# GOLDEN ROD

In modern America, most individuals are familiar with golden rod due to its reputation as a roadside fixture; however, the herb continues to be cultivated as a staple ornamental in the modern herb garden. The majority of species of the herb are native to the middle and eastern parts of the United States; while several others are native to Great Britain. Today, the herb can be found in other European countries as well. Of the seventy-five species of golden rod that exist in the United States today, only twenty three species are present in New York State. Figure 1 lists those species, indicating which ones were also present in New York in 1957 with an asterisk (*); the carrots (^) indicate the two species that existed in the State in 1957, but are no longer present.

**Etymology:**

The name *Solidago*, Golden Rod's genus, comes from the Latin word "solida," meaning "whole" and "ago" meaning "to make." The Italians know the herb as "Solidago" as do the Spanish, though they also call the herb "Vara de oro." In French, golden rod translates to "Verge d'or" and in German to "Goldrute." [1] In America, golden rod also goes by the general names of woundwort and Aaron's rod, though each species has its own common name(s).

**Cultural Significance:**

Golden rod has held a significant place in American history. For instance, after the Boston Tea Party, the tea made from golden rod became known as "liberty tea." It was the first and for a while, the only tea the colonists would drink while they protested against the British taxation. The tea was later exported to China because of its esteemed quality.[2] On October 26, 1918 a national publication entitled the Independent published its survey on the American sentiments for a national flower. The survey found that Americans were torn between columbine, clover, daisy, and golden rod. This debate continued further into the century. In 1942, golden rod was still a front runner for the title of National flower, but had developed the reputation of causing hay fever.[3] While the herb's pollen was then believed to be an aeroallergen, scientists have since discovered this is actually not the case. Golden rod's pollen is not airborne and blossoms at the same time as ragweed, the true instigator of hay fever.[4] Despite the clarification of its safety, the national flower debate was settled only in 1986 when the rose received the coveted honor of National flower.

| Kingdom | Plantea |
|---|---|
| **Division** | Magnoliophyta |
| **Class** | Magnoliopsida |
| **Order** | Asterales |
| **Family** | Asteracea (daisy) |
| **Genus** | *Solidago* |
| **Species** | See Figure 1 |

The herb is a sign of good luck and fortune in many cultures. For example, the British believed the plants pointed toward golden treasure and marked hidden springs.

---

"Somebody Likes Golden Rod:" http://www.flickr.com/photos/chefranden/1403154351/

[1] Chadwick, A.F., Cracker, L. E. & Simon, J.E., Herbs An Indexed Bibliography 1971- 1980 The Scientific Literature on Selected Herbs, and Aromatic and Medicinal Plants of the Temperate Zone (Hamden: Archon Books, 1984) 50.

[2] Reader's Digest Association, Magic and Medicine of Plants (Pleasantville: Reader's Digest Association,1986) 198.

[3] Thone, F., "Nature Ramblings: Symbol of Union." The Science News-Letter 42.1 (1942) 11.

[4] Reader's Digest Association 198.

| Species | Common Name |
|---|---|
| Altissima* | Canada Golden Rod |
| Arguta* | Atlantic |
| Bicolor* | White |
| Caesia* | Wreath |
| Canadensis | Canada |
| Cutleri | Cutler's Alpine |
| Erecta | Showy |
| Flexicaulis* | Zigzag |
| Gigantea* | Giant |
| raminifolia^ | Lance leaf |
| Hispidia | Hairy |
| Juncea* | Early |
| Latissimifolia | Elliot's |
| Macrophylla | Large Leaf |
| Nemoralis* | Gray |
| Odora* | Anisescented |
| Patula* | Round Leaf |
| Rigida^ | Stiff |
| Rugosa* | Wrinkle Leaf |
| Sempervirens* | Seaside |
| Simplex | Mt. Albert |
| Speciosa | Showy |
| Squarrosa* | Stout |
| Uliginosa | Bog |
| Ulmifolia | Elm Leaf |

**Botanical Description:**

Each species of golden rod has a slightly different appearance. Below is a description of four of the most common species, all of which grow in New York.

S. *caesia*: This is an unusual species of golden rod. Unlike many others, wreath golden rod's flowers form spikes along the whole of length of its bluish-purple stems. This herb grows to an average of 2 -3 feet and blooms in late August and early September.[5]

*S. odora*: Sweet golden rod is a very fragrant plant. When its leaves are crushed, it emits an anise-like fragrance. It grows best in zones 3 – 9 and on average 3 – 4 feet tall. Its small yellow flowers grow on only one side of the stems in small pinnacles.[6]

S. *rugosa*: Rough stemmed golden rod will not invade a garden as do most other species of golden rod. It will grow to be an average of 4 - 5 feet tall. This herb blossoms in late September and early October, when its flowers emerge in a large panicle on its hairy stems.[7]

