

NEW AND NOTEWORTHY PLANTS OF TEXAS

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ABSTRACT

Rhexia alifanus (Melastomataceae) and *Rhynchospora inundatum* (Cyperaceae), both previously reported in the state, are documented as part of the flora of the state. *Ratibida pinnata* (Asteraceae), *Tradescantia fluminensis* (Commelinaceae) and *Saccharum ravennae* (Poaceae) are reported as new to Texas. *Phytologia* 92(2): 249-255 (August 2, 2010).

KEY WORDS: Texas, *Rhexia*, Melastomataceae, *Rhynchospora*, Cyperaceae, *Ratibida*, Asteraceae, *Tradescantia*, Commelinaceae, *Saccharum*, Poaceae.

The following two species, both previously mentioned as occurring in Texas, are documented as part of the flora of the state. These are followed by the report of three species new to the state.

Rhexia alifanus Walter (Melastomataceae)

Specimen cited: U.S.A. TEXAS. Newton Co.: Hancock Management Land, 2.1 miles E of junction of Hwy 363 and Big Cow Creek on Hwy 363, then 0.2 mile south; flatwoods pond with *Rhynchospora perplexa*, *R. filifolia*, *R. elliotii*, *R. gracilentia*, *R.*

cephalantha, *Eleocharis equisetoides*, *Dichantherium scabriusculum*, *Eriocaulon decangulare*, *Xyris latifolia*, and *Rhexia lutea*, 23 July 2008, J. Singhurst 16123 (BAYLU).

Rhexia alifanus is characterized by glabrous stems, curved anthers 5–11 mm long, and seeds 1.2–1.4 mm long. The species is distributed from North Carolina, south to Florida, then west to Louisiana and Texas. The history of the citation of *R. alifanus* in Texas lacks verification (a voucher specimen). It was first mentioned as occurring in the state by Kral and Bostick (1969). However, the species was not included in the *Manual of the Vascular Plants of Texas* by Correll and Johnston (1970), possibly due to the short period of time between the two publications. In 1972, Correll and Correll included the species in *Aquatic and Wetland Plants of Southwestern United States*, stating “in s.e. Tex. (Hardin Co.)” while Brown (1972) also mentioned the occurrence of the species in Texas. The species was included in the second printing of Correll and Johnston (1979) with the comment “recently reported from Hardin Co., s.e. Tex.” Since then, the species has been included as part of the state’s flora and is listed in Hatch et al. (1990), Johnston (1990), Jones et al. (1997), Turner et al. (2003), and USDA, NRCS (2010).

Substantial effort has failed to locate either a voucher specimen or a reference citing a specimen from the state. Under such a circumstance, it appears proper to cite the above specimen to document the occurrence of the species within the state. The species is considered to be native to Texas.

Rhynchospora inundata (W. Oakes) Fern. (Cyperaceae)

Specimens cited: U.S.A. Texas. **Newton Co.:** E of Sandhill Cemetery, deep peat pond with floating mats, 24 Sep 2009, J. Singhurst 18003 (BAYLU); **Robertson Co.:** Love Ranch bog, 15 miles east of New Baden, mud and swampy soil, frequent, 2 Jul 1952, S. K. Menon 325 (TAES); **Washington Co.:** Roadside ditch on Hwy 290, 4.2 mi. SE of county line; sandy soil, 29 Jun 1982, James Kessler 6197 (TAES).

The initial mention of *Rhynchospora inundata* in Texas is in Jones’ et al. (1997) checklist of vascular plants of the state. No indication of importance (i.e., was the first mention of the species in the

state) nor was a listing of representative specimens presented. This report was used by USDA, NRCS (2010) as the basis for including Texas as part of the distribution of the species. The distribution of the species presented in Kral (2002) does not include Texas and Turner et al. (2003) do not include the species in their atlas of the vascular flora of the state. The specimens cited above thus serve as documentation of the species in Texas.

The species is distributed in the lower Atlantic and Gulf coastal plains from Massachusetts and Rhode Island to Florida and west to eastern Texas. It is considered to be native to the state. This emergent species occurs in savannah ponds and pools. Within Texas, the species is known from widely separated locations. The Robertson Co. location is approximately 280 km west of the Newton Co. location, while the Washington Co. location is 240 km west of the Newton Co. record. The Robertson Co. and Washington Co. locations are about 90 km distant. Kral (2002) includes Louisiana within the distribution of *R. inundata*, but neither Thomas and Allen (1993) nor USDA, NRCS (2010) indicate the presence of the species in that state.

