

and refers here to the scales of such color on the leaf sheaths.

***Pinanga fractiflexa* Hodel sp. nov.** Fig. 18-20.

Pinanga malaiana Becc. affinis sed foliis vaginis brunneolis luteis, rachillis valde fractiflexis, fructibus luteolis differt. Typus: Thailand, between Takuapa and Phanom, 600 m elev., D.R. Hodel, P. & R. Vatcharakorn 1729 (Holotypus BK).

Clustered understory palm to 5 m tall. Stems 3-5 cm diam., ringed, internodes 10-15 cm long, green with a few deciduous, brownish scales. Leaves 11, pinnate, ascending; sheaths 34 cm long, tubular, obliquely long-open apically, forming a crownshaft, greenish yellow with deciduous, smooth, reddish brown, stellate hairs 0.5 mm long, margins becoming shredded apically with small deciduous ocrea; petiole 70-100 cm long; rachis 1.8-2 m long; rachis and petiole with grayish brown scales; pinnae 8 on each side of rachis, 67-70 x 6-15 cm, falcate, acuminate, 3-6-nerved, end pair truncately praemorse. Inflorescences 2-3, infrafoliar, 25 cm long; peduncle 2-3 cm long; prophyll 24 cm long, flattened, 2-winged, with deciduous, smooth, reddish brown, stellate hairs 0.5 mm long, other bracts not seen or reduced to small, lip-like ridges; rachis 3-5 cm long; rachillae 5, these 17 cm long, drooping, strongly zig zag. Flowers in triads of center, later-opening pistillate flanked on each of two sides of earlier-opening staminate, triads 4-5 mm distant within a row, 3-4 mm between rows, distichously arranged, subtended proximally by mucronate bracteole 1 mm high, several much smaller bracteoles also present around pistillate flower, staminate flowers subtended by low, lip-like bracteole. Staminate flowers 10-15 x 7-8 mm, angular, whitish to golden-yellow; calyx 4 x 6 mm, prominently lobed, sepals connate in basal 1 mm, spreading apically, acuminate; petals 15 x 6 mm, narrowly ovate, valvate, free to base, acuminate; stamens ca. 40, 4-5 mm high, filaments very short, 0.5 mm long, anthers 4 x 0.4 mm, dorsifixed toward base. Pistillate flowers 3.5 x 4-4.5 mm, globular, whitish; calyx and corolla similar, sepals and petals imbricate to apex, bowl-shaped, broadly rounded apically with incurved, briefly mucronate tips; pistil

2.5 mm high, ovoid, stigma with 3, short lobes. Fruits 3 x 1.5 cm, ovoid, brownish yellow when soft ripe; seeds 2 x 1 cm.

Pinanga fractiflexa occurs in wet hill forest on the west side of middle peninsular Thailand. It is similar to *P. malaiana* but the latter differs in its more or less straight rachillae, purplish black fruits, and leaf sheaths with brown, rough hairs 0.4 mm long. The epithet is from the Latin *fractiflexus*, meaning zigzag, and refers here to the rachillae.

***Rhapis siamensis* Hodel sp. nov.** Fig. 21-23.

Rhapis micranthae Becc affinis sed foliis laminae segmentis breviter basaliter connatis, floribus femineis anguste ovoideis, petalis anguste ovatis, calyce membranaceo differt. Typus: Thailand, Phattalung, 20 m elev., D.R. Hodel, P. & R. Vatcharakorn 1652 (Holotypus BK).

Clustered, dioecious, understory palm forming dense clumps 3-5 x 1-2 m. Stems often covered with persistent, fibrous sheaths, 6-15 mm diam. without sheaths, 1.8-2.5 cm diam. with sheaths, ringed, internodes 1-5 cm long, yellowish green. Leaves 15-22, spreading, palmately divided; sheath 5-12 cm long, long-open, margins fibrous-netted, fibers dark brown and in 3 layers, outermost coarsest, middle and innermost finer; petiole 30-50 cm long; blade 15-28 x 25-50 cm, +/- semi-orbicular, divided 3/4 to nearly to base into (5-)8-12 segments, these (12-)18-20(-24) x 0.5-5 cm, truncately praemorse, glossy green adaxially, paler abaxially, 1-4-nerved, 12-24 nerves total per blade, transverse veinlets conspicuous, close-set, 1-2 mm distant. Inflorescences 2-3, interfoliar, spreading; staminate 40 cm long, peduncle 20 cm long, flattened, 7 mm wide; prophyll 15 cm long, attached 9 cm above base of peduncle, tubular, obliquely open apically, thin-papery, reddish brown to brown with deciduous, twisted, slender, whitish hairs 2.5-4 mm long at apex and along both slightly winged margins, peduncular bract 1, similar to prophyll, 1-6 cm long, attached 7 cm above base of prophyll and extending on to rachis 3-4 cm; rachis 1-3 cm long with 2 main branches, one with bract similar to peduncular bract and inserted 1.5 cm above branch base; rachillae 13-28, these 10-15 cm long, lower ones sometimes furcate; pistillate