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REFERENCES

- ANDERSON, L. C. 1984. Noteworthy plants from North Florida. *Sida* 10:295 – 297.
 ————. 1988. Noteworthy plants from North Florida. III. *Sida* 13:93 – 100.
- BRIDGES, E. L. and S. L. ORZELL. 1986. Distribution patterns of the non-endemic flora of Middle Tennessee limestone glades. *ASB Bull.* 33:155 – 166.
- BROOKS, H. K. 1981. Geologic map of Florida. Center for Environmental and Natural Resources, Tallahassee.
- CLEWELL, A. F. 1985. Guide to the vascular plants of the Florida Panhandle. University Presses of Florida, Tallahassee. 605 pp.
- COOKE, C. W. 1945. Geology of Florida. Florida Geological Survey, Geological Bulletin No. 29. 339 pp.
- CRONQUIST, A. 1980. Vascular Flora of the southeastern United States. Vol. 1. Asteraceae. Univ. North Carolina Press, Chapel Hill. 261 pp.
- HARPER, R. M. 1920. The limestone prairies of Wilcox County, Alabama. *Ecology* 1:198 – 203.
- KRAL, R. 1973. Some notes on the flora of the southern states, particularly Alabama and middle Tennessee. *Rhodora* 75:366 – 410.
 ————. 1976. Additions to some notes on the flora of the southern states, particularly Alabama and middle Tennessee. *Rhodora* 78:438 – 456.
 ————. 1981. Further additions to some notes on the flora of the southern states, particularly Alabama and middle Tennessee. *Rhodora* 83:301 – 315.
- MOORE, W. E. 1955. Geology of Jackson County, Florida. Florida Geological Survey, Geological Bulletin No. 37. 101 pp.
- NELSON, J. B. 1985. *Bouteloua curtipendula* in Florida. *Castanea* 50:58.
- PURI, H. S. and R. O. VERNON. 1964. Summary of the geology of Florida and a guidebook to the classic exposures. Florida Geological Survey, Special Publication No. 5. 312 pp.
- SCHMIDT, W., H. KIRK, and J. WAGNER. 1985. Cenozoic geology of the Apalachicola River area, northwest Florida. Southeastern Geological Society, Tallahassee. 95 pp.
- SPARLING, J. H. 1968. Biological flora of the British Isles No. 115. *Schoenus nigricans*. *J. Ecol.* 56:883 – 899.
- WARD, D. B. 1968. Checklist of the vascular flora of Florida. Part I. *Fla. Agr. Exp. Stat. Inst. Food Agr. Sci. Bull.* 726:1 – 72.
 ———— and A. K. GHOLSON. 1987. The hidden abundance of *Lepuropetalon spathulatum* (Saxifragaceae) and its first reported occurrence in Florida. *Castanea* 52:59 – 67.

NOTEWORTHY *CAREX* L. (CYPERACEAE: SECTION *STELLULATAE*) COLLECTIONS FROM MISSOURI—*Carex atlantica* L. H. Bailey subsp. *atlantica*. Shannon Co.: NW 1/4, SW 1/4 of section 5, T31N, R2W, Bunker 7.5' Quad, sedge-shrub fen in valley of Big Creek,

at base of east-facing valley slope on west side of Big Creek, 3 May 1981, *Orzell* 261B (MICH, MO). Wayne Co.: NE 1/4, SW 1/4, SE 1/4 of section 29, T29N, R7E, Lowndes 7.5' Quad, ca. 2 mi southeast of Hiram, property of Mr. Owen Hughey, in wooded seepage area at base of slope on east side of Bear Creek, 28 May 1983, *Orzell* 927 (MICH, MO). At the Wayne County site *C. atlantica* subsp. *atlantica* is common, forming cespitose clumps on elevated mossy hummocks of *Thuidium delicatulum* (Hedw.) B.S.G. and *Climacium americanum* Brid. in a seep forest dominated by *Acer rubrum* L. in the canopy and *Alnus serrulata* (Dry.) Willd. in the understory. Common associates are *Solidago patula* Muhl. ex Willd., *Impatiens capensis* Meerb., *Carex bromoides* Willd., and *Osmunda regalis* L. var. *spectabilis* (Willd.) Gray.

