

Navasota, 6155; Shiro, *Tharp* 6732 (TEX). WALLER Co.: Sealy, 6669. FAYETTE Co.: Muldoon, *Ripple* 51-1043 (TEX) BASTROP Co.: Bastrop, 6488; west of Bastrop, 5962. LIBERTY Co.: south of Devers, 6495. HARRIS Co.: south of Fairbanks, 6099. GALVESTON Co.: Webster, 6098. FORT BEND Co.: south of Rosenberg, 6668. COLORADO Co.: Weimar, *Turner* 51-5 (TRACY). GONZALES Co.: south of Smiley, 6067. DEWITT Co.: west of Cuero, 6219. MATAGORDA Co.: Bay City, 6216; west of Bay City, 6217. ATASCOSA Co.: Pleasanton, 6284; Jourdanton, 6224. FRIO Co.: Pearsall, 6286. BEE Co.: west of Beeville, 6050. DUVAL Co.: San Diego, *Tharp* 5238 (TEX). KLEBERG Co.: Kingsville, 6035; west of Kingsville, 6044. BROOKS Co.: *Falfurrias*, 6032. HIDALGO Co.: Edinburg, 6023. MEXICO. NUEVO LEON. Sierra Anahuac, near Monterrey, 6357; El Cercado, 6328.

For the loan of specimens, the writer is indebted to the curators of the herbaria of the U.S. National Museum, the universities of Michigan, California, Texas, Arizona, and Southern Methodist University.

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The Texas Species of *Potentilla* (Rosaceae)

Lloyd H. Shinnery

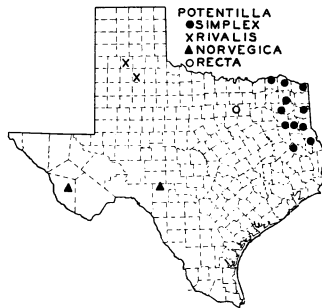
The large and difficult genus *Potentilla* is gratifyingly represented in Texas by a very small number of easily distinguished species, but there is no complete or precise published record of those found in the state. The summary here given is based on the collections in the Herbarium of Southern Methodist University, that of the University of Texas, and the Tracy Herbarium of Texas A. & M. College. Grateful acknowledgement is made to those in charge for the use of these collections. All cited specimens are in the first named herbarium.

KEY TO THE SPECIES

- 1a. Pedicel 5-12 times as long as the calyx; flowers axillary, solitary1. *P. simplex*
 - 1b. Pedicel shorter than or equalling the calyx in flower, up to 3 times as long in fruit; flowers mostly in terminal corymbs
 - 2a. Stem leaves pinnate.....2. *P. rivalis*
 - 2b. Stem leaves palmate
 - 3a. Leaflets 3, elliptic or oblong-lanceolate.....3. *P. norvegica*
 - 3b. Leaflets 5-7, oblanceolate.....4. *P. recta*
1. *P. SIMPLEX* MICHX. Pine woods or occasionally open ground, chiefly in somewhat low, sandy places; northeastern Texas, west to Lamar, Wood, Smith, and Angelina counties. Fl. April-May. Our plants are var. *simplex*, with

spreading-pilose stems; var. *calvescens* Fernald, with appressed-pubescent or glabrate stems, has been reported from McCurtain Co., in the southeastern corner of Oklahoma. This species is incorrectly listed by Small as *P. canadensis* L. (cf. Fernald, 1931).

2. *P. RIVALIS* Nutt. Banks of lakes, streams, or ditches; known only from two collections, made near the south end of the Panhandle. FLOYD Co.: 1.7 miles northwest of Floydada, *Shinners 18647*, April 28, 1954. SWISHER Co.: on shores of Lake Tulia near Tulia, *Eula Whitehouse 9959*, June 17, 1945.



3. *P. NORVEGICA* L. Damp or disturbed ground; known only from two localities, probably an introduction in the first one listed. EDWARDS Co.: yard, Substation No. 14 near county line south of Sonora, *V. L. Cory 49353*, May 30, 1945. PRESIDIO Co.: in marsh below San Esteban Lake, 12 miles south of Marfa, *L. C. Hinckley 693*, July, 1936. Along rocky disused irrigation canal below dam, San Esteban Lake, about 12 miles south of Marfa, *Rogers McVaugh 7326*, July 5, 1945. (Incl. *P. monspeliensis* L.)

4. *P. RECTA* L. A European weed, widely established in the northern United States; collected once in Texas. TARRANT Co.: on campus of T[exas] W[esleyan] C[ollege], Polytechnic, *Albert Ruth 1588*, May 20, 1929.

P. paradoxa Nutt. is reported from the Trans-Pecos by Cory & Parks, presumably on the basis of the range given by Small ("New York to Ontario, Oregon, Tennessee, and Mexico"). No specimens from the state have been seen.

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Notes

HETERANTHERA Liebmannii (Buchenau) Shinnars, comb. nov.—
Potamogeton Liebmannii Buchenau ex Magnus in Buchenau, Abhandl. Naturwiss. Ver. Bremen 3: 349. 1873. *Zosterella longituba* Alexander, N. Amer. Fl. 19: 52. 1937. In describing his new species (based on a type from Rio Hondo, Cameron Co., Texas; not seen), Alexander lists as unequivocal synonym that of Buchenau (based on three collections made by Liebmann at Pital, Huitamalco, and Mecapulco, Mexico; not seen). Buchenau's description was based on sterile material, with much comment on the peculiarity of the plant seemingly ambiguous between sections *Acrophyllon* and *Bathyphyllon* of *Potamogeton*. There seems little doubt that Alexander's identification of this anomalous species is correct, and under the rules of nomenclature, Buchenau's name must be adopted. Alexander gives the distribution of the species as "Southern Texas and Mexico; near Mobile, Alabama; Florida (?); Cuba; Hispaniola." In Texas, where it has usually passed as *H. dubia* (Jacq.) MacM., or *Zosterella dubia* (Jacq.) Small, the species occurs from the Rio Grande Plain north to the Edwards Plateau; specimens are in the S.M.U. Herbarium from Aransas, Hidalgo, Comal, San Saba, and Travis counties.—*Lloyd H. Shinnars*.

CANNIBALISM IN THE LARGEMOUTH BASS, MICROPTERUS SALMOIDES.—
 —While I was hunting on the Hughes farm in northern Dallas County, Texas (24 Dec., 1954), Mr. H. D. Hughes, Jr. pointed out what appeared, at a distance, to be a large fish floating at the edge of a 3-acre pond. Closer examination revealed two largemouth bass (*Micropterus salmoides*) of about the same size; one apparently had tried to swallow the other, and both had died in the attempt. Probably this had happened not more than 48 hours before, as the fish were in a fair state of preservation. Some decomposition was indicated by the odor; but scales, fins, eyes, and other external features were for the most part intact.

