



## A revision of *Chuniophoenix* (Arecaceae)

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### Abstract

A revision of the Asian palm genus *Chuniophoenix* is given based on study of 22 herbarium specimens of wild origin from A, BH, FIPI, HN, IBSC, K, LE, MO, NY, and P. Three species are recognized, including a new one, *Chuniophoenix suoitienensis*.

**Keywords:** dioecy, Palmae, Vietnam, China

The genus *Chuniophoenix* Burret (1937: 583) and species *C. hainanensis* Burret (1937: 583) were based on a single specimen collected by F. C. How in 1935 in Hainan, China. The genus was named after Chun Woon-Young, then director of the Botanical Institute, Sun Yat Sen University, Guangzhou. A second species, *C. nana* Burret (1940: 97), was described from northern Vietnam and a third, *C. humilis* Tang & Wu (1977: 111) from Hainan. Zona (1998), based on cultivated plants, considered that this last name should be a synonym of *C. nana*, and this was followed by Govaerts and Dransfield (2005). Two species were thus recognized, *C. hainanensis* from Hainan and *C. nana* from Hainan and northern Vietnam. Henderson (2009) considered *C. humilis* as distinct from *C. nana* and recognized three species.

The genus is poorly known. There are few specimens in herbaria, and several of these are from cultivated plants. Few other descriptions since the original ones have been published, at least in English. During the last few years the author has collected specimens from China and Vietnam, and studied all types, with a view to more fully distinguishing and describing the species. In 2009 a species of *Chuniophoenix* was collected from southern Vietnam, over 1000 km further south than the previous known locality of the genus. This specimen is here described as a new species and descriptions of the other two species are given.

Despite its obscurity, *Chuniophoenix* is of great interest because of its relationships. It is placed in the tribe Chuniophoeniceae (Dransfield *et al.* 2005), along with *Nanorrhops* Wendland (1879: 148) (Yemen, Oman, Iran, Afghanistan, Pakistan) and *Kerriodoxa* Dransfield (1983: 4) (Peninsular Thailand). These three genera display great morphological diversity and an unusual distribution. An intriguing piece was added to this puzzle by the addition of a fourth genus to the tribe, *Tahina* Dransfield & Rakotoarinivo in Dransfield *et al.* (2008b: 81), recently described from Madagascar.

***Chuniophoenix*** Burret (1937: 583).

**Stems** clustered, slender to moderate, erect, brown. **Leaves** palmate, induplicate; leaf sheaths open opposite the petiole, densely whitish-brown tomentose, the tomentum early deciduous, not split or split below the petiole to give a central cleft, winged or not winged along the proximal margins; petioles well-developed, channeled adaxially, tomentose as the sheaths; abaxial and adaxial hastulas absent; leaf blades split almost to the base into few to numerous segments, the central ones wider than the lateral ones, the central ones often split again, acuminate or briefly lobed at the apices; veins prominent ad- and abaxially. **Inflorescences** arching to pendulous, emerging from the top of the leaf sheaths, spicate or branched to 3 orders; prophylls short; peduncles well-developed, covered with overlapping, tubular, persistent peduncular bracts; rachis covered with similar bracts; rachillae covered with short, overlapping, tubular, persistent bracteoles; flowers solitary, or borne in short cincinni of 2, rarely 3, flowers per bracteole, borne on long pedicels, purple or yellowish; pedicels subtended by a tubular bracteole; calyces brown, membranous, tubular, 3-lobed at the apex, the lobes splitting and becoming reflexed; corollas pedicelliform below, 3-lobed above with fleshy,