TWO ADDITIONS TO THE VASCULAR FLORA OF TEXAS

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ABSTRACT

Euthamia caroliniana is reported as new to Texas, while *Rhynchospora chapmanii* is reported as new to Texas and the West Gulf Coastal Plain.

KEY WORDS: Asteraceae, Cyperaceae, *Euthamia, Rhynchospora*, Louisiana, Texas, West Gulf Coastal Plain.

The following species are reported as new to Texas.

Euthamia caroliniana (L.) Greene ex Porter & Britton (Asteraceae).

Euthamia caroliniana (Haines 2006) is distributed from Nova Scotia and Maine, south to Florida, and west to Michigan, Illinois, and Louisiana. Until now, it has not been reported in Texas (Correll & Johnston 1970, Turner et al. 2003, Haines 2006). The species was collected at Candy Abshier Wildlife Management Area adjacent to Smith Point. This location is approximately 180 km west of the nearest known occurrence of *E. caroliniana* in Jefferson Davis Parish, Louisiana, where it is treated under the synonym *Euthamia tenuifolia* (Pursh.) Nuttall (Thomas and Allen 1996).

Euthamia caroliniana occurred infrequently in a wet sandy coastal prairie and adjoining salt pan (slicks) in small patches that typically consisted of 5-10 plants. Several larger patches with 50-100 plants were also present. The site was dominated by *Bigelowia nuttallii*, *Borrichia frutescens*, *Boltonia diffusa*, *Dichanthelium acuminatum*, *Eupatorium glaucescens*, *Fimbristylis castanea*, *Fuirena breviseta*, *Hypericum drummondii*, *Iva angustifolia*, *Liatris acidota*, *Lythrum alatum*, *Morella cerifera*, *Rhynchospora plumosa*, *Scleria georgiana*, *Schizachyrium tenerum*, *Solidago tortifolia*, and *Xyris stricta*.

Voucher specimen: TEXAS. **Chambers Co.:** Candy Abshier Wildlife Management Area, Smith Point at the southwestern tip of FM 562 at Galveston Bay, 4 Nov 2007, *Singhurst 15467* (BAYLU).

Euthamia is a small genus of five species, closely allied to, but distinct from *Solidago* (Haines 2006). Other species of the genus known to occur in the state include *E. gymnospermoides* Greene and *E. leptocephala* (Torrey & A. Gray) Greene (Turner et al. 2003, Haines 2006). A third species, *E. graminifolia* (L.) Nuttall is cited as occurring in Texas by Turner et al. (2006), but is excluded from the state by Haines (2006). A key to species and further information is available in Haines (2006).

Rhynchospora chapmanii M.A. Curtis (Cyperaceae)

In Godfrey and Wooten (1979) and Kral (2000) *Rhynchospora chapmanii* is considered to be endemic to the United States where it occurs from North Carolina, south to Florida, and west to extreme eastern Louisiana. There are, however, unpublished reports in the TROPICOS Database of the species occurring in Belize and Nicaragua (MOBOT 2008). Until the present paper, *R. chapmanii* had only been documented in the Southern Atlantic and Eastern Gulf Coastal Plains.

The record cited below constitutes the first known report of the species not only in Texas, but in the West Gulf Coastal Plain as defined by Bailey et al. 1994. This distribution pattern is common to a number of other Eastern Coastal Plain species, such as *Agrimonia incisa*, *Platanthera chapmanii*, and *Xyris smalliana*, all present as disjuncts in southeast Texas, but with the major part of their distributions being from southeast Louisiana and eastward.

Rhynchospora chapmanii was collected in a shallow wetland in a sandy coastal prairie in Candy Abshier Wildlife Management Area adjacent to Smith Point. The site was dominated by *Anthaenantia rufa*, *Panicum rigidulum*, *Rhynchospora* spp., *Fuirena* sp., and *Eleocharis* sp. This location is about 450 km west of the nearest known occurrence of *R. chapmanii* in St. Tammany Parish, Louisiana (Thomas and Allen 1993).

TEXAS. **Chambers Co.:** Smith Point, Candy Abshier Wildlife Management Area, Take IH 10 E to SH 61 at Hankamer, S on SH 61 for four miles to FM 562, turn onto FM 562 and continue S then W for 22 miles on FM 562 to Smith Point, 01 Nov 2007, *Rosen 4660* (BRIT, TEX, VDB.

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LITERATURE CITED

- Bailey, R.G., P.E. Avers, T. King, and W.H. Mc Nab. 1994. Ecoregions and subregions of the United States (map). Washington, D.C., U.S. Department of Agriculture-Forest Service, scale 1:7,500,000.
- Correll, D. S. and M. C. Johnston. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner.

- Haines, A. 2006. *Euthamia*. In: Flora of North America Editorial Committee, eds. Flora of North America 20. Oxford Univ. Press, New York, pp. 97–100.
- Godfrey, R.K. and J.W. Wooten. 1979. Aquatic and wetland plants of the southeastern United States. Monocotyledons. Univ. of Georgia Press, Athens.
- Kral, R. 2000. *Rhynchospora*. In: Flora of North America Editorial Committee, eds. 1 Flora of North America 23. Oxford Univ. Press, New York, pp. 200-239.
- Thomas, R, D. and C. M. Allen. 1993. Atlas of the vascular flora of Louisiana. Vol. 1. Ferns & Fern Allies, Conifers, & Monocotyledons, Louisiana Department of Wildlife & Fisheries, Baton Rouge.
- Thomas, R, D. and C. M. Allen. 1996. Atlas of the vascular flora of Louisiana. Vol. II: Dicotyledons. Acanthaceae - Euphorbiaceae. Louisiana Department of Wildlife & Fisheries, Baton Rouge.
- MOBOT 2008. The TROPICOS Database (<u>http://mobot.mobot.org/W3T/Search/vast.html</u>, 14 Feb 2008) Missouri Botanical Garden, St. Louis, Missouri.
- Turner, B. L., H. Nichols, G. Denny, and O. Doron. 2003. Atlas of the vascular plants of Texas. Vols. 1 and 2. Sida Bot. Misc. 24. Botanical Research Institute of Texas, Fort Worth.