New Names of Texas Chamaesyces

Lloyd H. Shinners1

CHAMAESYCE missurica (Raf.) Shinners, comb. nov. Euphorbia missurica Raf., Atl. Journ. 1: 146, 1832 (fide L. C. Wheeler, Rhodora 43: 132-134, 1941). E. arenaria Nutt., Trans. Amer. Philos. Soc. n.s. 5: 171, 1837. E. petaloidea var. Nuttallii Engelm. in Emory, Rept. U.S. & Mex. Boundary Survey 2: 185, 1859. Chamaesyce Nuttallii (Engelm.) Small, Fl. S.E. U.S. 711 and 1333, 1903. Euphorbia missurica var. intermedia of Wheeler, Rhodora 43: 133-136, 1941, in large part.

C. MISSURICA var. calcicola Shinners, var. nov. Foliis anguste oblongis linearibusve, vetustate plerumque revolutis angustissimis, truncatis vel subemarginatis, interdum subacutis. Sola calcarea saxosa imprimis incolit. TYPE: Ellis Co.: 4 miles north-northeast of Midlothian, rocky (limestone) roadside, common, Lloyd H. Shinners 9367, Sept. 27, 1947 (in Herb. Southern Methodist University). In part the same as Euphorbia zygophylloides Boiss. as described in DC., Prodr. 15 (2): 29, 1862 (as to Lindheimer 301 there cited). Original description of this species (Cent. Euphorb. 10, 1860) not seen, and no type was designated by Boissier or by Wheeler.

Chamaesyce missurica is represented in Texas by two edaphically distinct though morphologically slightly overlapping races: a comparatively broad-leaved plant of sand (all the types of species and varieties here concerned, possibly excepting that of Euphorbia zygophylloides, are referable to this form), and a very narrow-leaved plant of caliche or Cretaceous chalk and limestone outcrops. Of 32 sheets from Texas in the Herbarium of Southern Methodist University, 11 are from sand and have the larger leaves with blades 2.7-5.0 mm. wide by 13-22 mm. long, 4.7-6.7 times as long as wide, on petioles 1-2(-3.2) mm. long; the remaining 21 are from calcareous substrata and have the larger leaves with blades 1.5-3.0 mm. wide by 12-28 mm. long, 5.7-9.7 times as long as wide, on petioles 0.9-1.7(-2.3) mm. long. Additional collections in the Herbarium of the University

¹Assistant Professor of Biology, Southern Methodist University, Dallas.

of Minnesota (I am indebted to Dr. Gerald Ownbey for the loan of 48 sheets) show that the narrow-leaved plant (var. calcicola) extends north and northeast to Oklahoma, Kansas, and Missouri; the broad-leaved plant (typical Chamaesyce missurica) is found from Texas to Minnesota, Wyoming, and New Mexico. In Texas, the specimens at hand show that typical C. missurica is found primarily in the Panhandle and along the Red River, south and east to Mitchell, Hood, and Wise Counties; var. calcicola is found on the Black and Grand Prairies, Lampasas section, and Edwards Plateau, from Cooke and Collin Counties south and west to Comal, Kerr, Taylor, and Collingsworth Counties. One of the Minnesota Herbarium specimens of var. calcicola bears a printed label stating that it was collected in "Sandy fields near Dallas," by J. Reverchon, July-August. The original number (Curtiss, N. Amer. Plants 2468*) has been crossed out, and 2405* written beneath, and the original specific name (Euphorbia arenaria) has been replaced by E. zugophulloides. I have no doubt that the habitat should also have been corrected to "Chalk hills," where the plant is exceedingly common.

C. Golondrina (L. C. Wheeler) Shinners, comb. nov. Euphorbia Golondrina Wheeler, Proc. Biol. Soc. Wash. 53:

8, 1940.

C. POLYCARPA (Benth.) Millsp. var. simulans (L. C. Wheeler) Shinners, comb. nov. Euphorbia polycarpa var. simulans Wheeler, Rhodora 43: 192, 1941.

C. FENDLERI (T. & G.) Small var. chaetocalyx (Boiss.) Shinners, comb. nov. Euphorbia Fendleri var. chaetocalyx Boiss. in DC., Prodr. 15 (2): 39, 1862.

C. FENDLERI var. triligulata (L. C. Wheeler) Shinners, comb. nov. *Euphorbia Fendleri* var. triligulata Wheeler, Bull. Torr. Bot. Club 64: 445, 1936.

C. theriaca (L. C. Wheeler) Shinners, comb. nov. Euphorbia theriaca Wheeler, Rhodora 43:242, 1941.

Euphorbia villifera var. nuda Engelm. ex Boiss. in DC., Prodr. 15 (2): 45, 1862, known only from the type and differing from the species only in being glabrous instead of pilose, is considered a minor form not warranting a new combination in varietal rank. Chamaesyce villifera (Scheele) Small is the name of the species in the segregate genus.