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# *Euploca rodaliae* J. I. M. Melo & Semir – a new species of *Euploca* (Heliotropiaceae) from Brazil

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## ABSTRACT

MELO, J. I. M. & J. SEMIR (2006). *Euploca rodaliae* J. I. M. Melo & Semir – a new species of *Euploca* (Heliotropiaceae) from Brazil. *Candollea* 61: 453-456. In English, English and French abstracts.

A new species of the genus *Euploca* (Heliotropiaceae) from the states of Pernambuco and Bahia in Brazil is described and illustrated. *Euploca rodaliae* J. I. M. Melo & Semir is characterized mainly by characters of the leaf blade associated to the floral structure.

## RÉSUMÉ

MELO, J. I. M. & J. SEMIR (2006). *Euploca rodaliae* J. I. M. Melo & Semir – une nouvelle espèce d'*Euploca* (Heliotropiaceae) pour le Brésil. *Candollea* 61: 453-456. En anglais, résumés anglais et français.

Une nouvelle espèce du genre *Euploca* (Heliotropiaceae) pour les états de Pernambuco et Bahia au Brésil est décrite et illustrée. *Euploca rodaliae* J. I. M. Melo & Semir est caractérisé principalement par ses caractères foliaires associés à des structures florales.

**KEY-WORDS:** HELIOTROPIACEAE – *Euploca* – Northeast Brazil

## Introduction

*Euploca* was established by NUTTALL (1837) based on *E. convolvulacea* Nutt. It was included in *Heliotropium* by GRAY (1874) and lately reestablished by HILGER & DIANE (2003). This genus belongs to the family Heliotropiaceae Schrad. and comprises approximately 120 species distributed in tropical, subtropical and temperate regions, most of them concentrated in the dry tropical zones. It includes plants predominantly herbaceous, subshrubs or rarely shrubs, associated to scorpioideous inflorescences or single flowers, usually with white and yellow mouth or yellow corollas. The fruit is squizocarpic, dry, constituted by four mericarps denominated nutlets. This important character is broadly adopted since the first treatment focusing on *Euploca* (MELO & SALES, 2004).

*Euploca* is widely distributed in Brazil, including the North, Northeast, Western-Center, Southeast and South regions (MELO & SALES, 2004) and it is found in coastal habitats, forests, and more frequently in caatinga, cerrado and campo rupestre vegetation, a few species being as weeds in cultures.

During the study of the Brazilian *Euploca* species, a taxonomic novelty, *Euploca rodaliae* J. I. M. Melo & Semir, was recorded from the states of Pernambuco and Bahia (Northeast Brazil). Its description is based on the terminology proposed by HARRIS & HARRIS (1994). For the foliar typification, the venation and the vestiture patterns, RIZZINI (1977), HICKEY (1973) and PAYNE (1978), respectively, are followed.

***Euploca rodaliae*** J. I. M. Melo & Semir, **spec. nova** (Fig. 1).

**Typus:** BRAZIL. Bahia: Rio-Bahia road, 10.III.1958, fl., fr., *Andrade-Lima 58-2919* (holo-: PEUFR 462; iso-: IPA 11482).

*Species suffruticosa, foliis discoloribus, ovalibus, ovalo-lanceolatis vel raro spatulatis et obovatis, petiolo decurrenti; spicis terminalibus et axillaribus, dichotomis; calycis laciniis subcarnosis et alatis; ovario stipitato; stylo circa 1 mm longo.*

**Subshrub** 0.3-1.1 m high. **Stem** striate, branches cylindrical, scabrous, sericeous. **Leaves** alternate or rarely pseudo-opposite just in the internodes region, petiole decurrent, blade 1.3-3 × 0.5-1 cm, discolour, membranaceous to subcarnose, ovate, ovate-lanceolate, or rarely espatulate to obovate, apices mucronate to acute, base truncate, margin slightly revolute to sinuate, ciliate, puberulous or estrigose in the upper surface, densely estrigose to setaceous in the lower surface, whitish, trichomes bulbous on both surfaces, hiphodromous, showing impressed veins in the upper surface and prominent veins in the lower surface. **Inflorescence** 1.9-8.4 cm, terminal and axial, dichotomous, laxe, slightly escorpioideous, peduncle 0.7-1.4 cm, bracts 4.5 × 1.5 mm, lanceolate, estrigose. **Flowers** 5. 5-7 mm, short pedicellate. **Calyx** 4.5-5.5 mm, obpyramidal, lacyniae 4-6 × 0.4-1 mm, subcarnose, linear to lanceolate, setaceous outside, glabrous inside, margin ciliate, whitish, presenting sparse blackish punctations, central region greenish. **Corolla** 5-6.6 mm, white, funnel-shaped, sericeous outside, villose inside just in the stamen attachment, tube 3.5-4 mm, lobes ca. 2 × 2 mm, patent, largely deltoideous, waved-plicate. **Stamens** subsessile, attached to ca. 1.5 mm of the base of the corolla's tube, anthers 1 mm, connate, ovate to ovate-lanceolate, apices with glands and trichomes. **Ovary** 0.5-0.7 mm, depressed-globose, sulcate, stipitate. **Style** ca. 1 mm, cylindrical. **Stigma** 0.5-0.7 mm, fertile region conical, slightly 2-furcate in the apice, puberulous. **Fruit squizocarp** 2-2.5 mm diameter, depresso-globose, puberulous, calyx and stigma attached, nutlets 4 with 1 mm, presenting three faces. **Seed** 1 for nutlet, 1 to 1.2 mm, elliptical, curved embryo.

