

## TWO VASCULAR PLANT SPECIES NEW TO OKLAHOMA

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### ABSTRACT

*Calyptocarpus vialis* (Asteraceae) and *Rhynchospora inexpansa* (Cyperaceae) are reported as new to the state of Oklahoma. The *Calyptocarpus* is considered to be a recent introduction, while the *Rhynchospora* is presumed to be native.

**KEY WORDS:** Asteraceae, Cyperaceae, *Calyptocarpus*, *Rhynchospora*, Oklahoma, Bryan County, McCurtain County, floristics, adventive

This paper documents the occurrence of two vascular plant species previously unknown to the flora of Oklahoma.

*Calyptocarpus vialis* Less. (Asteraceae), straggler daisy, is here reported as a recent introduction to Oklahoma, perhaps representing the northern edge of a gradual expansion. Nesom (2011) considered the species as native to Mexico and Texas (“at least to the southernmost counties of the Rio Grande valley, where it is essentially continuous with the Mexican distribution, and possible as far north as Austin (Travis County) along the eastern edge of the Edwards Plateau.”). All other distributions (elsewhere in Texas and the USA, Australia, Taiwan, and Hawaii) are apparently recently adventive.

Voucher specimen: **USA. Oklahoma.** Bryan Co.: 0.5 mi. N of E2190 Rd and Hwy 69, E side of Hwy 69 and 0.9 miles SSW of Colbert, 33° 50' 36.78" N, 96° 30' 46.02" W, 20 Nov 2011, *Singhurst & family 18736* (BAYLU).

The Oklahoma record is from Bryan Co., which is contiguous (across the Red River) with Grayson Co., Texas. *Calyptocarpus vialis* is documented from Grayson Co. (*Haller s.n.*, TEX-LL) at a site about 6 kilometers from the Oklahoma locality.

In Oklahoma, *Calyptocarpus vialis* occurred on a flood plain terrace in shady understory of *Acer saccharinum* and *Quercus shumardii* forest. Dominant herbaceous flora growing in association with *C. vialis* included *Carex cherokeensis*, *Senecio vulgaris*, *Poa annua*, *Viola sororia*, *Allium sp.*, and *Lamium amplexicaule*.

*Rhynchospora inexpansa* (Michx.) Vahl (Cyperaceae), the nodding beaksedge, is native to the southeastern USA (Kral 2003), being reported from Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Texas, and Virginia (Kartez 2011; USDA, NRCS 2011). The reported Oklahoma collection is from McCurtain Co., which is contiguous with southwest Arkansas and northeast Texas. In southwest Arkansas, the species has been documented in Miller Co. (*Gentry 9131*, UARK), Lafayette Co. (*Reid 2339*, UARK), and Hempstead Co. (*Lawson 1801*, NLU). In east Texas, the species is known as far north as Marion Co. (*Singhurst & Bridges 14436*, BAYLU). The species occurs in sands, peats, clays, and silts of moist meadows, pond shores, flatwoods, and disturbed low areas (Kral 2003). In eastern Texas, *R. inexpansa* occurs primarily on damp sandy soils in longleaf pine savannas, pitcher plant bogs, flatwood ponds, and disturbed areas (such as sand-based wetlands in maintained clearings for electrical transmission lines).

Voucher specimen: **USA. Oklahoma.** McCurtain Co.: 0.8 mile W of Tom, on north side of Rd EE, 9 Oct 2008, *Singhurst 16174* (BAYLU).

In Oklahoma, *Rhynchospora inexpansa* occurred in a maintained right-of-way (of an electrical power transmission line) that bisected a low sand hill characterized by water seepage. This site is 60 kilometers west of the nearest known occurrence in Hempstead Co., Arkansas, and 98 kilometers north of the nearest known Texas occurrence in Marion Co. Presently, the Oklahoma record is the most northwesterly known occurrence for the species. Characteristic associated flora included *Bidens aristosa*, *Conoclinium coelestinum*, *Eupatorium serotinum*, *Eupatorium compositifolium*, *Rhynchospora glomerata*, and *Axonopus fissifolius*.

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#### LITERATURE CITED

- Kartez, J.T. 2011. North American Plant Atlas. The Biota of North America Program (BONAP). Chapel Hill, North Carolina. <<http://www.bonap.org/MapSwitchboard.html>>
- Kral, R. 2003. *Rhynchospora*. Pp. 200–239 in Flora of North America Editorial Committee. Flora of North America, Vol. 23, Magnoliophyta: Commelinidae (in part): Cyperaceae.
- Nesom, G.L. 2011. Is *Calyptocarpus vialis* (Asteraceae) native or introduced in Texas? *Phytoneuron* 2011-31: 1–7.
- USDA, NRCS. 2011. The PLANTS Database. National Plant Data Team. Greensboro, North Carolina. <<http://plants.usda.gov>> 11 October 2011