

Myrtillocactus eichlamii Britton & Rose (Cactaceae) a local endemic species poorly known from Guatemala

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Myrtillocactus eichlamii, habitat, Guatemala (photo : M. Veliz.).

In 2003, during the collection expeditions to the low caducifolious thorny forest of Guatemala distributed in El Progreso, Zacapa and Chiquimula Departments, from 100 up to 400 m. in alt., under the sponsorship of the Head office of Investigation-DIGI, the San Carlos University of Guatemala, the study of the Flora biodiversity and endemisms of the semiarid zones of Guatemala patronized by the Secretariat of Science and Tecnology-SENACYT of Guatemala; and the F02-2007 project of "Cacti of Guatemala", patronized by the Fund for the Conservation of Nature-FONACON, the project was to inform precisely about distribution, morphology and phenology of *Myrtillocactus eichlamii*, an endemic treelike cactus very localized and poorly known from Guatemala.

This treelike species was described by Britton & Rose, based on specimens sent by Federico Eichlam in 1909 (holotype: F. Eichlam, 09-203, August 5th, 1909. [US (photography F-044749) and published in 1920 in *The Cactaceae; Descriptions and Illustrations of Plants of the Cactus Family* 2:180-181, F 256 (Standley & William, 1961; 1978 Bravo; www.mobot.org/W3trópicos/]).

Description:

Cactus treelike, 5-7 m high, columnar, with a well defined trunk, the new branches being glaucous, 11-14 cm. in diameter, greenish-yellow, with 6 ribs 2-3 cm. high, blunt; rounded **areoles**, ca. 1 cm. in diameter, in the old stems, raised in about 1 cm.; separated between them by 2-3-5 cm.; radial **spines** 5, bulbous at the base, 2-3 mm long, stiff, dark brown; **central spine** 1, 10-15 mm long, bulbiform, stiff, brown; **diurnal flowers**, 2 or more in areoles, 26-29 mm long, 28-32 mm wide, whitish-cream, segments of the perianth with reddish tips; **pericarpel**, 5-8 mm long, **thickness of the pericarpel wall** ca. 1 mm., **thickness of the column** 0.8 mm.; length of the receptacle tube 4-5 mm; **external tepals**, whitish-cream, purplish on the underside, lanceolate-elongated, 5-7 mm wide, 10-12 mm long; **inner tepals** whitish-cream, lanceolate-elongated, 12-14 mm long, almost always in right angle with the tube; **exserted stamens**, ca. 5 mm to 6-9 mm long, whitish-cream, stretched out, **anthers** whitish-cream, ca. 1 mm. long; **style exserted**, 13-15 mm long, white, with 4-5 branches 5-6 mm long; fruit spherical, 5-9 mm long, red-purple when mature, eventually with small scales (see photos 1-2).



Myrtillocactus eichlamii, habitat & gros plan, Guatemala (photo : M. Veliz.).



F1. *Myrtillocactus eichlamii* fr. (photo : M. Veliz.).



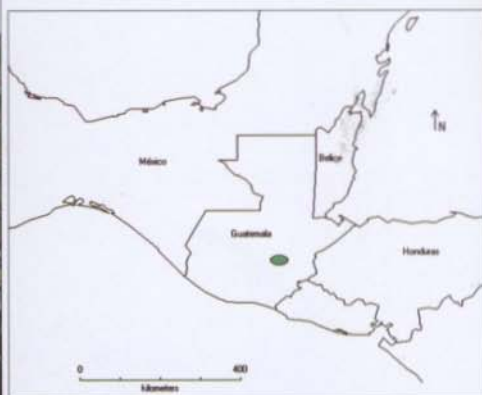
Myrtillocactus eichlamii fl. (photo : M. Veliz.).



F2. *Myrtillocactus eichlamii* fr. (photo : M. Veliz.).



Myrtillocactus eichlamii (photo : M. Veliz.).



F.3 Map distribution of *Myrtillocactus eichlamii* in Guatemala.

Studied specimens:

GUATEMALA, El Progreso, Mpio San Agustín Acasaguastlán, M. Véliz MV 13890 and F. Ramirez (BIGU, MEXU 1148299); in. Cobar 187 and M. Véliz (BIGU, MEXU 1165002); M. Véliz MV 13283 and M. Pérez; M. Véliz MV 13304 and M. Pérez; H. Paniagua 2 (BIGU, MEXU 1170011); M. Véliz MV 19488, T. Calderón and J. López (BIGU); T. Calderón 495 and M. Véliz and S. Lemus (BIGU)

Distribution: this species is only known from the Department of El Progreso, in San Agustín and San Cristóbal Acasaguastlán municipalities at a height of 100-300 m. in alt. (See figure 3)

Phenology: blooms from January till February, fruits in February-March.

Habitat: rare species, the known population represents only approximately 20 plants (Véliz *et al.* , 2003, Véliz 2007; Véliz & Méndez, 2007); it grows together with *Stenocereus pruinosus*, *Pilosocereus leucocephala*, *Nopalea guatemalensis*, *Opuntia decumbens*, *Mammillaria voburnensis* var. *eichlamii*, *Melocactus curvispinus*, *Erythroxylon fiscalensis*, *Guaiacum sanctum*, *Plocospermum buxifolia*, *Malpighia puniceifolia*, *Pereskia lychnidiflora*, *Acanthocereus tetragonus*, *Ceiba aesculifolia*, *Bursera schlechtendalii*, *B. simaruba* and *B. steyermarkii*, into the low caducifolious-thorny forest (Véliz, 2002; Véliz *et al.* , 2003).

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