

# A NEW SPECIES OF *MIRABILIS* (NYCTAGINACEAE) FROM JALISCO, MEXICO

ALICE LE DUC<sup>1</sup>

*Department of Botany*  
*University of Texas*  
*Austin, TX 78713 U.S.A.*

## ABSTRACT

A new species, *Mirabilis russellii*, belonging to the section *Oxybaphoides*, is described and illustrated. It is known from two collection sites along the coast of Jalisco. It is rather common along the entry road to the Instituto de Biología de la Universidad Nacional Autónoma de México, Chamela, Mexico, in tropical deciduous vegetation.

## RESUMEN

Se describe e ilustra una especie nueva, *Mirabilis russellii*, perteneciente a la sección *Oxybaphoides*. Se conoce únicamente de dos colectas a lo largo de costa de Jalisco. Es común en el camino de entrada a la estación biología de la Universidad Nacional Autónoma de México "Chamela," México, en bosques bajos caducifolios.

***Mirabilis russellii*** Le Duc, sp. nov. (Fig. 1).

*Mirabilis oligantha* (Standl.) Macbride arcte affinis sed anthocarpiis pubescentibus clavatis 5-porcatisque differt.

Much branched shrubby perennial, 4–7 dm high, branches glandularly pubescent to glabrous, the nodes only slightly swollen. Mid-stem leaves 3–5 cm long, 2.5–3.5 cm wide, petioles slender 1–2 cm long; blades puberulent, broadly to narrowly ovate, cordate or slightly truncate at the base, the apex acuminate, the margin entire, sparsely ciliolate. Involucres solitary or in cymules, in the axiles of upper leaves or sometimes terminal; pedicels 2–5 mm long, pubescent. Involucre one-flowered, slightly accrescent in age, narrowly campanulate, 7–10 mm long, glabrous or slightly glandular pubescent, the lobes narrowly triangular, as long or longer than the tube, margin ciliolate. Perianth 1.5–2.5 cm long, pink, expanded upwards, limb 8–15 mm broad, the lobes obtuse. Stamens 5, exerted ca. 4–8 mm beyond perianth. Pollen grains 0.11–0.12 mm in diameter. Anthocarp light brown, oblong-clavate, 7–9 mm long, ca. 3 mm wide, 5-angled, the ridges tuberculate, scattered puberulent, constricted at both base and apex, mucilaginous when wet.

TYPE: MEXICO. JALISCO: on the banks along the entrance road to the UNAM Biological Research Station, Chamela, in tropical deciduous forest; vegetative specimen, material transplanted and

---

<sup>1</sup>Present address: Department of Horticulture, Forestry and Recreation Resources, Kansas State University, 226 Waters Hall, Manhattan, KS 66506.

