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Wallichia disticha in Thailand

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Wallichia disticha is an easily recognized palm that has been much prized as an ornamental. Never very frequent in cultivation, its scarcity probably reflects the difficulty in obtaining seed. It is the only member of the genus and, indeed, of the tribe Caryoteae to which it belongs, to have its leaves arranged in two rows, i.e., distichously. It is this unusual leaf arrangement that makes it such a handsome and desirable palm.

Wallichia disticha was first described by Thomas Anderson in the *Journal of the Linnean Society*, Volume 11, in 1871, based on material collected in gorges from the Sikkim Himalaya. Kurz also recorded the palm from Pegu in Burma, though there is some possible confusion here, as Kurz described the leaves as being arranged in a one-third spiral rather than being distichous—a tristichous *Wallichia disticha* would be desirable indeed! *W. disticha* has also been recorded for China (see Pei, S.-J. and Chen, S.-Y., *Flora of China: Palmae*. 1991). There are very few herbarium collections of this most distinctive palm and, as is so often the case with palm herbarium specimens, most of these are of poor quality and lack important field notes. That the leaves are distichous, for example, is almost never mentioned, despite its being such a striking and unusual feature.

In January 1994, on my way to Brunei for fieldwork, I spent time in Thailand to have a few days in the field with my student Sasha Barrow, who was just starting her monographic study of *Phoenix*, to introduce her to the problems of making good palm specimens. We planned a short visit up the valley of the Kwai Noi River in Kanchanaburi Province, the river made famous by the film "Bridge on the River Kwai." It flows from north to south, draining a large area of Thailand adjacent to the border with Myanmar (Burma). The upper reaches of the river have been dammed to form a large reservoir for generating electricity and providing water for irrigation. Until recently the upper part of the Kwai Noi was rather inaccessible, but

now the construction of the dam has opened up the area to agricultural development, and there is an excellent road that goes right to the border of Myanmar at the Three Pagodas Pass. The upper part of the valley is an area of outstanding beauty, with varied topography and an abundance of karst limestone hills. Although some natural forest remains, much of the land accessible from the road has been cleared for agriculture.

Before we left Bangkok for Kanchanaburi we spent a morning in the Forest Herbarium of the Royal Forest Department. While Sasha looked at the specimens of *Phoenix*, I went through the palm collections. Mr. Thawatchai Wongparsert, of the Saraburi Botanical Garden, who planned to look after us on our short trip, introduced himself and dragged me away from the dead specimens to show me a young palm in the Forest Herbarium's nursery nearby that he had collected in Tung Yai Wildlife Sanctuary in the northern part of Kanchanaburi Province. The narrow praemorse induplicate leaflets proclaimed that the palm was either a species of *Arenga* or of *Wallichia*, but the leaflets were far too narrow for the palm to be *W. siamensis*, and the leaflet arrangement was unlike that of any *Arenga* known to me and, although there were only three leaves, they seemed to be arranged distichously. I guessed that it was probably *W. disticha*. Later, in the Forest Herbarium, I looked more carefully at the material of *Wallichia* and one collection, *Larsen et al.* 8965, clearly belongs to *W. disticha*. It was collected in 1961 by Kai Larsen, from southeast of Sai Yok, also in Kanchanaburi.

The following day we drove off to the valley of the River Kwai to Thong Pha Phum, stopping whenever we saw *Phoenix*. The *Phoenix* here is for the most part a dwarf shrubby species, always associated with limestone, but, despite this, it seems not to grow on the tops of the limestone hills, but more at the base, or in open boulder fields in dry deciduous forest. Which species it is yet to be determined. This is one of several forms of *Phoenix loureiri*.



1. *Wallichia disticha* growing on a limestone hill near the Three Pagodas Pass, Thailand. 2. Close-up view of *Wallichia disticha* showing the distichous leaf bases. Photos: J. Dransfield.

On our second day out, within sight of the Three Pagodas Pass, we stopped to look at a population of *Phoenix* on a travertine slope of a limestone hill, and, almost immediately found *Wallichia disticha*, growing in dry deciduous forest on limestone at the base of the hill. Unfortunately the plants were all young and there were no signs of flowers or fruit; however, the distichous arrangement of the leaves proclaimed its identity. The record is vouchered by Dransfield *et al.* 7343 in the Herbarium of the Royal Forest Department (BKF) and Kew. Later in the day we saw two more popula-

tions, both at the foot of limestone hills and neither flowering nor fruiting.

It thus seems that *Wallichia disticha* occurs in a relatively large area, stretching from Sikkim southwards to Thailand, to at least 14° north. It seems surprising that up until now, this very distinctive palm should not have been identified as occurring in Thailand. It is also worth noting that, whereas the palm in the north of its range seems to occur on sandstone, in the south of its range it occurs on limestone.

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