

Notes on *Monstera minima* Madison (Araceae) in Colombia and Panama

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INTRODUCTION

Monstera is one of the most morphologically complex of neotropical aroids, mainly distributed in mesic lowland tropical forest (Croat, 1992; Madison, 1977). *Monstera* sect. *Monstera* is characterized by seedlings with exerted foliage leaves and by a gradual increase in size of successive leaves without pronounced heterophylly. Species belonging to this section can become very large plants and exhibit wide patterns of distribution, such as *Monstera adansonii* Schott, *Monstera lechleriana* Schott or *Monstera pinnatipartita* Schott while other plants in the section may be very reduced in size and have restricted geographic distributions, such as *Monstera xanthospatha* Madison, a Colombian endemic species and *Monstera minima* Madison (Madison, 1977).

Monstera minima is a species described by M. Madison (1977) based on a specimen collected by J. A. Duke and had not been recollected until recently. During an aroid inventory (Mora *et al.*, in press), and study of vertical distribution of epiphytic aroids in forest on the Pacific coast of Chocó (Jácome, unpubl. data) individuals of *Monstera minima* were collected. This species was previously only known from the type specimen in Panama in the Comarca de San Blas and was considered endemic to that country (Madison, 1977).

The type specimen was found in fruit and the inflorescence was never described. In this paper, the first description of the inflorescence of *Monstera minima* is given, and an illustration of the species is included. A recent collection made at the Reserva El Amargal has contributed the first flowering collection of the species and the description of the flowers and other additional details not previously described before are presented here.

Monstera minima Madison, *Contr. Gray Herb.* 207:72–73. 1977.

Type: PANAMA. Comarca de San Blas: trail east of Cangandi-Mandinga airport road, 2–5 mi. S. of Mandinga airport, 27 Oct., 1967. J. A. Duke 14758 (Holotype, MO-2051569) (Fig. 1.)

Hemiepiphytic; stem scandent, terete, stems 20–30 cm long, matte, dark green; internodes, 1–2 cm long, 3–4 mm diam., matte, dark green; leaf scars line-shaped; cataphylls membranaceous, paler than stem, 7–8 cm long, 1.5–1.8 cm wide, deciduous; leaves erect to spreading, distributed mainly near the apex; petioles 2.0–6.0 cm long, sheathed almost throughout, the free part 4–8 mm long, terete; sheath deciduous; leaf scars linear; blades, lanceolate, 9–14 cm long, 2.0–4.0 cm wide, narrowly acuminate at apex, narrowly acute at base, dark green and semiglossy

