NOTEWORTHY VASCULAR PLANT COLLECTIONS FROM CALCASIEU PARISH, LOUISIANA

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ABSTRACT

The publication of vascular flora surveys of Calcasieu Parish, Louisiana by Neyland et al. in 2000 and by Neyland in 2002 and 2009 are updated and revised. Subsequent fieldwork has yielded the discovery of 30 new species records for the parish. *Dichanthelium wrightianum* is reported for Louisiana for the first time. Rare in Louisiana, *Bouteloua curtipendula* var. *curtipendula* and *Zephyranthes chlorosolen* are also reported. A single correction from the original survey is noted.

RESUMEN

La publicación de estudios de la flora vascular de Calcasieu Parish, Louisiana por Neyland et al. en el año 2000 y por Neyland en 2002 y 2009 se actualizó y revisó. Tras el trabajo de campo ha resultado el descubrimiento de 30 nuevos registros de especies para la parroquia. *Dichanthelium wrightianum* se cita de Luisiana por primera vez. Raras en Louisiana, *Bouteloua curtipendula* var. *curtipendula* y *Zephyranthes chlorosolen* se informa. Se señaló una única corrección del estudio original.

INTRODUCTION

This paper updates and revises the original vascular plant surveys by Neyland et al. (2000) and Neyland (2002, 2009). Specifically, the purpose of this paper is to list new collections from Calcasieu Parish and to correct a previous identification error. Detailed information is given for five noteworthy collections included in this survey.

METHODS

Since the publication of the previously mentioned surveys, plant collections from Calcasieu Parish have continued. These collections also include those discovered during the survey of Persimmon Gulley sponsored by the Nature Conservancy. Voucher specimens were prepared using standard herbarium practices and are housed in the McNeese State University (MCN), Louisiana State University (LSU), Arkansas Natural Heritage Commission (ANHC), University of North Carolina (NCU), University of Texas at Austin (UTL-XX), University of Wisconsin-Stevens Point (UWSP) and Vanderbilt (VDB) herbaria. Parish records are listed alphabetically by family. Scientific names follow Flora of North America Committee (1997+) or USDA, NRCS (2010).

RESULTS AND DISCUSSION

The following are new additions to the vascular flora of Calcasieu Parish. These taxa have not been confirmed previously as occurring in the parish. Specimen references below follow the same format as in the original survey (Neyland et al. 2000) and in the subsequent updates (Neyland 2002, 2009). Following the collection data is an abbreviation for the vegetative region where each species typically occurs: pineland (**Pi**); prairie (**Pr**); disturbed sites (**D**); fresh marsh (**FM**); brackish marsh (**BM**).

Amaranthaceae

Amaranthus australis (A. Gray) Sauer (MCN) *Neyland 2435* D, FM, BM

Amaryllidaceae

Zephyranthes chlorosolen (Herbert) D. Dietrich (MCN) *Neyland 2334* D, Pr

Asteraceae

Chromolaena ivifolia (L.) King & H. Rob (ANHC, LSU) *Reid 7272* Pr
Coreopsis gladiata Walter (LSU) *Rosen w/Reid 5141* Pi
Euthamia caroliniana (L.) Greene ex Porter and Britton (LSU) *Reid* 7774 Pr
Solidago ludoviciana (A. Gray) Small (LSU) *Reid* 7776 Pr
Symphyotrichum ontarionis (Weig.) Nesom (LSU) *Reid* 7772 Pr

Clusiaceae

Hypericum fasciculatum Lam. (LSU) *Rosen* w/*Reid 5094* Pi

Cyperaceae

Carex longii Mack. (LSU) *Reid 7394* Pr
Carex meadii Dewey (BRIT, LSU, MO, TEX) *Rosen* w/*Reid 5181* Pi
Eleocharis tenuis Schult. var. *verrucosa* (Svens.) (LSU) *Reid* 6545 Pr
Fimbristylis dichotoma (L.) Vahl (LSU, VDB) *Reid 7687* Pr
Rhynchospora careyana Fernald (LSU, TEX) *Rosen* w/*Reid 5121* Pi
Rhynchospora globularis (Chapm.) Small var. *pinetorum* (B.S.P.) Gale (LSU, VDB) *Reid* 6548 Pr
Rhynchospora rariflora (Michx.) Elliott (LSU) *Reid 7081* Pr
Rhynchospora recognita (Gale) Kral (LSU) *Reid 7462* Pi, Pr
Scleria muehlenbergii Steud. (LSU) *Reid 7665* Pr
Scleria paucifolia Muhl. Ex Willd. (LSU) *Reid* 6538 Pr

