

**MATELEA MAGALLANESII, A NEW SPECIES OF ASCLEPIADACEAE
FROM WESTERN MEXICO**

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ABSTRACT

A striking new species of *Matelea* from western México is described and illustrated. It is perhaps most closely related to *M. pilosa* (Benth.) Woods.

KEY WORDS: *Matelea*, *Matelea magallanesii*, Asclepiadaceae, Jalisco, México

Continuing work on a guide to the flora of the Chamela Bay region of Jalisco, México, necessitates the publication of a number of new species from the area, including the following:

Matelea magallanesii E.J. Lott, *sp. nov.* Fig. 1. TYPE: MEXICO. Jalisco: Mpio. La Huerta, Estación de Biología Chamela UNAM, antiguo camino a Nacastillo, [a 8 km al E de la carretera Puerto Vallarta-Barra de Navidad], 19° 30' N, 105° 03' W, 24 Sep 1981, (fl & fr), E.J. Lott 552 (HOLOTYPE: MEXU; Isotypes: MICH,MO).

Matelea magallanesii E.J. Lott; species insignis floribus viridulus majusculis (ad 6 cm diam), lamina petali triangularis, longi-attenuatus, coronae echinatus.

Plants twining vines. Stems woody at the base, to 1 cm diam, with a corky, somewhat winged, pale brown bark, herbaceous above, whitish to yellowish pubescent throughout with a mixture of straight multicellular trichomes mostly 1-3 mm long and short glandular trichomes 0.05 mm long. Leaf blades 2.5-10. x 1.0-5.5 cm, ovate, narrowly cordate; the upper surfaces dark green, moderately and evenly short hirsute; the lower surfaces paler, short hirsute

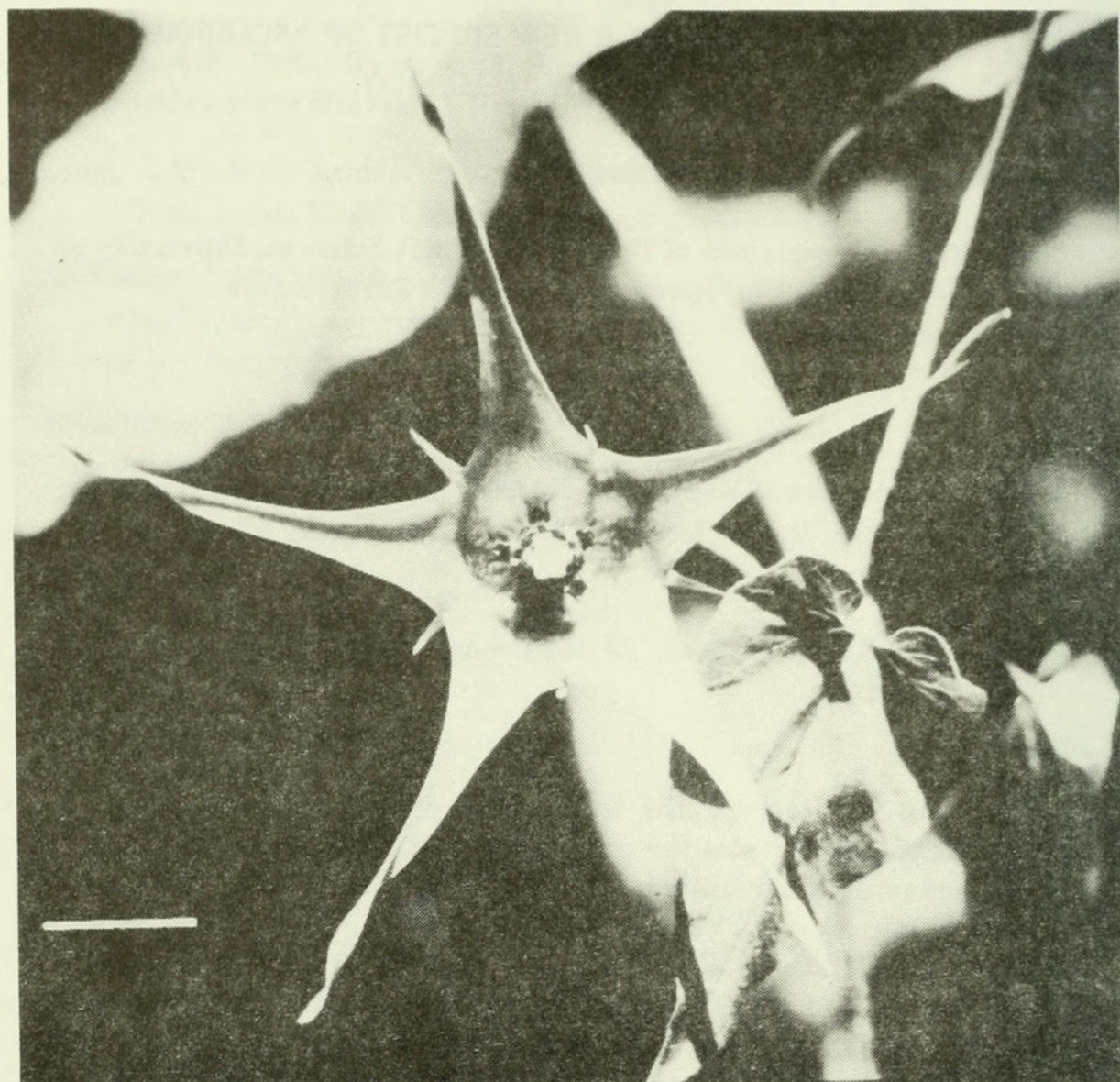


Figure 1. Flower of *Matelea magallanesii* (Lott 3879). White line = 1 cm.

