

Key to the Goldenrods (*Solidago species*) of The Quarry Gardens at Schuyler

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How to Use This Key: Using the leaves and/or the flowers, choose one of the following 5 groups. Within each group, select one of the two options presented, and move down and right through the simple key to arrive at the correct species. A millimeter scale is helpful. A hand lens is helpful, though not required to use the key. Sometimes variation within each species will present anomalies that will not satisfy all parts of the key, and therefore we try and include multiple clues for each section.

Group 1 >Goldenrods with flowers in flat-topped clusters distinctly wider than tall, and fleshy/leathery leaves: ***Solidago rigida* (stiff goldenrod)**

Group 2>Goldenrods with elongate, narrow vertical flower heads, and the branches of the flower head evenly distributed on both sides, with largest leaves at the base of the plant,.

>Flowers white or cream-colored : ***Solidago bicolor* (silverrod)**

OR...

>Flowers yellow. Continue:

> Stem pubescent: ***Solidago puberula* (downy goldenrod)**

OR...

> Stem smooth or pilose (widely spaced long hairs) Continue.

> Flower heads either narrow and unbranched, or with relatively widely spaced branches, stem leaves less than 2cm wide:

***Solidago erecta* (slender goldenrod)**

OR...

> Flower heads typically more densely branched and slightly spreading/ascending, stem leaves usually wider than 2cm :

***Solidago speciosa* (showy goldenrod)**

Group 3>Goldenrods with elongate flower heads that lean to one side, the largest leaves are at the base of the plant, the stem leaves typically smaller and less developed, especially those on the upper stem.

> Stems covered in dense, fine hairs : ***Solidago nemoralis* (gray goldenrod)**

OR...

> Stems with little to no hair. Continue:

>Ray flowers ("petals") 3-7, disk flowers (inner flower parts) 3-9 :

***Solidago pinetorum* (pineywoods goldenrod)**

OR...

>Ray flowers 7-13, disk flowers 8-12 : ***Solidago juncea* (early goldenrod)**

Group 4>Goldenrods with flower heads arising from the junction of a leaf and the stem (axil), scattered along the main stem. Well-developed leaves throughout the stem,

> Stem bluish, cylindrical in cross section, the leaves narrow, 2.5-3 times as long as wide:
***Solidago caesia* (blue-stemmed goldenrod)**

OR...

> Stem green, angled, the leaves rather ovate, toothed, and 1-2 times as long as wide :
***Solidago flexicaulis* (zigzag goldenrod)**

Group 5>Goldenrods are rather large. Well-developed leaves throughout the stem, flower heads branched, large, and borne at stem tips.

>Leaves at the middle of the stem with 1 prominent vein, often scented of anise:

***Solidago odora* (sweet goldenrod)**

OR...

>Leaves at middle of the stem with 3 prominent veins, not scented of anise. Continue:

> Stem smooth and usually covered in a whitish powder (bloom):

***Solidago gigantea* (late goldenrod)**

OR...

> Stem (at least part of it) covered in short hairs, without whitish bloom. Continue:

>Mid-stem leaves are not toothed OR are very minutely short-toothed:

***Solidago altissima* (tall goldenrod)**

OR...

>Mid-stem leaves obviously toothed (with largest being >1.5mm long):

***Solidago canadensis* (Canada goldenrod)**