

ADDITIONAL NOTEWORTHY COLLECTIONS OF *CYPERUS DRUMMONDII*
(CYPERACEAE) FROM TEXAS AND FIRST REPORT FROM MEXICO

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ABSTRACT

Recent noteworthy collections of *Cyperus drummondii* from the Texas Gulf Prairies and Marshes, Piney Woods Natural Regions, and a first record from Mexico are reported.

RESUMEN

Se citan colecciones recientes notables de *Cyperus drummondii* de las paraderas y charcas del Golfo de Texas, Piney Woods Natural Regions, y una primera cita de México.

Collections of *Cyperus drummondii* Torr. & Hook. from the Gulf Coast Prairies and Marshes as defined by Gould (1975) from Texas counties not previously reported by Rosen (2004) were made during field work in 2004–2007 as follows:

TEXAS. Fort Bend Co.: Buffalo Creek Unit of the San Bernard National Wildlife Refuge, S of FM 442, 7.2 km W of its intersection with Hwy. 36, between the towns of Boling and Needville, 10 May 2007, Rosen 4114 (BRIT, TAES, TEX, VSC).

At this location, *Cyperus drummondii* occurred frequently in prairie wetlands on clayey-loam soils with *Carex aurecolensis* Steud., *C. festucacea* Schkuhr ex Willd., *C. triangularis* Boeck., *Cyperus reflexus* Vahl, *Eleocharis* sp., *Juncus acuminatus* Michx., *J. brachycarpus* Engelm., *J. marginatus* Rostk., *Polygonum* sp., *Sesbania drummondii* (Rydb.) Cory., and *Steinchisma hians* (Elliott) Nash.

Victoria Co.: McFaddin Ranch, about 2.8 mi E of the jct. of U.S. Hwy. 77 and FM 445 in the town of McFaddin, 11 Sep 2004, Rosen 3056 & Carter (MICH, TEX); Carter 15438 & Rosen (VDB, VSC, others to be distributed).

At this location, *Cyperus drummondii* was locally abundant in a large prairie wetland on clayey-loam soils of the Lissie Formation with *Acacia farnesiana* (L.) Willd., *Andropogon gerardii* Vitman, *Cyperus* spp., *Fleocharis ravenelii* Britton, *Leersia hexandra* Sw., *Paspalum* spp., *Polygonum* sp., *Prosopis glandulosa* Torr., and *Rhynchospora* spp.

Reports of *Cyperus drummondii* from the Piney Woods in the *Illustrated Flora of East Texas, Vol. 1*. (Diggs et al. 2006) are based on two very old collections from the southeast margin of East Texas (Rosen 2004). Recent field work in Hardin County has resulted in collections of *C. drummondii* from a hillside seepage bog and the margins of a flat-woods pond as cited here:

TEXAS. Hardin Co.: Roy E. Larsen Sandyland Sanctuary, N of State Hwy. 327, between the towns of Salsbee and Kountze, 08 Oct 2006, Rosen 3949 & Brown and Boensch (BRIT, MICH, TAES, TEX, VSC).

The label data from the historic collections of *Cyperus drummondii* from eastern Texas provide no details on its habitat (Rosen 2004). We expand the habitat description of this species in Texas to include hillside seepage bogs and flat-woods ponds, in addition to the relict Coastal Prairie wetlands noted by Rosen (2004). At the Roy E. Larsen Sandyland Sanctuary, *C. drummondii* was occasional to frequent on sandy soils in shallow water on the fringes of a flatwoods pond and wet sandy soils of a hillside seep with *Dichanthelium* sp., *Eleocharis* spp., *Fuirena* sp., *Morella cerifera* (L.) Small, *Panicum hemitomon* Schult., *Saccharum giganteum* (Walter) Pers., and *Scirpus cyperinus* (L.) Kunth. This is very similar to the habitat of this species in the Gulf Coastal Plain of Georgia and Mississippi (Carter et al. 1999).

Denton (1978) reported *Cyperus drummondii* [as *C. virens* Michx. var. *drummondii* (Torr. & Hook.) Kük.] as occurring in North America (Texas and Louisiana), Nicaragua, Jamaica, the Galapagos Islands, Surinam, and Brazil. Tucker (1994) and Espejo Serna and López-Ferrari (1997) included *C. drummondii* under *C. virens* in Mexico. During field work near the city of Durango following the Second Botanical Symposium of Northern Mexico, we collected specimens of *C. drummondii*, confirming its occurrence in Mexico. Review of specimens at CHDIR also resulted in the discovery of other collections of *C. drummondii* from the Mexican state of Durango previously identified as *C. virens*.

Specimens examined. **MÉXICO. Durango:** proximidad a Canelas, terrenos de la UAF Topia, Mpio. Canelas, montemojino, transición entre el bosque tropical caducifolio y el bosque de pino, 1414 m sam, suelo profundo, café muy pedregoso, con pendientes hasta de 45°, 27 Sep 1990, *Benítez 2400* (CHDIR), Carretera Durango-Nombre de Dios, Km 246.5, Mpio. Nombre de Dios, Aug 1997, matorral scrublo, *González 354* (CHDIR), 17 km al E de Durango por la carretera a Fresnillo, lugar inundado cerca de la carretera, localmente abundante, 1960 m, 18 Oct 1983, *González & Acevedo 2747* (CHDIR); Río Tunal, bajo puente en libramiento de carretera Za. accas-Torreón (cerca del Balneario San Juan), Mpio. Durango, 19 Jan 1999, *Pinedo 24* (CHDIR), 31 km de La Guajolota, por el camino a Los Charcos, Mpio. El Mezquitil, estanque en medio de bosque de pino-encino, escaso, dentro del agua, 2000 m, 8 Oct 1983, *González 2701* con *González y Acevedo* (CHDIR), Carretera 45 al E de la Ciudad de Durango (Puente Gavilanes), Mpio. Durango, 24°0'51" N, 104°29'23" W, 1850 m, vegetación riparia (*Salix bonplandiana*), común, hierba, 08 Oct 1999, *González 3195* (CHDIR); Mpio. Durango, 17.7 km al SSE de Durango, por la carretera a El Mezquitil, al S de Felipe Ángeles, 23°55'21" N, 104°32'40" W, 1850 m, vegetación subacuática, abundante a orilla de canal, 16 Sep 2005, *González 7091* con *Guaghanone, Torres, Rosen, Carter y Peterson* (CHDIR, ANSM, ENCB, IEB, MEXU, SI); *Carter 16149, 16150 & González, Guaghanone, Torres, Rosen, & Peterson* (VDB, VSC), others to be distributed); *Rosen 3493, 3494 & Carter, González, Guaghanone, Torres, & Peterson* (IAES).

The following key modified from Denton (1978) and Carter et al. (1999) will separate *Cyperus drummondii* from other members of the *C. virens* complex in Mexico.

1. Primary peduncles 3–5; floral scales 1.0–1.5(–1.8) mm long; spikelets at least 2.25 mm wide _____ **C. drummondii**
1. Primary peduncles 6–12(–14); floral scales 1.5–2.4 mm long; spikelets (2–)2.2–3.3 mm wide.
 2. Achenes (2.5–)3–5 times longer than wide, (1–)1.2–1.5 mm long; spikelets (5–)7–15 mm long _____ **C. virens**
var. **virens**
 2. Achenes 2–2.5 times longer than wide, 1–1.2 mm long; spikelets 5–6.5 mm long _____ **C. virens**
var. **minarum**

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