

CYPERUS ALBOSTRIATUS (CYPERACEAE) NEW TO NORTH AMERICA AND FIMBRISTYLIS CYMOSA (CYPERACEAE) NEW TO TEXAS

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ABSTRACT

Cyperus albobstriatus is reported as a naturalized component of the North American flora based upon recent collections from Harris County, Texas. *Fimbristylis cymosa* was recently collected from Padre Island in Cameron County and is reported new to the Texas flora.

RESUMEN

Se cita *Cyperus albobstriatus* como un componente naturalizado de la flora de Norte América basados en colecciones recientes en el condado de Harris, Texas. *Fimbristylis cymosa* se colectó recientemente en Padre Island en el condado de Cameron y se cita como nueva para la flora de Texas.

Cyperus albobstriatus

During routine field work in 2004, the first author vouchered an unknown *Cyperus*, determined it as *C. diffusus* Vahl, and sent it to Richard Carter for confirmation. The plant was subsequently determined to be the similar species, *Cyperus albobstriatus* Schrad. Native to southern Africa (Kükenthal 1935–1936), *C. albobstriatus* has not previously been reported from North America (cf., Tucker et al. 2002).

Voucher specimen: **USA. Texas. Harris Co.:** Houston, in the floodplain of White Oak Bayou, about 0.6 mi SW of the intersection of Hwy. 610 and Ella Blvd., a local green-space known as Little Thicket Park with about 7 acres of undisturbed remnant riparian forest, abundant rhizomatous herb apparently escaping from cultivation and well established in shaded mesic slopes with *Carpinus*, *Prunus*, *Acer*, *Populus*, *Fraxinus*, and *Ulmus*, N29°48'24.0" W95°25'53.8" (NAD83), 26 Jul 2004, D.J. Rosen 3028 (VSC). Fig. 1.

Although not listed as such by Bailey (1949), *Cyperus albobstriatus* is frequently cited as an ornamental (e.g., Bailey 1935; Bailey & Bailey 1976; Everett 1980–1982; Greenlee & Fell 1992; Brickell & Zuk 1997; Turner & Wasson 1998; Darke 1999). Kükenthal (1935–1936) indicated *C. albobstriatus* is widespread in southern Africa and described its habitat as swampy places, shores, and forests. According to Gordon-Gray (1995), *C. albobstriatus* is "frequent in Natal in shaded, often rocky, not necessarily damp situations on margins of forest, in woodland and in plantations of exotics (pines, rarely eucalypts)," and in New South Wales, Australia, it is frequently cultivated as an ornamental and has become naturalized (Wilson 1993). It has been cited as a weed in Australia and New Zealand (Healy and Edgar 1980; Simpson and Inglis 2001; Bryson and Carter 2008).

Kükenthal (1935–1936) treated *Cyperus albobstriatus* in section *Diffusi* Kunth. Its slender elongate rhizomes, major veins of dried primary inflorescence bracts and leaves adaxially white banded, and floral scales with conspicuously ciliate margins readily distinguish it from other Texas *Cyperus*.

Fimbristylis cymosa R. Br. was recently collected in sandy, disturbed soils in southern coastal Texas, not being previously reported therein (Correll & Johnston 1970; Jones et al. 1997). *Fimbristylis cymosa* is a wide-



Fig. 1. *Cyperus albostratus* Schrad. (Rosen 3028—VSC 0006337)

spread species known from seaside and coastal habitats in the United States (Florida), southern Mexico, Central America, South America, Africa, Asia, Australia, and Islands in the Indian and Pacific Oceans (Kral 2002).

Fimbristylis cymosa is quite distinct from other Texas perennial *Fimbristylis* in its dense rosette of stiff, spreading excurved leaves and compact cluster of spikelets forming a corymbose head-like inflorescence. Koyama (1985) treated Ceylonese plants as *F. cymosa* subsp. *spathacea* (Roth) T. Koyama based on the presence