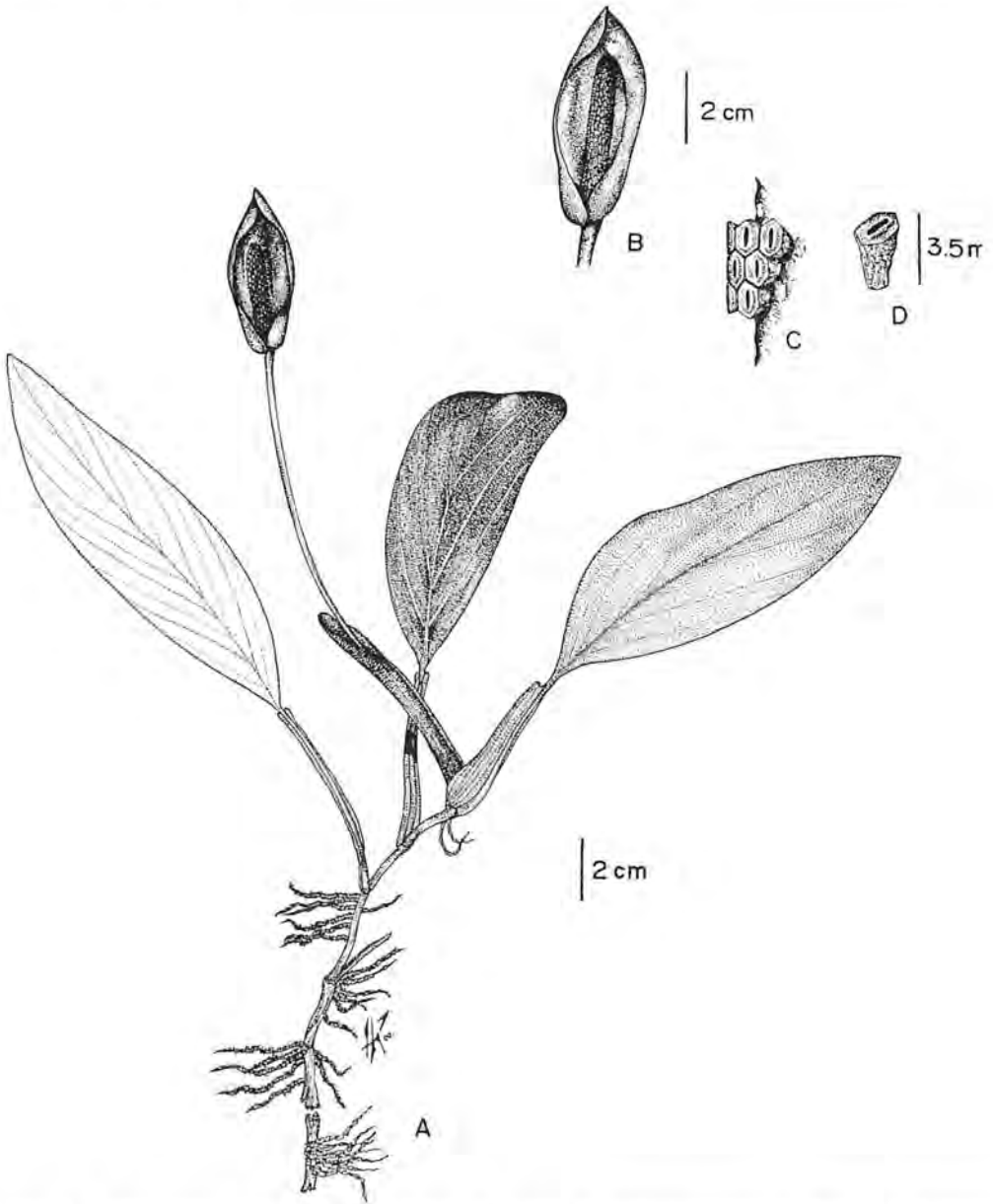


Fig. 1. *Monstera minima*. M. Madison. A. habit; B. Inflorescence; C. detail of flower arrangement on the spadix; D. Pistil, side view (Drawing by H. Arellano).

above, slightly paler and semiglossy below; primary lateral veins inconspicuous or slightly sunken above, slightly prominent and concolorous below; minor veins indistinct. Inflorescence erect, 1 per axil, erect; peduncle 16–18 cm long, 3–4 mm

diam., light green, matte; spathe 6.5–7.5, 3.2–4.0 cm wide, creamy yellow, ellipsoid, matte; spadix white, 4.4 cm long, 0.9–1 cm diam., cylindrical, creamy yellow; flowers prismatic, 2.5 mm diam., 3.5 mm long; immature stamens 1.5 mm long; filaments 0.5

mm long; anthers 1 mm long, basifixed; ovary 1-locular; style absent; stigma 1.5 mm long, linear. Immature infructescence green, 5 cm long, 1.8 cm diam., light green; berries subprismatic, 4–5 mm long, 6–7 mm diam., truncate at the apex.

**Interspecific Relationship,
Geographic Distribution and Habitat**

Monstera minima is known only from the Caribbean coast of Panama (San Blas Province) and along the Pacific slope of northern Colombia (Chocó) at 50–150 m in premontane wet and tropical wet forest. It occurs mainly in undisturbed forests in the lower three m of the forest, growing over shrubs and small trees in heavily shaded and humid conditions. The species is the smallest species of section *Monstera* and can easily be confused with other small species of the section, such as *Monstera obliqua* Miq. and *Monstera xanthospatha* Madison. *Monstera minima* differs from these species by the complete absence of perforated blades, peduncle longer than the flowering spadix and leaves (blade and petiole), and by the dark brown-drying leaves.

In contrast to *Monstera minima*, *Monstera xanthospatha* is known only from the Cordillera Central and Cordillera Oc-

cidental at 600–1700 m and *Monstera obliqua* is widespread, ranging from Costa Rica to French Guiana, Brazil and Bolivia.

Additional specimens examined: COLOMBIA. Chocó: Municipal de Nuquí, Corregimiento de Arusí, El Amargal Biological Station, Pacific coast, ca 10 km S. of village of Arusí, 5°34'N, 77°31'W, March, 1999, *Jácome 280* (COL, MO).

ACKNOWLEDGMENTS

The authors thank Fundación Inguedé and Universidad Nacional de Colombia for financial support and Dr. M. Grayum for his taxonomical assistance.

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