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## Solidago sempervirens

Seaside goldenrod; salt-marsh goldenrod



Two plants along the bank of a South Florida canal

Family: Asteraceae

# Seaside goldenrod

Synonyms (Discarded Names): Aster sempervirens; A. mexicanus; Solidago mexicana; S. sempervirens subsp. mexicana; S. sempervirens var. mexicana Origin: Coastal areas from the Gulf of St. Lawrence to Florida, west to Texas and New Mexico to Central America. Bermuda, Bahamas, and Cuba. **U.S.D.A. Zone:** 3-11 (-40°F minimum) Growth Rate: Fast Flowering Months: October into November; sometime a secondary Spring bloom Leaf Persistence: Brief dieback of basal leaves Salt Tolerance: High Drought Tolerance: High **Soil:** Sandy soils Nutritional Requirements: Low Major Pests: None Typical Dimensions: 1.25 feet wide and 3 to 9 feet tall **Propagation:** Seed Human hazards: None Uses: Wildflower gardens; flower gardens; attracts birds and insect pollinators



Seaside goldenrod growing in low area along the Tamiami Trail, Florida Everglades, October 23rd



A profusion of seaside goldenrods

#### Natural Geographic Distribution and Ecological Function

*Solidago sempervirens* is native throughout eastern coastal North America from Newfoundland to Florida and the Bahamas. It is also native along the Gulf Coast and southward to Tobasco, Mexico. It has become naturalized in the Great Lakes regions and in the Azores. *S. sempervirens* grows naturally along roadsides, in pinewoods, coastal marshes, estuarine, bay shores and in dry to damp soils. It is a wetland species that has high saline soil and salt spray tolerance.

#### Morphology, Growth Habit and Reproduction

Of the nineteen native species of *Solidago* found in Florida, only four are used for landscaping. Recognizing the genus is fairly easy for observers driving 50 miles per hour; however, sorting out the species can be challenging. All are perennials and have simple leaves and composite flowers with disc and ray florets.

Following germination, basal leaves are produced, forming the foundation of the plant. Basal leaves are narrowly ovate to oblanceolate tapering to a winged petiole. They are up to 22 inches long and commonly 1.5 to 2.5 inches wide. The basal leaves persist through flowering. Shortly thereafter the plant grows to produce a single stem, or sometimes multiple stems if the plant was pinched back. The stem is laden with alternating leaves. The stems purpose is to eventually produce distal inflorescences. Stem growth stops when the stem has its full compliment of inflorescences, at which point stem height commonly ranges from 3 to 9 feet tall. The leaves on the stems are much smaller than the basal leaves and are progressively smaller toward the top of the stem. They are typically 2 to 3 inches long and 0.5 inches wide. Stem leaves are lanceolate and sessile (without petiole).

The plant base is a woody caudex\*, without rhizomes as is the case in some other Solidago species. The stem becomes laden with many dense deep-yellow pyramidal inflorescences. Axillary inflorescences



From left to right: Basal, lower stem and upper stem leaves





Leaves alternate on the stem, are sessile and are typically between 2 and 3 inches long

The plant base is woody caudex

\*Caudex,. The persistent and often woody base of a herbaceous perennial.

are produced below the terminal inflorescence but without the pyramidal shape. Flowering stems are from 18 inches to 10 feet tall. The mass of the inflorescence is made up of many secunds (arranged on one-side of the axis only) that are somewhat backward curving (recurving). Individual secund appear at the leaf axis. Flowering begins at the top of the inflorescence and work it way down. When laden with flowers, the stem is inclined to arch downwards at or near the ground. The flowers are quickly replaced by masses of fine white bristles known as pappi.

Seaside goldenrod pollen is too heavy and sticky to be blown far from the flowers, and is mainly pollinated by insects. It is a nectar plant for several butterfly species including the clouded sulphur, purplish copper, gray hairstreak, snout butterfly, silver bordered fritillary, pearl crescent, viceroy, wood nymph, monarch and eastern tailed blue.



Secund and flower buds in leaf axis

Individual flower taken from secund

Flowering begins at the top of the inflorescence mass



Bee pollination



Axillary infloresence are produced below the terminal inflorescence

#### **Planting and Maintenance Guidelines**

Seaside goldenrod makes an attractive addition to naturalized gardens, backyard habitats, meadows, wildflower gardens and herb gardens. Plant it in the spring for fall flowers. Plant deeply by removing a few of the lower leaves and placing those nodes in the soil. Deeper planting will anchor the plant more firmly in the ground. In cultivation, seaside goldenrod sometimes produces a mass of foliage with few flowers. This is usually the result of too much fertilization or over watering. For best flowering, this plant requires a dry site and full sun. Many heavily blooming stems will nod downward close to the ground. They may be staked or left alone. They can also be cut back soon after emerging to force multiple but shorter stems and to avoid the exaggerated arching. After flowering, cut the stems down to the ground, as they will not flower again. The clump will die-back briefly but will reemerge in early spring. The new clump may be slightly larger due to the expanding caudex. The height of the flowering stems may vary from year to year. Generally, more blooming stems are added the following year. Seaside goldenrod is a prolific seeder. Consequently, new seedlings will appear in nearby areas of the landscape the following seasons.





April 10th of the second year, basal leaves renewed



October 19th of the first year

October 29th of second year

Typical Flowering Height	Flower Color	Infloresence Shape	Floral Arrangement	Leaf Shape	Growth Pattern
3 to 9 feet	Yellow	Pyramidal	Secund	Ovate to sublanceolate; subsclasping	Clump from Caudex

Table 1. Charateristics of Solidago sempervirens

### References

1. Bell, C. and Taylor, Bryan J. 1982. Florida Wild Flowers and Roadside Plants. Laurel Hill Press, Chapel Hill

2. Knopf, Alfred A. 1979. National Audubon Society: Field Guide to North American Wild Flowers, Eastern Region. National Audubon Society, N.Y.

3. Orsorio, Rufino. 2001. A Gardener's Guide to Florida's Native Plants. University of Florida Press, Gainesville, Florida.

4. Solidago sempervirens: Seaside goldenrod. Flora of North America:

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