An immature specimen annotated by Reznicek (pers. comm.) [*J. A. Steyermark* 78281 (MO, PH)] from Stoddard County in extreme southeastern Missouri represents the only previous record for the state. This record was indicated on the distribution map for the taxon in Reznicek and Ball (1980). *Carex atlantica* ssp. *atlantica* is primarily a bog or acidic seepage wetland species widespread throughout eastern North America. It is apparently most frequent on the coastal plain and occurs inland primarily in unglaciated areas with oligotrophic to weakly minerotrophic seepage wetlands. It is often characteristic in oligotrophic seepage forests dominated by deciduous canopy trees and shrubs in the Ouachita Mountains of southwestern Arkansas and on the coastal plain of eastern Texas and northern Louisiana. These collections are the first for the Ozark Plateau and represent a westward range extension of about 120 km from stations near the inner margin of the Mississippi Embayment.

Carex sterilis Willd. Dent Co.: N 1/2, SE 1/4 of section 3, T34N, R3W, Viburnum West 7.5' Quad, calcareous seep-fens at base of slope, on north side of creek, in Bates Hollow, 9 Jun 1983, *Orzell* 982 (MICH, MO, TEX). Shannon Co.: NW 1/4, SW 1/4 of section 5, T31N, R2W, Bunker 7.5' Quad, sedge-shrub fen in valley of Big Creek, at base of east-facing slope on west side of Big Creek, 3 May 1981, *Orzell* 262 (MICH, MO). St. Francois Co.: NW 1/4, SW 1/4, NE 1/4, SE 1/4 of section 9, T38N, R5E, Bonne Terre 7.5' Quad, calcareous seep-fens in headwaters of Coonville Creek, in St. Francois State Park, 22 May 1981, *Orzell* 263 (MICH, MO).

Carices most commonly associated with *C. sterilis* at these sites include *C. interior* Bailey, *C. hystericina* Muhl. ex Willd., *C. leptalea* Wahlenb., *C. lurida* Wahlenb., and *C. stricta* Lam. Other frequent associates include

Parnassia grandifolia DC., *Rudbeckia fulgida* Ait. var. *umbrosa* (C. L. Boynt. & Beadle) Cronq., *Viola cucullata* Ait., and *Fuirena simplex* Vahl (Orzell 1983). Further information on the natural communities and associated species of Ozark fens is available in Orzell (1983, 1984). Although similar to *Carex interior*, often an associate at Missouri sites, *C. sterilis* lacks prolonged clavate staminate bases, particularly on the terminal spikelet (Wheeler & Ownbey 1984, Reznicek & Ball 1980).

The range of *C. sterilis* is principally in the glaciated area centered on the Great Lakes region with a discontinuous secondary center along the Gulf of St. Lawrence (Reznicek & Ball 1980). Outlying stations occur in Minnesota, Manitoba, Saskatchewan, northern Ontario, and from eastern Pennsylvania to western Massachusetts (Reznicek & Ball 1980). The nearest collections to Missouri represent disjunct occurrences—Cole County in east-central Illinois (Mohlenbrock & Ladd 1978) and Fentress County on the northern Cumberland Plateau of Tennessee (Reznicek, pers. comm.). Reznicek and Ball (1980) consider *C. sterilis* an obligate calciphile occurring in fens, marl meadows, calcareous shores, moist limestone flats, wet prairies, and calcareous swamps. Wheeler and Ownbey (1984) consider *C. sterilis* to be a calcareous fen species in Minnesota. *Carex sterilis* is a fidel calciphile restricted to minerotrophic fens, constantly saturated by cold, telluric seepage at its isolated, disjunct stations on the Ozark Plateau of southeastern Missouri. These collections represent the first of *C. sterilis* for Missouri and are disjunct 270–350 km from the nearest isolated locality and 340–420 km southwest of its relatively continuous range.

