ERRATA FOUR NEW ANNUAL SPECIES OF EUPHORBIA SECTION TITHYMALUS (EUPHORBIACEAE) FROM NORTH AMERICA

Mark H. Mayfield

Herbarium, Division of Biology Kansas State University Manhattan, Kansas, U.S.A. 66506-4901, U.S.A. markherb@ksu.edu

The following are provided as corrections/additions to Mayfield (2013).

The Perry (1943) reference information was omitted from the references section and it is provided herein.

In Figure 2, the length of the scale bar is 1 mm.

In the key to species on pages 646 and 647, *Euphorbia ouachitana* was inadvertantly omitted from the key. It should have been included in a couplet with E. tetrapora under the first part of couplet 13 on page 647. Below, couplet 13 is revised and a new couplet 14 is added to distinguish *E. tetrapora* and *E. ouachitana*. The entire key is given again for ease of reference and use.

1. Plants biennial; seeds ≥ 1.8 mm long; primary ray bracts about as wide as long or wider, generally suborbicular to broadly ovate; plants occurring outside of Texas. 2. Seeds rotundly ovoid, strongly pitted, with distinct, round depressions on a generally flat surface; plants of the eastern United States and southern Ontario, Canada (northeastern Oklahoma north to Wisconsin, east to Pennsylvania, and south to Florida and Mississippi) E. commutata 2. Seeds oblong-ellipsoid, weakly dimpled, with shallow, irregularly shaped depressions bordered by weak reticulating ridges, surface nowhere flat; plants of the western United States (southern California to northwestern Oregon, also local in southern Colorado and northern New Mexico E. crenulata 1. Plants annual; seeds mostly ≤ 1.7 mm long; primary ray bracts usually longer than wide; plants often occurring in Texas and elsewhere. 3. Stem leaves generally erect-ascending at maturity, if lax, the blades less than 3 mm wide at the widest point. 4. Raylet leaves at least $1.5 \times$ longer than wide, the apices acute. E. austrotexana var. carrii 5. Seeds rotund; stems mostly strict, erect or virgate____ 5. Seeds oblong; stems laxly ascending. 6. Seeds with troughlike and rounded pits, the surface not pimpled ______ ____ E. peplidion 6. Seeds without pits, the surface pimpled_ E. exigua 4. Raylet leaves about as long as wide, or wider than long. 7. Leaves linear to linear-oblanceolate ____E. austrotexana var. austrotexana 7. Leaves spatulate to oblanceolate. 8. Seeds uniformly covered with deep, well-defined rounded pits on both surfaces _ ____ E. longicruris 8. Seeds with 4 (or 5) shallow ventral pits, and 4 rows of indistinct pits on the dorsal surface ____ _____E. tetrapora 3. Stem leaves generally divergent or lax at maturity, and over 4 mm wide at the widest point. 9. Stem leaves with petioles or elongated petiole-like bases. 10. Raylet leaves apically obtuse, subdeltate; plants 8-18 cm tall_ E. nesomii 10. Raylet leaves apically rotund, subreniform to scarcely deltate; plants 15–35 cm tall. 11. Capsules with longitudinal wings along the ridges; seeds 1.3–1.5 mm long, bearing two longitudinal sulcae on the ventral facet E. peplus 11. Capsules without longitudinal wings along the ridges; seeds 1.8-2.0 mm long, smooth to pitted, but not sulcate on the ventral facet. 12. Seeds smooth (10×), lacking reticulating ridges _ E. helleri E. roemeriana 12. Seeds not smooth (10×), with reticulating ridges _ 9. Stem leaves sessile, or attenuate to a brief, petiole-like base.

13. Seeds with a few, well-separated pits in vertical rows.

- 14. Seeds maturing dull grayish brown, the ventral faces with 4 weakly defined pits; plants of the western Gulf Coastal Plain in Oklahoma, Louisiana and Texas ______ E. tetrapora
- 14. Seeds maturing lustrous reddish-brown, the ventral faces with 6 strongly defined pits; plants of the Interior Highlands in Arkansas, southwestern Missouri, and central Tennessee______ **E. ouachitana**
- 13. Seeds with numerous crowded, deep pits not clearly in vertical rows; plants only occurring on granite outcrops within the Piedmont Province of Georgia _______ E. georgiana

REFERENCES

MAYFIELD, M.H. 2013. Four new annual species of *Euphorbia* section *Tithymalus* (Euphorbiaceae) from North America. J. Bot. Res. Inst. Texas 7(2):633–647.

PERRY, B.A. 1943. Chromosome numbers and phylogenetic relationships in the Euphorbiaceae. Amer. J. Bot. 30:527–543.



Mayfield, Mark H. 2014. "ERRATA FOUR NEW ANNUAL SPECIES OF EUPHORBIA SECTION TITHYMALUS (EUPHORBIACEAE) FROM NORTH AMERICA." *Journal of the Botanical Research Institute of Texas* 8(1), 85–86.

View This Item Online: <u>https://www.biodiversitylibrary.org/item/262641</u> Permalink: <u>https://www.biodiversitylibrary.org/partpdf/280467</u>

Holding Institution Missouri Botanical Garden, Peter H. Raven Library

Sponsored by Missouri Botanical Garden

Copyright & Reuse Copyright Status: Permission to digitize granted by rights holder Rights: <u>http://www.biodiversitylibrary.org/permissions</u>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.