A KEY TO THE ILLINOIS SPECIES OF SOLIDAGO

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The object of this study is a taxonomic analysis of the Goldenrods of Illinois. The study was made on specimens from the herbarium of the University of Illinois.

The nomenclature of the species was brought up to date and standardized according to Deam's *Flora of Indiana*, Friesner's *The Genus Solidago*, Rydberg's *Flora of the Prairies and Plains of Central North America*, and Mackenzie's treatment of Solidago in Small, *Manual of the Southeastern Flora*.

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I have followed the plan of separating this group of plants into three generic units each possessing distinguishing morphological characteristics as follows:

I. Heads sessile; leaves punctate.....Euthamia
I. Heads distinctly pedicellate; leaves not punctate.
  A. Heads in a dense compound corymbiform cyme; bracts obtuse, longitudinally striate; achenes glabrous.....Oligoneuron
  A. Heads in a panicle or axillary racemes; bracts acute or obtuse, not striate; achenes glabrous or pubescent.....Solidago

SOLIDAGO L. GOLDENROD

I. Stem glabrous up to the inflorescence.
  A. Inflorescence completely glabrous.
    a. Leaves elliptical-lanceolate with one principal vein.....S. juncea Ait.
    a. Leaves linear-lanceolate, distinctly triple-veined.....S. glaberrima Martens
  A. Inflorescence more or less pubescent or puberulent.
    a. Heads in axillary racemes.
      b. Stem angular; ultimate branches of inflorescence pubescent; leaves oval with sharply serrate margins.....S. latifolia L.
      b. Stem terete; pedicels pubescent; leaves lanceolate with unevenly dentate and hispidulous margins.....S. caesia L.
    a. Heads in a terminal panicle or raceme.
      b. Stem strongly angled.....S. patula Muhl.
      b. Stem terete or nearly so.
        c. Leaves with one principal vein; bracts obtuse or acute; achenes pubescent or glabrous.
          d. Leaves glabrous except the margins; achenes glabrous; bracts obtuse.
            e. Heads secund.....S. uniligulata T. & G.
            e. Heads not secund.
              f. Lower leaves oval or ovate-lanceolate, serrate; plants of rich woods.....S. speciosa Nutt.
              f. Lower leaves lanceolate.
                g. Lower leaves sometimes crenate otherwise entire; plants of dry woods and prairie.....S. rigiduscula T. & G.
                g. Lower leaves serrate or serrulate, oblong-lanceolate; plants of swamp or bogs.....S. uliginosa Nutt.
          d. Leaves ciliate on margins, and veins beneath; achenes pubescent; bracts acute.....S. ulmifolia Muhl.
        c. Leaves triple-veined, i.e., one pair of lateral veins more prominent than the others; heads secund.
          d. Leaves more or less puberulent or pubescent at least along the veins beneath.
            e. Involucre 2-2.8 (–3) mm. high.....S. canadensis L.
            e. Involucre 3-4.3 mm. high.....S. gigantea Ait.
          d. Leaves completely glabrous, except the scabrous margins.....S. gigantea var. leiophylla Fern.
I. Stem pubescent or puberulent throughout (rarely glabrous below).
  A. Heads not secund; rays white or yellow.
    a. Rays white; involucre 3-5 mm. high; achenes glabrous.....S. bicolor L.
    a. Rays yellow; involucre 4.5-5.5 mm. high; achenes glabrous or slightly pubescent.....S. hispida Muhl.
  A. Heads secund; rays always yellow.
    a. Leaves with one principal vein.
      b. Blades elliptical; bracts acute.....S. rugosa Mill.
      b. Blades oblanceolate; bracts obtuse.
        c. Plants with a green appearance.....S. radula Nutt.
        c. Plants with a whitish or grayish appearance.....S. nemoralis Ait.

a. Leaves triple-veined.
b. Blades oblanceolate; bracts obtuse.....S. radula Nutt.
b. Blades lanceolate or elliptical; bracts obtuse or acute.
c. Leaves lanceolate; bracts acute.
d. Involucre 2-2.8 (–3) mm. high.....S. canadensis L.
d. Involucre 3-5 mm. high.....S. altissima L.
c. Leaves elliptical; bracts obtuse.....S. Drummondii T. & G.

EUTHAMIA NUTT. BUSHY GOLDENROD

I. Stem glabrous; leaves glabrous; heads in clusters of 3-7.....E. media (Greene) Bush
I. Stem hirtellous (especially on the branches of the corymb and on the striations of the stem); leaves puberulent on the veins and margins; heads in clusters of 6-8.....E. hirtella (Greene) Bush

OLIGONEURON SMALL. ROUGH GOLDENROD

I. Stem leaves conduplicate, entire.....O. Riddellii (Frank) Rydb
I. Leaves not conduplicate.
A. Leaf margin crenate; stem pubescent.....O. rigidum (L.) Small
A. Leaf margin entire or sparingly serrulate; stem glabrous
(S. ohioensis Riddell, Syn. Fl. West. States 57. 1835).....**O. ohioensis** (Riddell) G. N. Jones, comb. nov.