



A revision of the genus *Trithrinax* (Cryosophileae, Coryphoideae, Arecaceae)

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Abstract

The palm genus *Trithrinax* is revised and three species and four varieties are accepted (*T. brasiliensis* var. *brasiliensis*, *T. brasiliensis* var. *acanthocoma*, *T. campestris*, *T. schizophylla* var. *schizophylla* and *T. schizophylla* var. *biflabellata* comb. nov.). This taxonomic treatment presents detailed and complete description of all taxa, based on the studies of natural populations in Argentina, Brazil and Paraguay, the morphological analysis of herbarium specimens (including all available types) and an exhaustive literature research. Illustrations are presented for all taxa and identification keys to the species and varieties are proposed. Species descriptions include updated distribution maps, information about their ecology, taxonomic notes and a compilation of common names and uses. The conservation status assessment reveals an important level of threatening for all taxa, ranging from vulnerable (VU) to endangered (EN), mainly due to the decline of the area of occupancy and the quality of habitat.

Introduction and historical survey

Trithrinax Martius (1837: 149) is a Neotropical palm genus distributed in the subtropical region of South America. It is easily distinguished from other palms of the region by its relatively short size, palmate leaves, persistent spiny leaf sheaths covering the trunk and solitary and hermaphrodite flowers. *Trithrinax* is placed in the tribe Cryosophileae Dransfield *et al.* (2005: 561) of subfamily Coryphoideae Griffith (1844: 311; Asmussen *et al.* 2006, Dransfield *et al.* 2008) and can be found in xeromorphic forests or open hilly areas, where local people use their leaves to thatch and their fruits to prepare alcoholic beverages (Corrêa 1931, Lorenzi *et al.* 2010).

The type species of the genus, *Trithrinax brasiliensis* Martius (1837: 150), was collected for the first time by F. Sellow in southern Brazil and published by Martius in his magnificent palm treatment *Historia Naturalis Palmarum*. In the third volume of that work Martius included a plate of *T. brasiliensis* (tab. 104). Burmeister (1861: 48) described *Copernicia campestris* from Córdoba, Argentina, a species that was later transferred to *Trithrinax* as *T. campestris* by Drude & Grisebach (in Grisebach 1879: 283). *Trithrinax acanthocoma* was described by Drude (1878: 361) using a specimen collected by Glaziou in southern Brazil. The same author described *T. schizophylla* in Martius' *Flora Brasiliensis* (1882: 552) based on specimens collected by Weddell and d'Orbigny from Mato Grosso (Brazil) and Santa Cruz (Bolivia), respectively. The last species described for the genus is *T. biflabellata* Barbosa Rodrigues (1899: 2), which was collected by J. D. Anisits from a Paraguayan locality near Concepción, and described in the *Palmae Novae Paraguayense* in 1899. Recently, Quercellini *et al.* (2012) described two interesting cultivated individuals of *Trithrinax* (identified as *T. campestris*), which are morphologically different from other taxa within the genus. They considered those cultivated exemplars as a probable undescribed species.