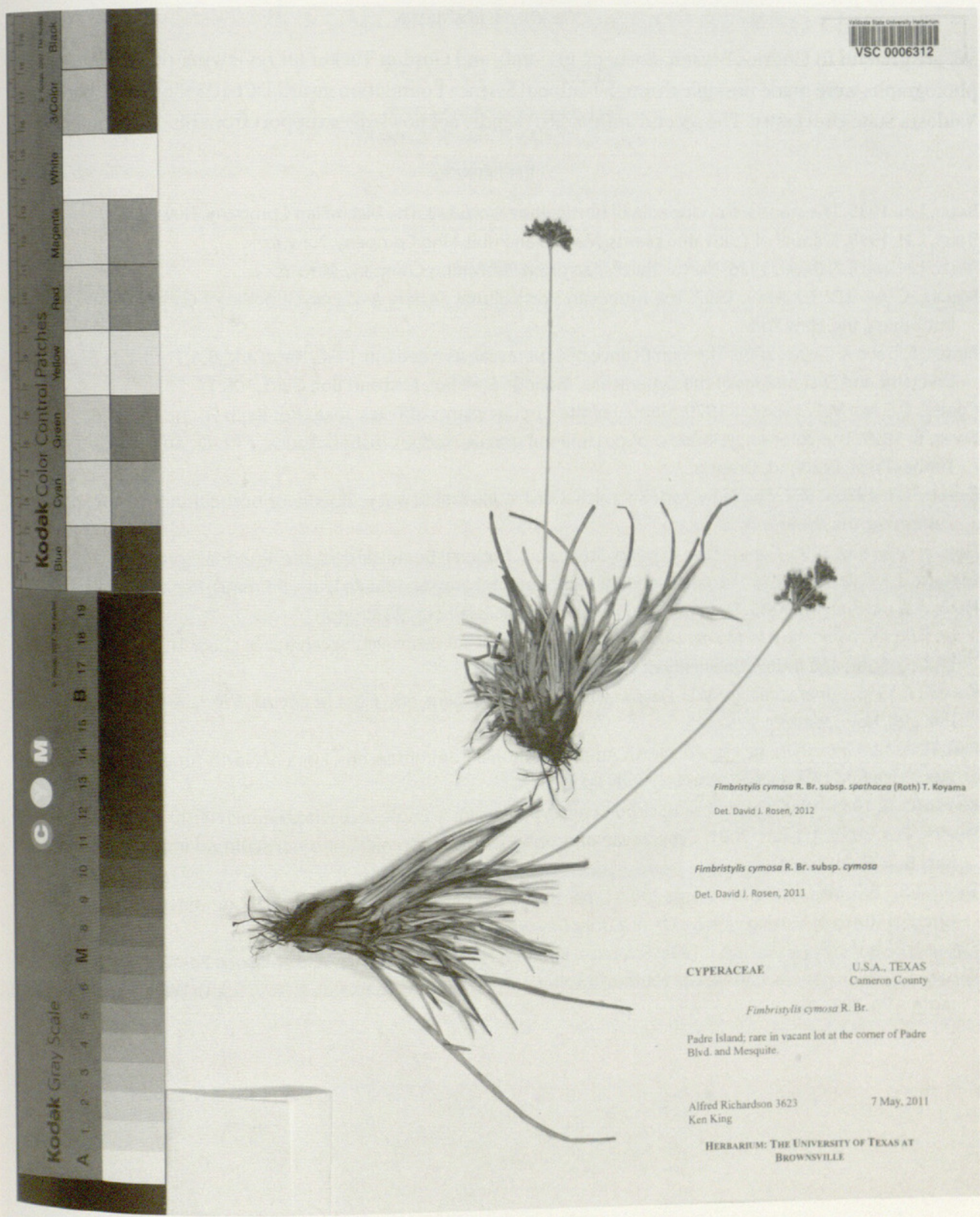


Fig. 2. *Fimbristylis cymosa* R. Br. subsp. *spathacea* (Roth) T. Koyama (A. Richardson & K. King 3623—VSC 0006312)

of biconvex achenes with bifid styles. As discussed by Kral (2002), New World specimens of *F. cymosa* (now including Texas plants) are bicarpellate with bifid styles and are thus treated here as *F. cymosa* subsp. *spathacea*.
Voucher specimen: USA. Texas. Cameron Co.: Padre Island; in vacant lot at the corner of Padre Blvd. and Mesquite, rare with *Calylophus serrulatus*, *Hedyotis nigricans*, *Linum lundellii*, *Rhynchospora colorata*, and *Spiranthes vernalis*, 7 May 2011, A. Richardson & K. King 3623 (RU-NYON, TEX, VSC). Fig. 2.

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