with multicellular trichomes up to 1 mm or more long and minutely glandular, the hairs similar to those on the stems, trichomes coarser and denser on the veins, tending to be appressed; secondary veins 4-5 pairs, somewhat prominent beneath, yellowish; apices acuminate, base deeply cordate, the lobes straight to convergent, with 0-4 fingerlike yellowish glands at the junction of petiole and blade; margins lightly ciliate; petioles (20-)30-60 x 1.0-1.5 mm, the indument as on the stems. Inflorescences axillary, 1-4 flowered, loose cymes, 0.5-1.5 times the length of the petioles of subtending leaves, the primary peduncle 1.5-4.0 cm long, the indument of short trichomes mostly 0.5-1.0 mm long and minute glandular trichomes ca. 0.050-0.075 mm long; bracts linear-lanceolate, 8-10 x ca. 1 mm, acute; pedicels 0.8-2.0 cm long. Flowers 3.5-6.0 cm diam. Calyx lobes 8-15 x 1.5-3.0 mm, lanceolate, the apex acuminate, the base slightly imbricate, with 2-3 small white glands between each pair of lobes. Corolla pale green with purplish tinges, minutely and inconspicuously puberulent throughout, the tube shallowly and broadly campanulate-rotate, with darker green veins extending onto the corolla lobes and becoming somewhat reticulate; 6-8 mm (fresh) from base to sinus, the limb scarcely distinct, the lobes convolute in bud, (20-)25-30 x 6-9 mm, widely spreading, narrowly triangular, long attenuate to an acuminate apex, whitish on the margins. Corona exceptionally ornate, exceeding the corolla tube; the free portion of the corona lobes ca. 2 mm long, basically concave in outline from above, each lobe with two reflexed filiform appendages ca. 2 mm long. Anther head with ornate, callous, echinate, bihorned appendages ca. 4 mm wide, exceeding the stigma apex, free above, adnate to the corona lobes below and connivent with them above, glabrous, dark reddish purple; each anther with a broad dorsal stripe ca. 0.9 mm wide, minutely papillose, pale yellowish-brown, apical anther appendages hyaline, obtuse, covering ca. 1/2 of apex, each ca. 1.5 mm wide. Gynostegium 1 mm x 2.5-4.0 mm at apex, stipitate, white, the apex white, pentagonal, concave. Pollinia horizontal, pollen sacs ca. 0.5 x 0.3 mm, subtriangular, somewhat excavated at the tip; corpusculum sagittate, reddish brown, 0.4 x 0.2 mm. Follicles 10-15 cm long, narrowly fusiform, smooth, glaucous. Mature seeds unknown, immature seeds 4 x 2 mm, obovate, the apex truncate, more or less smooth, pale brown, margins paler and erose; coma white.

Additional specimens examined: MEXICO. Jalisco: Mpio. La Huerta, Estación de Biología Chamela UNAM, Camino Antiguo X Vereda Chachalaca, 6 Aug 1981 (fl), *S.H. Bullock* 978 (Est. Biol. Chamela, MO); same locality, antiguo camino a Nacastillo, [a 8 km al E de la carretera Puerto Vallarta-Barra de Navidad], 19° 30' N, 105° 03' W, 2 Aug 1983 (fl & fr), *E.J. Lott* 1732 (MEXU); same locality, 10 Aug 1983 (fl), *E.J. Lott* 1812 (MEXU); same locality, Camino Entrada, 17 Jul 1984 (fl), *J.A. Solís Magallanes* 4255 (MEXU); camino a La Rumorosa, km 60 de la carretera Puerto Vallarta-Barra de Navidad, 12 Oct 1982 (fl), *E.J. Lott & R. Hernández M.* 1464 (UCR); same locality, 28 Sep 1985 (fl & fr), *M.G. Ayala* 245 (ENCB, F, MEXU, TEX); camino a Playa La

Virgen, a 3.8 km al NO de la entrada a la Estación de Biología Chamela, 2 Oct 1985 (fl), *E.J. Lott et al.* 2642 (MEXU,MICH,US); Rancho Cuixmala, 27 Aug 1988 (fl), *G. Castillo C. et al.* 5367 (XAL); same locality, 22 Aug 1991 (fl & fr), *E.J. Lott* 3864 (CAS,RSA,UCR); same locality, 19° 23' N, 104° 59' W, 22 Aug 1991 (fl), *E.J. Lott & T. Upson* 3879 (FLAS,K,MO,NY,UCR).

The new species is named in honor of J. Arturo Solís Magallanes, now of the Reserva Joyas de Manantlán, Jalisco, outstanding collector of the flora of the Chamela coast.

Matelea magallanesii is thus far known only from coastal Jalisco between Chamela and Cuitzmala, Jalisco, where it is uncommon. It is usually found among herbs and shrubs at the edge of clearings in tropical dry forest from near sea level up to about 200 m.

Matelea magallanesii cannot be placed with certainty in any of Woodson's (1941) subgenera; understanding of its relationships must await further taxonomic study. However, the new species does resemble *M. pilosa* (Benth.) Woods., which differs in its much smaller purplish flowers with shorter, blunter corolla lobes, and much simpler floral structure. *Matelea gonoloboides* (Robins. & Greenm.) Woods., of Chiapas, can be distinguished from *M. magallanesii* by its much smaller, purplish flowers in umbellate inflorescences. *Matelea magallanesii* can be distinguished from other Chamela mateleas, especially *M. quirosii* (Standl.) Woods., by its large green flowers, and longer and narrower fruit.

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