

A NEW NAME AND A NEW COMBINATION IN *SOLIDAGO* SUBSECT. *GLOMERULIFLORAE* (ASTERACEAE: ASTEREA)

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ABSTRACT

The following new name and new combination are proposed: *Solidago caesia* var. *zedia*, *Solidago curtisii* var. *flaccidifolia*.

RESUMEN

Se proponen el siguiente nombre y combinación nueva: *Solidago caesia* var. *zedia*, *Solidago curtisii* var. *flaccidifolia*.

The following new name and new combination are presented in order to have them available for use in our treatment of *Solidago* L. for the Flora North America project (Semple & Cook, submitted). Cook (2002, Ph.D. thesis) revised *Solidago* subsect. *Glomeruliflorae* (Torrey & A. Gray) Nesom, including cytogeography and multivariate morphometric analyses. Detailed papers on the taxonomy and biosystematics of subsect. *Glomeruliflorae* are in preparation.

***Solidago caesia* L. var. *zedia* R.E. Cook & Semple, var. nov. (Fig. 1).** TYPE: U.S.A. LOUISIANA. EAST FELICIANA PARISH: LA-67, 2.5 km S of Felps (LA-422), vicinity of small creek, 13 Oct 1991, J.C. Semple & B.A. Surtip 10108 (HOLOTYPE: WAT; ISOTYPES: BRIT, MO).

Differt a *Solidago caesia* var. *caesia* foliis caulinis rhombico-ovatis.

Perennial from woody caudex-like rhizomes. Stems one to many, arching (27.7–)31.6–54.1–76.6(–99.1) cm tall occasionally with one to several elongated lateral branches, glaucous, usually blue to purple anthocyanin colored, glabrous to slightly pubescent in the inflorescence (0.0–)0.6–6.2–11.8(–17.0) hairs/mm². Basal leaves absent at flowering time. Lower stem leaves lanceolate to rhombic, sessile, (47.3–)57.0–70.0–83.1(–91.8) mm long, (13.0–)14.4–17.7–21.1(–24.0) mm wide, sparsely pubescent above (0.0–)0.0–1.1–2.2(–3.6) hairs/mm², (0.2–)1.6–3.3–5.0(–6.0) hairs/mm along the vein, glabrous to sparsely pubescent below (0.0–)0.0–0.2–0.9(–2.7) hairs/mm², (0.0–)0.1–2.5–4.9(–8.0) hairs/mm along the vein, leaf apices acuminate, margins with (4.0–)5.0–6.9–8.7(–9.3) serrations. Upper stem leaves lanceolate to rhombic, sessile, (23.0–)32.4–43.0–53.6(–60.3) mm long,

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Fig. 1. Holotype of *Solidago caesia* var. *zedia*: Semple & Suripto 10108 WAT, scale bar = 10 cm in total. Insert. A. Upper stem leaves, scale bar = 1 cm.

(5.6–)6.7–9.1–11.6(–13.9) mm wide, glabrous to sparsely pubescent above (0.0–) 0.1–1.1–2.2(–3.0) hairs/mm², (0.8–)1.6–3.8–5.9(–8.6) hairs/mm along the vein, glabrous to sparsely pubescent below (0.0–)0.0–0.2–0.9(–2.0) hairs/mm², (0.0) 0.4–2.6–4.9(–7.5) hairs/mm along the vein, margins entire to slightly serrate

with (0.0-)0.0-1.8-3.6(-7.0) serrations. Capitulescence short axillary and terminal racemiform-paniculiform clusters, inflorescence (8.9-)11.4-20.8-30.2(-38.7) cm long with heads secund. Involucres (4.8-)5.4-6.1-6.8(-7.2) mm high, (3.1-)3.1-3.9-4.7(-6.3) mm wide; phyllaries in several unequal series, outermost phyllaries (0.9-)1.0-1.1-1.2(-1.3) mm long, lanceolate, acute; innermost phyllaries (2.5-)2.8-3.3-3.7(-4.1) mm long, linear-oblong, obtuse to acute, single nerved. Ray florets (1.0-)1.9-2.7-3.5(-4.0), strap yellow, (1.5-)1.8-2.3-2.7(-3.4) mm long; corolla (1.3-)1.5-1.7-1.9(-2.0) mm long; achenes (1.1-)1.3-1.7-2.1(-2.6) mm long, sparsely to moderately pubescent; pappus (1.6-)2.2-2.6-3.1(-3.4) mm long. Disc florets (3.0-)3.8-5.2-6.6(-7.0), yellow; corolla (2.0-)2.1-2.5-3.0(-3.7) mm long; corolla lobe (0.9-)1.1-1.3-1.4(-1.6) mm long; achenes (1.2-)1.4-1.7-2.0(-2.2) mm long, moderately to densely pubescent; pappus (2.4-)2.6-3.0-3.4(-3.6) mm long. Chromosome number: $2n=18$.

Solidago caesia var. *zedia* is distinguished by its shorter, broadly lanceolate to rhombic leaves (Fig 1). Variety *zedia* is found in the wet, lowland areas of southern Arkansas, Mississippi, Louisiana, Alabama, Georgia and into north-western Florida.

Etymology.—The varietal name is an alphabetical reference to it being the last taxon recognized during work by our Canadian laboratory, eh.

KEY TO THE TWO VARIETIES OF *SOLIDAGO CAESIA*

1. Lower midstem leaves long and narrowly lanceolate, 5–15 cm long, 0.8–3 cm wide; stems strongly arching; Nova Scotia to Wisconsin south to Florida and Texas ____ ***S. caesia* var. *caesia***
1. Lower midstem leaves shorter and broadly lanceolate, 5–9 cm long, 1.3–2.4 cm wide; stems weakly arching; restricted to the wet, lowlands of Arkansas, Mississippi, Alabama, Georgia, and Florida ____ ***S. caesia* var. *zedia***

Solidago curtisii Torrey & A. Gray var. ***flaccidifolia*** (Small) R.E. Cook & Semple, comb. et stat. nov. BASYONYM: *Solidago flaccidifolia* Small, Bull. Torrey Bot. Club 25:477. 1898. TYPE: U.S.A. GEORGIA: Rome, 1872, *Chapman s.n.* (HOLOTYPE: NY!)

The var. *flaccidifolia* is distinguished by its leaves being more elliptical and more pubescent than those of var. *curtisii*. The range of var. *flaccidifolia* includes the mountains of Tennessee, Kentucky, Virginia, North Carolina, and Georgia, as well as lowland areas in southern Georgia, Alabama and Mississippi. It can be found at low to moderate elevations in shaded woods and thickets. This variety has been found to be tetraploid and hexaploid. A complete discussion of the taxon will be presented in a paper, now in preparation by R.E. Cook.

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