We thank Dr. Anton A. Reznicek at the University of Michigan Herbarium for verification of all cited specimens and for providing label data for other specimens mentioned in the text. Helpful suggestions were made by reviewers A. A. Reznicek and George Yatskievych. Vascular plant nomenclature follows Kartesz & Kartesz (1985) for vascular plants and Crum et. al. (1973) for bryophytes.—Steve L. Orzell and Edwin L. Bridges, University of Texas Herbarium, Austin TX 78713, U.S.A.

REFERENCES

- CRUM, H. A., W. C. STEERE, and L. E. ANDERSON. 1973. A new list of Mosses of North America north of Mexico. *The Bryologist* 76:85–130.
- KARTESZ, J. T. and R. KARTESZ. 1985. A synonymized checklist of the vascular flora of the United States, Canada, and Greenland. Unpublished draft of second edition.
- MOHLENBROCK, R. H. and D. M. LADD. 1978. Distribution of Illinois vascular plants. Southern Illinois Univ. Press, Carbondale. 281 pp.

- ORZELL, S. L. 1983. Natural area inventory and floristic analysis of fens in selected southeastern Missouri counties. M. S. thesis, Southern Illinois University, Carbondale.
- _____. 1984. Natural area inventory and floristic analysis of fens in selected southeastern Missouri counties, Part II. *Missouriensis* 5:109 – 116.
- REZNICEK, A. A. and P. W. BALL. 1980. The taxonomy of *Carex* section *Stellulatae* in North America north of Mexico. *Contr. Univ. Mich. Herb.* 14:153 – 203.
- WHEELER, G. A. and G. B. OWNBEY. 1984. Annotated list of Minnesota Carices, with phytogeographical and ecological notes. *Rhodora* 86:151 – 231.

AGRIMONIA INCISA (ROSACEAE) NEW TO TEXAS.—In the course of routine identifications for Edward C. Fritz of the Texas Committee on Natural Resources, specimens of *Agrimonia incisa* T. & G. were identified. Steve Orzell (Texas Natural Heritage Program, Texas Parks and Wildlife Department; pers. comm.) did not find any specimens at TEX from Texas. From the literature, the species ranges from the Carolinas to northern Florida westward to Mississippi. While one would expect it to occur in Louisiana, no reports of this taxon appear in the literature from that state.

Jasper Co.: dry longleaf uplands; upper Trout Creek, 0.8 mi E of FR 330 on Plum Ridge Road and 0.5 mi S, 21 Aug 1988, *Edward C. Fritz & John Ward* 8884 (ASTC, SMU).

—*Wm. F. Mahler, SMU Herbarium/BRIT, Dallas, TX 75275, U.S.A.*

LEONURUS MARRUBIASTRUM L. (LAMIACEAE), NEW TO MISSOURI—*Leonurus marrubiastrum* L., Biennial Motherwort, a native to northern Asia and eastern Europe (Ball 1972), is one of the numerous European invaders to the eastern United States. It occurs in isolated sites from Delaware and eastern Pennsylvania to Illinois and south to Florida (Fernald 1950; Gleason 1952). In the central U.S., it is found near the Missouri River in only seven counties in four states: northeastern Kansas (Douglas County), in east central Nebraska (Washington and Douglas counties) and southeastern Nebraska (Richardson and Nemah counties), western Iowa (Harrison County), and southeastern South Dakota (Hutchinson County) (Gr. Plains Fl. Assoc. 1977).

Biennial Motherwort was collected for the first time in Missouri during the summers of 1986 and 1987 at the Jamerson McCormack Wildlife Refuge Area in Holt County. These collections were made at the edge of woods in the refuge's parking lot. It should now be expected to occur in