, Flesh flies, Blow flies and Muscid flies. The caterpillars of many moths,

including the goldenrod scarlet plant bug, net-veined beetle and leaf-footed bug, feed on the foliage and other parts of this plant. The seeds are also eaten by the Eastern Goldfinch to a limited extent. *Ethno botanical:* Native Americans boiled the roots and used the liquid to treat jaundice and kidney disorders. The leaves were boiled and the liquid used as a wash for burns and skin ulcers. The Navajo burned the plant as incense, and the seeds were used for food.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Description and Adaptation

Gray goldenrod is a native perennial wildflower it is one of the smaller species of goldenrod, growing from 6 inches and seldom reaching 2.5 feet tall. The central stem is reddish or grey-green and covered with short white hairs, often in lines. Usually this stem has winged leaflets at the axils of the upper leaves. The alternate leaves are up to 4 inches long and 3/4" across, pubescent (covered with fine short hairs) and become smaller as they ascend the stem. The leaves taper to a narrow base and have a soft scratch feel to them. The leaf margins are smooth or slightly serrate. Grey goldenrod flowers later than most other goldenrods. The narrow flower is wider in the middle and has numerous yellow compound flowers that are about 1/4" across. The blooming period occurs during the fall and lasts about a month. The flowers occasionally have a slight fragrance. After flowering, the small dry seed develops with tufts of hair and are dispersed by the wind. The root system consists of a branching caudex (a thickened root structure that serves as water storage for the plant) and rhizomes. The caudex root system is especially prevalent on older plants. In suitable locations, grey goldenrod has a tendency to form groups of plants.

Grey goldenrod is a carefree plant that prefers growing in full sun and dry soil. This plant thrives in sand, clay or gravel soils. It will also grow in fertile soils however it can be short-lived if the site is too rich.

Distribution: This species is widely distributed from Georgia to Texas, north to Nova Scotia and Alberta Canada in USDA cold hardiness zones 2 – 9.

Habitats include: meadows, dry open woods, upland

prairies, pastures, savannas, fallow fields, thickets, roadsides, railroads, eroded slopes, and sand dunes

Establishment

Seed Propagation: Seed ripens in the autumn and should be collected when the heads are brown and become fluffy. Fresh seed germinates at low percentages without any pretreatment. Germination is improved by 90 days of cold moist pretreatment (40 degrees F). This pretreatment may be accomplished artificially in a refrigerator or by sowing the seed in the fall.

Vegetative Propagation: Four to six node softwood stem cuttings taken in the late spring root nearly 100 percent. Plants may also be propagated by division of mature plants. Make sure each section has a bud and a root. It can also be divided by separating individual crowns with a length of rhizome (horizontal plant stem with shoots above and roots below) before growth begins in the spring.

Management

Gray goldenrod is a hardy, pioneer plant with relatively few problems. It is easy to maintain with the addition of low to moderate levels of nitrogen (50 lbs. / acre). Before amending the soil with any additional nutrients a soil test is highly recommended. Gray goldenrod will naturalize under optimal conditions and can become weedy in moist, highly fertile soils, especially in the Western U.S.

Pests and Potential Problems

Gray goldenrod tends to be a care-free plant but may be affected by spot anthracnose, powdery mildew, rust, and fungal spots in moist conditions.

Environmental Concerns

Weediness: This plant may become weedy or invasive in western states where it may displace other desirable vegetation if not properly managed.

Control

Gray goldenrod is easily controlled by foliar applications broad spectrum herbicides. Please contact your agricultural extension specialist or county weed specialist to learn what works best in your area and how to use it safely. Always read label and safety instructions for each control method. Trade names and control measures appear in this document only to provide specific information. USDA NRCS does not guarantee the products and control methods named, and other products may be equally effective.

Cultivars, Improved, and Selected Materials

There are no recommended cultivars or selected materials at this time. Gray goldenrod may be available from commercial nurseries specializing in native plants.

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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web site <<http://plants.usda.gov>> or the Plant Materials Program Web site <<http://Plant-Materials.nrcs.usda.gov>>

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