## Key to Species of <u>Solidago</u> (goldenrods, Family Asteraceae) of the Finger Lakes Region\* Charles R. Smith

- a. Flower heads paniculate (in a loose, elongated, compoundly branched cluster), thyrsoid (in a compact, elongated, compoundly branched cluster), or axillary (clustered in the angles between the leaves and stem)
  - b. Involucral bracts (small, modified leaves beneath each flower head) squarrose (very widely spreading or recurved); basal leaves very large, strongly toothed, often forming a rosette; flowers large; stem stout, often reddish
    1. S. squarrosa (Stout Goldenrod)
  - b. Involucral bracts with erect or appressed tips
    - c. Flowers cream color; hybridizes with Nos. 3, 9, 10
    - c. Flowers yellow
      - d. Flower heads mostly in axillary clusters (in the angles between the leaves and stem)
        - e. Leaves lanceolate (elongate and pointed, widest below middle); stem glaucous (smooth and grayish or bluish in color); hybridizes with Nos. 2, 4, 10, 11, 14
          3. <u>S. caesia</u> (Blue-stemmed or Wreath G.)
        - e. Leaves ovate (egg-shaped) or oval (width more than half length); markedly zigzag angular stem; hybridizes with No. 3
          4. <u>S. flexicaulis</u>

(Zigzag G.)

2. S. bicolor

(Silver-rod)

- d. Flower heads in a terminal panicle (a loose, elongated, compoundly branched cluster)
  - e. Leaves markedly increasing in size down the stem; lower and basal leaves usually present
    - f. Foliage glabrous (without hairs) and smooth, or nearly so; stem terete (slightly angled or circular in crosssection); flower heads secund (turned to one side)
      - g. Lower leaves lanceolate or oblong-lanceolate, inconspicuously toothed
        - h. Branches of the panicle pubescent (with hairs); panicle narrow; leaves linear-lanceolate, upper ones much reduced and narrow; plants of wet soil (swamps, bogs, wet meadows); hybridizes with Nos. 6 and 14
          5. <u>S. uliginosa</u> (Bog G.)
        - h. Branches of the panicle glabrous; panicle widely spreading; tiny, wing-like leaflets in axils of slim, toothless upper leaves; leaves feather-veined; plants of dry soil; hybridizes with Nos. 5, 7, and 9
          6. <u>S. juncea</u>

(Early G.)

g. Lower leaves feather-veined, elliptic-oval, doubly-serrate (sharply and coarsely toothed with large and small teeth); branches of the panicle pubescent; smooth, reddish-brown stem; plants of dry soil; hybridizes with No. 6
 7. <u>S. arguta</u>

(Sharp-toothed G.)

 f. Foliage scabrous (very rough to the touch); stem strongly 4-angled, especially above; branches of the panicle usually distant, generally strongly divergent; very large basal leaves (up to 12 inches long)
 8. <u>S. patula</u> (Rough-leaved or Swamp G.)

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- f. Foliage crisp-puberulent (covered with very fine, curved hairs) and canescent (hairs gray and closely-spaced); hybridizes with Nos. 2 and 6 9. S. nemoralis (Gray or war G.) Leaves not markedly increasing in size downward; lower and basal leaves usually absent e. f. Leaves rugose-veiny (with wrinkled appearance), not triple-ribbed g. Stem villous (covered with fine, long hairs that are not tangled); 10. S. rugosa hybridizes with Nos. 2, 3, 11, and 14 (Rough or Hairy G.) Stem glabrous (smooth), or puberulent (very finely hairy) toward the summit; branches of panicle few, very g. long and wide-spreading, mostly flowerless toward the base; plants of dry, rocky soil; hybridizes with Nos. 3 and 10 11. S. ulmifolia (Elm-leaved G.) f. Leaves not rugose-veiny, and triple-ribbed g. Stem glaucous (smooth and grayish or bluish in color), except in the panicle; involucre (whorl of modified leaves beneath flower cluster) 3.2-5.0 mm long; 12. S. gigantea hybridizes with No. 14 (Smooth or Early G.) Stem puberulent (very finely hairy) or villous (covered with fine, long hairs that are not tangled), at least g. above, not glaucous h. Involucre 3.2-4.5 mm long; leaves parallel-veined and inconspicuously toothed; stem crisp-pubescent; hybridizes with No. 14 13. S. altissima (Tall G.) h. Involucre 2.0-2.8 mm long; leaves sharply toothed; stem sparingly crisp-pubescent above, glabrous below; leaves pubescent only along the veins beneath, narrow; hybridizes with Nos. 3, 5, 10, 12, 13 14. S. canadensis (Canada G.) a. Flower heads corymbose (rounded or flat-topped, with branches of unequal length, the lower ones longer) b. Flower heads separate; basal leaves enlarged and feather-veined (very rare in our area) 15. S. ohioensis (Ohio G.)
  - b. Flower heads in glomerules (small, compact, more-or-less rounded clusters); leaves parallel-veined, basal leaves not enlarged, mostly absent (assigned to the Genus <u>Euthamia</u> by Gleason and Cronquist, 1991)
    16. <u>S. graminifolia</u> (Narrow-leaved G.)
- \* Modified (September 1994) from Wiegand and Eames (1925). Scientific names and hybridization information follow Fernald (1950). Because of the occurrence of hybrids among many of these species, intermediate forms, not handled well by this key, can be found.

## References

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