**Figure 1**[8&9]

---

[5] Image: USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 3: 382.
[6] Image: "Solidago odora." USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 3: 389.
[7] "Image: Solidago rugosa." USDA, NRCS. 2008. The PLANTS Database (http://plants.usda.gov, 20 April 2008). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
[8] USDA, NRCS. 2008. The PLANTS Database (http://plants.usda.gov,1 April 2008). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

*S. sempervirens*: This species of golden rod also only flowers on one side of the stem in late September and early October. It will grow to be between 4 and 6 feet tall. Though, unlike other species, seaside golden rod does well in salty and sandy areas and its roots can be used to stop soil erosion.[10]

**Uses:**

Native Americans and the Chinese believed Golden Rod to hold medicinal value. Both groups relied on *Solidago virgo-aurea* L. for their herbal remedies. The Native Americans used this particular species of Golden Rod to treat arthritis, emphysema, nephritis and periodontal disease.[11&12] In addition, they created different types of tea from dried Golden Rod to cure different ailments. One of the teas worked on intestinal disorders, another for infant colic.[13] They also used rolled leaves of the plant to make a topical lotion for wounds and ulcers.[14] The Chinese used this species as well to remedy the flu, gastric pain, headaches, intestinal worms, malaria, measles, sore throats and vomiting. [15]

Without regard to a specific species, golden rod is documented as having been used as an astringent, carminative, diaphoretic (promotes sweating,) diuretic, and stimulant, as well as to treat warts, tumors and cancers. Modern pharmacists acknowledge that the herb's power as a carminative and diaphoretic is most likely valid.[16] Golden rod was and continues to be used in medicines for its sweet smell and anise-like taste to mask the unpleasant flavors and odors of the true medicinal elements. Also, *S. ordora* is used today in the folk medicine practiced in the Appalachian Mountains to treat colds, fevers and the flu.[17] While the impacts of golden rod as a medicinal herb are not substantial, golden rod is certainly not harmful to the health of humans. The culinary use of the herb is limited to its status as a tea.

There are several industrial uses of the herb. For instance, it is used to make fertilizer and its yellow flowers turn blue indigo-dye into different shades of green.[18] A Texas agriculture station was planning on using Golden Rod's oil to produce gum, candy and deodorant, though this idea did not materialize.[19] Thomas Edison used the varietal *Solidago leavenworthii* as a source of rubber. He did so in

---

[9] Lehr, J.H.,"An Annotated Preliminary Catalogue of the Vascular Flora of Rockland County, New York [Continued]" Bulletin of the Torrey Botanical Club 84.5 (1957) 388-92.
[10] Image: http://www.flickr.com/photos/anitagould/41864787/
[11] Lewis, W. H. & Elvin-Lewis, M.P.F. Medicinal Botany: plants affecting men's health (New York, John Wiley & Sons,1977) 515.
[12] Lust, J. The Herb Book. (New York, Bantam Books, 1974) 659.
[13] Reader's Digest Association 198.
[14] Hutchens, A.R., Tretchikoff, N.G., & Tretchikoff, N.K., Indian Herbology of North America (Ontario: Merco, 1974.)
[15] Anonymous, A barefoot doctor's manual. D.H.E.W. Publication No. 9NIH) 75-695 (Washington D.C.: U.S. Dep. Health, Education and Welfare; Public Health Service; National Institutes of Health. Superintendent of Documents, U.S. Government Printing Office, 1974.) 960.
[16] Reader's Digest Association 45.
[17] Reader's Digest Association 72.
[18] O'Connor, A., Hirshfeld, M. & Cornell Plantations, An Herb Garden Companion and Guide to the Robison York State Herb Garden (Ithaca: Cornell University, 1984) 97.
[19] Kowalchik, C. & Hylton, W.H., Rodale's Illustrated Encyclopedia of Gardening (Emmaus: Rodale Press, 1987).

an attempt to establish an emergency supply of rubber during times of war; though, other species of golden rod are not sufficient sources of rubber.[20]

**Cultivation:**

Most of the species of golden rod found throughout the world are considered to be weeds. But the herb is frequently grown for cultivation as an ornamental. Golden rod is a perennial herb, which flowers in August and September. Its ideal growing conditions are in zone 4 (Plant Hardiness Scale,) with average, well drained soil, and full sunlight[21]; though, many species of the herb desire dry sandy soil, such as *S. odora*. *S. canadensis* is one of the most prominent of the species of golden rod native to America. While it is one of the most common species used to produce hybrids, it is not popular in Europe as a propagated species because, as William Robinson put in 1883, it "exterminates valuable plants."[22] This "extermination" quality is quite common of the genus. Due to this trait, one should plant shorter species. Plus, smaller species do not require a physical support system to grow vertically as do most of the taller species.

---

[20] Thone, F.,"Nature Ramblings: Goldenrod" The Science News-Letter 20.538 (1931) 79.
[21] Kowalchik
[22] Armitage, A. M., Herbaceous Perennial Plants : A Treatise on their Identification, Culture, and Garden Attributes (Athens: Varsity Press, 1989) 546.