This species belongs to the genus *Euploca* for its bracteate inflorescences, connate anthers with appendages, glands and trichomes, in their apices, as well as for its fruits composed by four nutlets and seeds with a curved embryo. It is separated from the other Brazilian *Euploca* species by its discolour leaves, a decurrent petiole, exclusively dichotomous inflorescences and mainly for its short pedicellate flowers, a calyx presenting subcarnose lacyniae and an estipitate ovary.

**Etymology.** – The specific epithet was given in honor to Dr. Maria Jesus Nogueira Rodal of the Universidade Federal Rural de Pernambuco at Recife, PE, Brazil, researcher of the Brazilian Northeast's flora.

**Distribution.** – Known from Brazil: states of Pernambuco and Bahia. In Pernambuco, it is found in caatinga vegetation. In Bahia, it is distributed in Northwest and Southeast in caatinga and cerrado vegetation.

**Ecology.** – The species occurs isolated or in small assemblages, generally on the road-sides, at elevations between 560-940 m. However, in the cerrado vegetation, *E. rodaliae* grows on sandy soils associated to rocks.

*Phenology.* – Flowering from February to November and fruiting from February to September.

*Paratypes.* – **BRAZIL. Bahia:** Barreiras, IX.1978, fl., fr., *L. Coradin & al. 1177* (CEN); Caetité, 13°59'35"S, 42°12'27"W, 8.III.1997, fl., fr., *E. Saar & al. 5242* (ALCB 35414, HUEFS 29030); Caetité, 13°51'17"S, 42°16'12"W, II.1997, fl., fr., *B. Stannard & al. 5199* (ALCB, CEPEC, HUEFS); Santaluz, 11°11'16"S, 39°25'48"W, XI.1986, fl., *L. P. Queiroz & al. 1127* (HUEFS). **Pernambuco:** Caruaru, 1998, fl., fr., *V. C. Lima s.n.* (IPA 65497).

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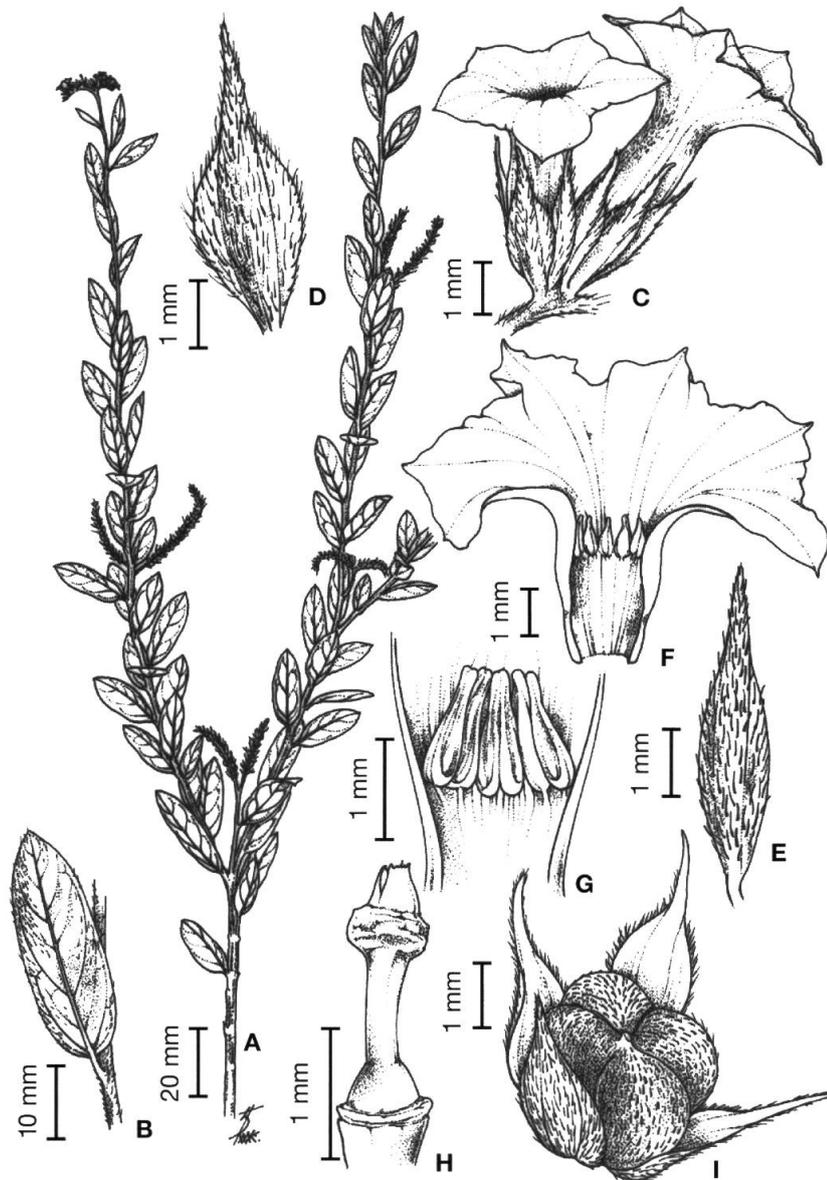


Fig. 1. – *Euploca rosaliae* J. I. M. Melo & Semir. **A.** Habit; **B.** Leaf; **C.** Flower; **D.** Sepal; **E.** Bract; **F.** Corolla dissected; **G.** Detail of the androecium, showing anthers connate; **H.** Gynoecium; **I.** Fruit in superior view.

[**A-D** and **F-I:** *B. Stannard & al.* 5199; **E:** *E. Saar & al.* 5242] (Drawing Frank Valdomiro Silva)