

**ADELONEMA PELTATUM (ARACEAE),
A NEW RECORD FOR THE FLORA OF PANAMA**

ORLANDO O. ORTIZ

Universidad de Panamá
Herbario PMA, Estafeta Universitaria
Panama City, Panama
author for correspondence: ortizopma@gmail.com

THOMAS B. CROAT

Missouri Botanical Garden
St. Louis, Missouri 63166-0299

RICCARDO M. BALDINI

University of Florence
Department of Biology & Tropical Herbarium FT
Florence, Italy

ABSTRACT

We present the first record of *Adelonema peltatum* for Panama and Central America. Images of the species, taxonomic comments, and a key for Panamanian *Adelonema* are provided.

RESUMEN

Presentamos el primer registro de *Adelonema peltatum* para Panamá y Centroamérica. Se proporcionan imágenes de la especie, comentarios taxonómicos, y una clave para las especies panameñas de *Adelonema*.

We record the species *Adelonema peltatum* (Mast.) Wong & Croat for the first time for Panama and Central America, bringing to six the number of *Adelonema* species reported for Panama. Additionally, a key of the Panamanian *Adelonema* species is provided.

Adelonema peltatum (Mast.) S.Y. Wong & Croat, Syst. Bot. 41: 43. 2016. Figures 1–3. *Homalomena peltata* Mast., Gard. Chron., n. ser. 7: 273. 1877. **TYPE: Colombia.** Cultivated by Bull, ex. Shuttleworth, *Masters s.n.* (holotype: K!).

Distribution. Panama (Comarca Guna Yala), Colombia (Antioquia) to Ecuador.

Panama specimen examined. Comarca Guna Yala (San Blas). Forest SE of Puerto Obaldía on steep creek bank, 08°39'30"N 077°23'18"W, 18 Aug 1971, *Croat & Gentry 16811* (MO). The plant was collected in a Tropical wet forest life zone at ca. 150 m.

Notes. *Adelonema peltatum* (sect. *Curmeria*) is characterized mainly by having peltate blades usually with the blades forming a deep depression owing to the fusion of the upturned margins and upturned posterior lobes with the upper surface usually weakly glossy to matte on drying with spinose petioles with the surfaces usually densely puberulent to hispidulous throughout or at least toward the apex (see the key below). In Panama, *A. peltatum* can be confused with *A. panamense*, since both species have peltate blades and spines on the petioles. *Adelonema panamense* differs from *A. peltatum* in having leaf blades glossy and glabrous on upper surface with posterior lobes flat.



Figure 1. Voucher for Panama occurrence of *Adelonema peltatum*, Croat & Gentry 16811 (MO). Photo credits: © MO Herbarium.



Figure 2. Type of *Homalomena peltata* Masters, Masters s.n. (K). Photo © copyright of the Board of Trustees of the Royal Botanic Gardens, Kew.



Figure 3. Original illustrations of *Homalomena peltata* Masters. From Masters (1877): figures 45 and 46.

Key to *Adelonema* species of Panama (based on Wong et al. 2016)

1. Leaf blades broadly to narrowly ovate or elliptic, base not lobed, without trichomes or spines.
5. Petioles short, 1.5–4(–6.5) cm long, sheath usually extending nearly to blade
..... ***Adelonema wallisii***
5. Petiole over 6.5 cm long, sheath usually extending to no more than about mid-petiole
..... ***Adelonema allenii***
1. Leaf blades cordate to hastate, base evidently lobed with trichomes, those on petiole sometimes much thickened and spinescent.
2. Petioles sulcate, densely to slightly pubescent with filamentous trichomes, especially near apex, but never with spines ***Adelonema picturatum***
2. Petioles terete or nearly so, usually with spinose trichomes towards base.
3. Leaf blades basifixed ***Adelonema wendlandii***
3. Leaf blades peltate at base.
4. Blades glossy and glabrous on upper surface, posterior lobes flat; midrib and proximal portion of primary lateral veins pale green to whitish ***Adelonema panamensis***
4. Blades usually matte and obscurely puberulent on upper surface; posterior lobes directed prominently upward at an angle to midrib; midrib and primary lateral veins concolorous to pale green ***Adelonema peltatum***

Adelonema is a Neotropical genus of Araceae characterized as either mesophytic, helophytic, or rheophytic terrestrial herbs; petiolar sheath well-developed; leaves lanceolate, elliptic, oblong, subtriangular or cordate to sagittate, rarely peltate; ovules anatropous; placentation central; petiole often armed with prickles and leaf blade glabrous or pubescent, often variegated (Wong et al. 2016).

The genus *Adelonema* was long-considered synonymous with *Homalomena* (Mayo et al. 1997). Traditionally, several studies argued that *Homalomena* was a polyphyletic group, with distinct Neotropical species and Asian species. Recently, molecular studies (nuclear ITS and plastid matK regions) (Wong et al. 2014) resurrected the genus *Adelonema* as distinct from the Asian *Homalomena*. The taxon *Adelonema* currently consists of 16 strictly Neotropical species in two distinct sections: **sect. *Adelonema*** with 10 species: *A. erythropus* Schott, *A. allenii* (Croat) S.Y. Wong & Croat, *A. hammelii* (Croat & Grayum) S.Y. Wong & Croat, *A. kvistii* (Croat) S.Y. Wong & Croat, *A. moffleriana* (Croat & Grayum) S.Y. Wong & Croat, *A. orientalis* Croat, *A. palidinervia* Croat, *A. roezlii* (Mast.) S.Y. Wong & Croat, *A. speariae* (Bogner & Moffler) S.Y. Wong & Croat, and *A. wallisii* (Regel) S.Y. Wong & Croat; and **sect. *Curmeria*** with six species: *A. crinipes* (Engl.) S.Y. Wong & Croat, *A. panamensis* Croat & Mansell, *A. peltatum* (Mast.) S.Y. Wong & Croat, *A. picturatum* (Linden & André) S.Y. Wong & Croat, *A. wendlandii* (Schott) S.Y. Wong & Croat, and *A. yanamonoensis* Croat & Mansell. Sect. *Curmeria* is characterized by having petioles often armed with prickles, leaf blades pubescent, spadix stipitate and interpistillar staminodes sometimes present. Sect. *Adelonema* is characterized by having petioles not armed, leaf blades glabrous, spadix sessile and interpistillar staminodes always absent (Wong et al. 2016).

ACKNOWLEDGEMENTS

We are very grateful to all volunteers of the Araceae Laboratory of the Missouri Botanical Garden. We would also like to thank Professor Raúl Carranza (Dean of Science of the University of Panama), Professor Maria de Stapf (Director of the PMA Herbarium), botanists and herbarium workers Lucila Guillén and Vielka Murillo (PMA) for providing facilities and other support, and Carla Kostelac of the Missouri Botanical Garden for providing excellent images of the *Adelonema*

peltatum. The first author of this paper (O.O.O.) thanks Panama's National Secretariat for Science and Technology (SENACYT) for funding the herbarium work. Lastly, we offer thanks to Jerry Harrison for his suggestions and comments.

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