# A NEW SPECIES OF EUPHORBIA FROM OKLAHOMA

## U. T. WATERFALL

While botanizing the Waynoka sand dunes in northwestern Oklahoma the author recently collected a prostrate *Euphorbia* unlike any species with which he was familiar. It is evidently in the subgenus *Chamaesyce* as defined by Wheeler, but is like none of the species included in his monograph<sup>1</sup>. It seems to be a quite distinct species characterized by its large glabrous angular fruits, long smooth roundish seeds with large caruncles, and its dimorphic involucres.

EUPHORBIA CARUNCULATA Sp. nov. Planta annua, glabra, decumbens, ramosa; foliis oppositis, laminis integris, ellipticoovatis (ca. 1.3 cm. longis et 0.6-0.8 mm. latis) vel oblongospatulatis et minoribus, petiolis 3-6 mm. longis; stipulis lanceolatis vel lineari-lanceolatis, integris vel 2-3-partitis, segmentis linearibus vel lineari-subulatis; involucris dimorphis: (1) involucris cylindro-obconicis (ca. 3 mm. longis, 0.8 mm. latis ad basin et 1.0-1.2 mm. ad apices), lobis fimbriato-ciliatis, glandulis 4, ca. 3 mm. latis, exappendiculatis, antheris abortivis; (2) involucris hemisphaericis vel hemisphaerico-campanulatis; lobis fimbriatociliatis; glandulis 4, stipitatis, appendiculatis; glandulis cum appendiculis 1.3-1.5 mm. longis, 0.8-1.5 mm. latis; appendiculis albis, ca. 1 mm. longis; staminibus fertilibus; capsulis glabris angularibus, 5-6 mm. longis, 4-5 mm. latis; stylis 0.5-0.6 mm. longis, bilobis, lobis ca. 0.2 mm. longis; seminibus non-angularibus, laevibus, 3.8-4.5 mm. longis, ca. 2 mm. latis, carunculis attenuatis, 0.5 mm. vel 0.8 mm. longis.

EUPHORBIA CARUNCULATA n. sp. Plant annual, decumbent; stems branched, glabrous, somewhat succulent, enlarged at the nodes; leaves opposite, blades entire, slightly inequilateral, the larger ones 1.1–1.4 cm. long and 0.6–0.8 cm. broad on petioles 3 to 6 mm. long; upper leaves reduced and relatively elongated becoming spatulate or rhombic-spatulate; stipules lanceolate to linear-lanceolate, usually 2- to 3-parted, divisions sometimes linear-subulate, tardily deciduous; involucres dimorphic: (1) involucres cylindric-campanulate, about 3 mm. long, 0.8 mm. wide at the base to 1.0 or 1.2 mm. wide at the top, glabrous outside and pubescent inside, margins of the lobes ciliate-pubescent; glands small, 0.2–0.3 mm. in diameter, without petaloid appendages; stamens few, abortive; stamineal bracts distinct, branching, involucre mostly filled with the fleshy gynophore; (2) involucres

<sup>1</sup> Wheeler, L. C. Euphorbia Subgenus Chamaesyce in Canada and the United States. RHODORA 43: 97-154, 168-205, 223-286. 1941.

#### Rhodora

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hemispherical to hemispherical-campanulate, lobes fimbriateciliate on the margins; glands 4, stipitate, appendaged; glands and petaloid appendages 1.3-1.5 mm. long and 0.8-1.5 mm. wide, appendages usually constituting from  $\frac{2}{3}$  to  $\frac{3}{4}$  of the total dimensions, appendages yellowish-white; stamens fertile; stamineal bractlets divided near the summit, pubescent; fruit glabrous, angular, large (5-6 mm. long and 4-5 mm. broad), widest a little above the base and tapering to the blunt apex which may approach 2 mm. in width, reflexed when mature, gynophore glabrous; seeds 3.8–4.5 mm. long, ca. 2 mm. broad near the distal end, gradually tapering through about three-fourths of their length, then more abruptly tapering and attenuate into a caruncle 0.5-0.8 mm. long; seed flattened, but non-angular and with a smooth seed-coat.-TYPE: Waterfall and Goodman's 4519 from drifting sand, north of the Cimarron River, near Highway no. 281 on the Waynoka sand dunes, Woods County, Oklahoma, Oct. 11, TYPE deposited in the Bebb Herbarium of the University 1947. of Oklahoma. ISOTYPES are in the Gray Herbarium, and in the herbaria of the New York Botanical Garden and the Missouri Botanical Garden.

Associates of Euphorbia carunculata include: Reverchonia arenaria, Oenothera latifolia and Heliotropium convolvulaceum. Where the sand dunes are more stabilized Calamovilfa gigantea is common, it being the principal stabilizer. Associated with this stage, or its transition to higher stages, we found Lygodesmia rostrata abundant, at least locally. Calamovilfa gives way to such climax species as Andropogon scoparius, A. Hallii and Artemisia filifolia on the more stabilized dunes.

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# A DANGEROUS WEEDY POLYGONUM IN PENNSYLVANIA

### EDWIN T. MOUL

In the late summer of 1946 a specimen of a strange *Polygonum* for Pennsylvania was sent for identification to Dr. John M. Fogg, Jr. at the University of Pennsylvania Herbarium. It was found growing in a neglected nursery belonging to Mr. Joseph B. Gable at Stewartstown, York County, Pennsylvania, where it had become a most troublesome weed.



Waterfall, U. T. 1948. "A new species of Euphorbia from Oklahoma." *Rhodora* 50, 63–64.

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