

7. MICROCYCAS A. DC.

Miquel, F. A. W., in Van Houtte's Fl. Serres et Jard. 7: 141 (1851); De Candolle, A., Prodr. 16²:538 (1808).

Stem aerial and columnar, up to 10 m. in height, frequently branched, usually ringed by the alternation of scars of leaf bases and of bud scales; rings disappearing in old plants and the trunk becoming smooth. Leaves many in a crown, about 1 m. in length; petiole unarmed. Leaflets narrowly lanceolate, entire, jointed at the rachis, deflexed in old plants, with "parallel" (dichotomous) venation. Vernation of the rachis subcircinate, of the leaflets straight.

Male cones solitary, cylindric, short stalked. Microsporophylls flat, cuneate below, the sterile tip ovate and rather blunt. Microsporangia covering the entire basal two-thirds of the lower surface. Female cones solitary, cylindric, short stalked. Megasporophylls peltate, long stalked, the top cuneate, convex, and with three rounded shallow grooves on each side. Seeds red.

A single species, confined to a relatively small area in western Cuba, where it occurs in scattered patches with few individuals. Name from *μικρος* (small) and *Cycas*, a most unfortunate choice, since it is one of the tallest of cycads. Type species: *M. calocoma* (Miq.) A. DC.

Microcycas was first described as *Zamia calocoma* Miq., and plants of *Zamia pumila* may have been distributed as *Microcycas calocoma*; but its appearance in the field is so characteristic that no one could mistake it for any other cycad. De Candolle made the first fairly adequate description and Caldwell the first description of specimens in the field. The following is based on Caldwell's account, together with observations by H. A. van Hermann and by Dorothy Downie, and on my own study extending over the entire known range of the species.

1. Microcycas calocoma (Miq.) A. DC.

Miquel, F. A. W., in Van Houtte's Fl. Serres et Jard. 7:141 (1851); De Candolle, A., Prodr. 16²:538 (1868); Caldwell, O. W., and Baker, C. F., Bot. Gaz. 43:330-335 (1907); Caldwell, O. W., Bot. Gaz. 44:118-141 (1907); Downie, D. G., Bot. Gaz. 85:437-450 (1928); Schuster, J., Pflanzenreich 4^V:128-130 (1932); Cendrero, O., Mem. Soc. Cub. Hist. Nat. 14:175-182 (1940); Foster, A. S., and San Pedro, M. R., Mem. Soc. Cub. Hist. Nat. 16:105-121 (1942).

Stem up to 10 m. tall and 66 cm. in diameter. Leaves up to 40 in a crown, about 1 m. long, bright green, finely tomentose when young, becoming glabrous. Petiole 10 cm. long, terete, ~~the~~ swollen at the base. Leaflets 50-80 on each side, opposite or alternate, bluntly pointed, callused at the base, slightly revolute, 8-20 cm. long, with 15-20 veins. Bud scales 4-6 cm. long, 1-1.5 cm. wide, woolly except on the lower half of the inner face.

Male cones solitary, cylindrical, 25-30 cm. long, 5-8 cm. in diameter, with a woolly peduncle 2.5 cm. long. Microsporophylls 2.2-2.7 cm. long, 1.5-2 cm. wide, obtuse, the upper third tomentose, the basal two-thirds of the lower surface covered by 150-200 microsporangia not separated by a sterile median line. Microsporangia commonly 2 in a sorus, occasionally 1 or 3. Female cones borne singly, cylindrical, tapering slightly from base to apex, 50-70 cm. long, 13-16 cm. in diameter, and weighing up to 9.5 kilos; peduncle short and woolly, with several ~~woolly~~ scale leaves. Megasporophylls 4.5-5 cm. long; peltate top thickened, convex, rhombic, 2-3 cm. high, hairy, with 3 rounded shallow grooves on each side; peduncle 3-3.5 cm. long, perpendicular to the cone axis. Seeds red, 2.5-3 cm. long, 1.8-2.5 cm. in diameter. Stony layer smooth, with indistinct corona; impressions of bundles hardly recognizable except at the chalaza.

Geographic distribution: Province of Pinar del Río, in western Cuba, from San Diego de los Baños to Sumidero, especially on the lowlands and mountains to the north of Consolación del Sur and Herradura. In geographic distribution and number of individuals Microcycas calocoma may be the most restricted species in the Cycadaceae.

A small number of specimens and
 several hundred plants in the
 vicinity of San Diego de los Baños
 and Sumidero in the Province of Pinar del Río.