Label data from Texas specimens suggest that the low representation of the species in Texas herbaria may be related to misdetermination as *R. corniculata*, (Lamarck) A. Gray, a similar and much more abundant cespitose species lacking slender scaly rhizomes characteristic of *R. inundata*. Additional information is in Kral (2002).

Ratibida pinnata (Ventenat) Barnhart (Asteraceae)

Specimen Cited: U.S.A. Texas. Bowie Co.: Godley Prairie, 1.8 mi. S of FM 1840 and Hwy 98, just S of Godley Community, alfisol prairie with mima mounds, 27 Jun 2009, J. Singhurst 17500 (BAYLU).

Ratibida is a genus of seven species, four of which occur in the United States and Canada (Urbatsch and Cox, 2006). Until now, three species have been recorded in Texas. These are *R. columnifera* (Nuttall) Wooton and Standley, widely distributed in the eastern two-thirds of the state, *R. peduncularis* (T. & G.) Barnhart of the south Texas plains and the Gulf prairies and marshes, and *R. tagetes* (E. James) Barnhart of the western third of Texas. *Ratibida pinnata*, here reported as new to Texas, is widely distributed in eastern North

America from west and south of the Appalachian Mountains to the eastern portions of the tall grass prairies of the Great Plains (Urbatsch and Cox 2006). The species is reported in Choctaw and Mc Curtain counties, Oklahoma, which border Texas, and Hempstead and Clark counties, in southwest Arkansas (USDA, NRCS 2010). The Texas location cited is about four miles southwest of New Boston, Bowie Co., Texas. A key to the species of *Ratibida* and an illustration of *R. pinnata* are in Urbatsch and Cox (2006). The species is considered to be native to the state.

Tradescantia fluminensis Vellozo (Commelinaceae).

Specimens cited: U.S.A. Texas. Travis Co.: Austin, jct. of Koenig Ln. and Waller Creek, 19 Mar 2009, J. & A. Singhurst 17671 (BAYLU); Austin, jct. 34th Street and Shoal Creek, 25 Jun 2009, J. Singhurst 17515 (BAYLU); Victoria Co.: Victoria, 12 May 1968, Tim Edwards s.n. (BAYLU).

Tradescantia fluminensis is native to South America, where it is distributed from Brazil to Argentina. The species is naturalized in coastal California and the Gulf Coastal plain of Alabama, Florida, and Louisiana (Faden 2000). The species has recently been reported in Georgia by Carter et al. (2009). Reports of the species by Small (1933) in North Carolina and Georgia are unconfirmed (Faden 2000). USDA, NRCS (2010) mentions that the species occurs in Kentucky. In Texas, the species occurs in shaded areas, springs, streams, and seeps in limestone, often in mats.

Saccharum ravennae L. (Poaceae)

Specimen cited: U.S.A. Texas. Hemphill Co.: Gene Howe Wildlife Management Area, north side of the Canadian River, 15 Oct 2009, J. Singhurst 17613 (BAYLU). Wheeler Co.: 2.6 mi. N of Shamrock (jct. of Interstate Hwy 40 and U.S. Hwy 83), north side of North Fork Red River, west side of Hwy 83, 15 Oct 2009, J. Singhurst 17670 (BAYLU).

Saccharum ravennae (formerly *Erianthus ravennae* Beauv.) is a native of southern Europe and western Asia (Webster 2003). Bailey (1949) mentions that the species is utilized as an ornamental, especially where thermal regimes are too severe for pampas grass (*Cortaderia*

selloana (Schult & Schult. f.) Asch. & Graebn.). The species is first mentioned as occurring in the United States in Hitchcock (1935, 1950), but is unnumbered and does not appear in the key. In that work, such plants were not considered as permanent constituents of the flora and appear not to be established. However, it is mentioned in both editions that the species is "Established along irrigation ditches near Phoenix, Arizona." The species was reported as adventive in Arizona by Kearney and Peebles (1960). The oldest herbarium specimen located was from Fresno, California, collected 4 August 1918 by *P.B.Kennedy s.n.* (CDA 206). It is not known if this was a naturally occurring or cultivated plant. Webster (2003) mentions that the species occasionally escapes from cultivation and may persist. Presently, *S. ravennae* has been recorded in a discontinuous distribution as far east as Florida, north to Maine and Michigan and west to California. The occurrence of the species in Texas should be monitored to determine if it will become a permanent part of the state's flora and possibly a serious invasive pest.

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