Fabaceae

Desmodium sessilifolium (Torr.) Torr. & A. Gray (LSU) *Reid 7668* Pr
Strophostyles leiosperma (Torr. & A. Gray) Piper (LSU) *Reid 7673* Pr

Hypoxidaceae

Hypoxis rigida Chapm. (LSU, TEX, MO) *Rosen* w/*Reid* 5185 Pi

Lamiaceae

Monarda citriodora Cerv. ex Lag. ssp. *citriodora* (MCN) *Neyland 2432* D
Scutellaria parvula Michx. var. *missouriensis* (Torr.) Goodman & C.A. Lawson LSU *Rosen* 5118 Pi

Poaceae

Bouteloua curtipendula (Michx.) Torr. var. *curtipendula* (LSU, NCU, TEX-LL) *Reid* w/ *Rosen 7541* D
Dichanthelium consanguineum (Kunth) Gould & C.A. Clark (UWSP) *Reid* w/ *Rosen* 7537 Pi
Dichanthelium wrightianum (Scribn.) Freckmann (LSU) *Reid* w/ *Rosen 7628* Pi
Panicum tenerum Beyr. Ex Trin. (LSU, TEX, MO) *Rosen* w/*Reid* 5093 Pi
Paspalum modestum Mez (LSU) *Reid* 7677 Pr
Sacciolepis indica (L.) Chase (LSU, NCU) *Reid* 7670 Pr

Scrophulariaceae

Gratiola neglecta Torr. (LSU, TEX) *Rosen* w/*Reid* 5225 Pi

The following entry was misidentified in the original survey (Neyland et al. 2000). The specimen reported as *Amaranthus cannabinus* (L.) Sauer *Neyland 1003* **BM, FM,** is *Amaranthus australis* (A. Gray) Sauer. Therefore, this misidentified taxon is removed from the survey. As a result of these revisions to the three previous vascular surveys, the number of confirmed specific and subspecific entries for the parish is increased to 1203.

Four of the above collections are noteworthy. First, *Zephyranthes chlorosolen* is listed as S2 (imperiled) in Louisiana by the Louisiana Natural Heritage Program (2010). The listed specimen represents a fairly large population from along railroad tracks that run through a coastal prairie remnant in Lake Charles. The only other known population in Calcasieu Parish was discovered in 2005 (Reid, 5621, LSU) along the same railroad line in a coastal prairie remnant near Vinton, LA. The distance between these two populations is approximately 33km.

Second, *Bouteloua curtipendula* (Michx.) Torr. var. *curtipendula* is listed as S1 (critically imperiled) in Louisiana (NatureServe 2010). Native populations occur on calcareous prairies in Louisiana (Allen et al. 2004). The specimen cited above was collected from a large well-established population on a dry rocky roadside and is an apparent introduction.

Third, *Dichanthelium wrightianum* is reported as new to Louisiana. In the southeastern United States, this wet pine savanna grass ranges from Virginia to Texas but is not included in Louisiana (Freckmann & Lelong 2003; Allen et al. 2003; Diggs et al. 2006).

Fourth, *Monarda citriodora* Cerv. ex Lag. ssp. *citriodora* was collected along railroad tracks near the AMTRACK station in Lake Charles. The collected specimen represents the sole individual observed. This species has been collected in the northern half and the southeastern portion of Louisiana. However, this is the first collection of this species from the southwestern portion of the state. It is uncertain whether this is a waif or represents a prairie remnant.

Additionally, in the Neyland et al. 2000 paper, *Tillandsia recurvata* (L.) L. (Neyland, 1846, MCN) was listed in the Calcasieu flora. This specimen was collected from a recently introduced population. However, a specimen was collected in 2010 (Neyland, 2436, MCN) that represents what may be a natural population. The specimen was collected in an ancient *Quercus virginiana* tree near the Calcasieu River in Lake Charles. This and an adjacent *Q. virginiana* tree were both heavily infested with *T. recurvata*. Based on this information, Harry

Luther (pers. comm.) stated that this population is most likely derived from native Texas stock. Whether this is a natural or a very old introduced population remains uncertain.

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