

**SENECIO AMPULLACEUS (ASTERACEAE): A WEST GULF
COASTAL PLAIN ENDEMIC NEW TO OKLAHOMA**

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ABSTRACT

Senecio ampullaceus is reported as new to Oklahoma. The overall distribution of the species in the western Gulf coastal plain is discussed.

KEY WORDS: Asteraceae, *Senecio*, Oklahoma.

Senecio ampullaceus Hook. (Asteraceae) is not cited as occurring in Oklahoma by Taylor and Taylor (1994), USDA, NRCS (2006), Oklahoma Vascular Plants Database (Hoagland et al. 2006), and Barkley (2006), thus the records cited below constitute the first report of the species in the state.

Voucher specimens: U.S.A. OKLAHOMA. **Pushmataha Co.:** 2.1 miles S of jct. of Okla. Hwy 3 and Coffee Creek Road (NS412RD) on Coffee Creek Road, SW of Antlers, 8 Apr 2006, *Singhurst 14,109 & Powers* (BAYLU, OKL, TEX); 1.4 miles NW of jct. of Coffee Creek Road (NS412RD) and WD194 RD on Powers Ranch, 8 Apr 2006, *Singhurst 14,110 & Powers* (BAYLU, OKL, TEX).

The two populations of *Senecio ampullaceus* were located on open sandhills consisting of loose, deep sands above Beaver Creek, southwest of Antlers at approximately 180 m elevation. The first location (Singhurst 14,109) was along the right-of-way and onto private land and consisted of about 7 ha. The second location consisted of about 9 ha of sandhill ridge top. At the time of collection, immature plants were still emerging from the soil at both locations. Each population was estimated to consist of several thousand individuals. The sites were dominated by *Quercus stellata* var. *stellata*, *Q. marilandica*, *Carya texana*, *Callicarpa americana*, *Opuntia* sp., *Sassafras albidum*, *Prunus angustifolius*, and *Vaccinium arboretum*. Non-woody plants included *Pediomelum rhombifolium*, *Eragrostis secundiflora*, *Croptilon divaricatum*, *Loeflingia squarrosa*, *Monarda punctata*, *Phlox* sp., *Polypreum procumbens*, and *Tradescantia* sp. The locations are about 50 km northwest of the nearest known Texas occurrence in Red River County (Singhurst, Carr, & White 14,089, BAYLU).

Senecio ampullaceus was reported endemic to Texas (Correll and Johnston 1970; Diggs et al. 1999). It is very widespread in the eastern half of the state (Turner et al. 2003), but is usually limited to sandy soils. The species was reported in St. Louis, Missouri by Steyermark (1963) and is now considered to be adventive at that location (see <http://biology.missouristate.edu/herbarium/advent.html>). Singhurst and Holmes (1998) reported the species in Miller Co. in southwestern Arkansas, about 1.5 km east of the Texas stateline. At the time of collection of the Arkansas record, several hundred plants were observed on the road right-of-way, which was about 800 m long and 3 m wide (on each side), and in and on the edge of a 2.2 ha cultivated, sandy field. The vegetation at this site was very similar to that of the Texas Post Oak Savannah, being dominated by *Quercus incana*, *Q. stellata*, *Carya texana*, etc., but, as were the Oklahoma sites, less diverse (lacking such common Texas species such as *Penstemon murrayanus*, *Streptanthus hyacinthoides*, *Polygonella americana*, *Polanisia erosa*, *Hymenopappus artemisiifolius*, *Oenothera heterophylla*, *Tetragonotheca ludoviciana*, etc.). Barkley (2006) wrote that the species had been reported from Arkansas and Missouri (St. Louis), yet included only Texas in the stated distribution. This

suggests that he considered the plant endemic to Texas and adventive in both Arkansas and Missouri. Certainly the Missouri record, being far removed from the center of distribution of the species, is best considered adventive. However, the presence of the species in Oklahoma and Arkansas is better regarded as slightly disjunct and naturally occurring. This is supported by the proximity of the locations to where the species occurs in Texas, the similarity of their habitats, and the large number of individuals present that exhibited considerable morphological variation.

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