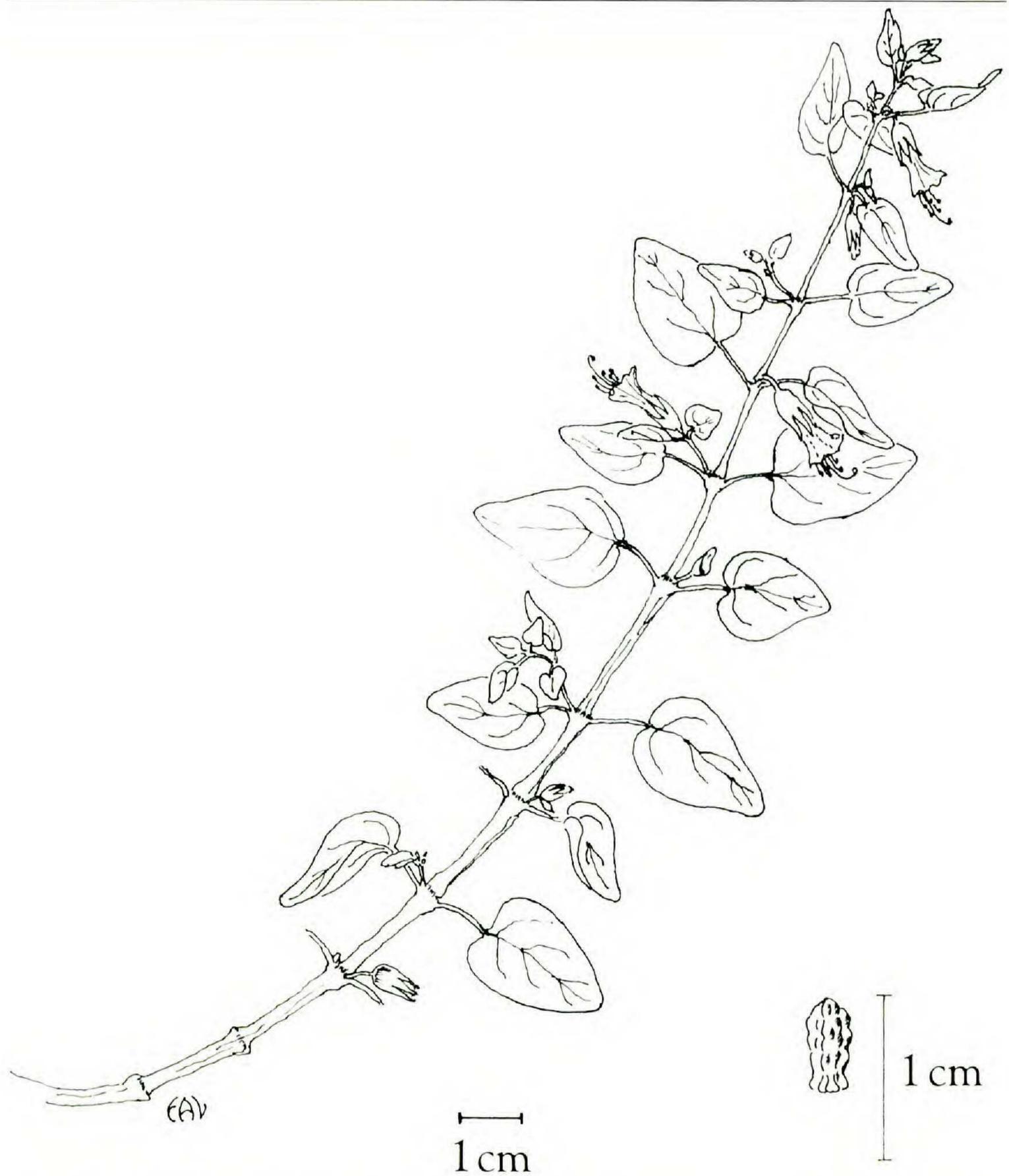


FIG. 1. *Mirabilis russellii* from the holotype. Showing: flowering stem and enlarged detail of the anthocarp.

grown in greenhouse, with subsequent flowers attached, 10 Aug 1992, *Le Duc* 250 (HOLOTYPE: TEX!; ISOTYPES: UNAM, to be distributed).

Additional specimens examined: MEXICO. JALISCO: Manzanillo - Puerto Vallarta Road, Tomatlan, 15 Feb 1975, *R. McVaugh* 26317 (MICH); Mpio. La Huerta, Estacion de Biologia Chamela (UNAM). Camino Entrada, cerca la Estacion, 25 Nov 1981, *E.J. Lott* 574 (NMU).

*Distribution.* Known from the coastal tropical deciduous forest of Jalisco, Mexico.

*Phenology.* Flowering from November to March (or longer in the greenhouse). Blooms open in the morning only.

Monographic studies of *Mirabilis* section *Mirabilis* have revealed a heretofore undescribed species, *Mirabilis russellii*. Its placement lies in section *Oxybaphoides* because of its shrubby habit, involucre single-flowered and only slightly accrescent in age, perianth campanulate, and anthocarps mucilaginous when wet. Within section *Oxybaphoides* this new species appears to be related to the *Mirabilis tenuiloba* S. Wats. - *M. oligantha* (Standl.) Macb. group because of the lanceolate involucre lobes which are at least as long as or longer than the tube. However, the clavate, five ridges, and the pubescence of the anthocarp set *M. russellii* apart from the other taxa of section *Oxybaphoides*. These same anthocarp characters are similar to those exhibited by several taxa of the section *Oxybaphus* (i.e., *M. hirsuta* (Pursh.) MacM., *M. pumila* (Standl.) Standley, *M. decumbens* (Nutt.) Daniels, *M. oblongifolia* (A. Gray) Heimerl. *Mirabilis russellii* is not placed in section *Oxybaphus*, however, because the involucre and perianth morphology of this new species firmly establishes its close relationship with taxa of section *Oxybaphoides*.

This species is named in honor of my son Russell Jack who has been so supportive of my graduate studies.

#### ACKNOWLEDGMENTS

I am grateful to Luis Hernandez for the Spanish resumen and to Guy Nesom for the Latin diagnosis. The illustration is provided by the author.