having considered it to be *P. malaiana* (Mart.) Scheff., e.g. *Whitmore FRI 0187*, SING). *P. jamariensis* and *P. pantiensis* are more localised in their known habitat, the latter being probably more seriously endangered by forest clearance at Linggiu and Gunung Panti, where an *in situ* conservation effort would be most desirable and urgent. *P. palustris*, although earlier thought to be localised to the Endau area, is now known to be quite widespread not only in Johor but also along the east coast of the Peninsula up to Terengganu. As with *P. johorensis*, with which it often shares its habitat, many early collections of this taxon have been labelled as *P. malaiana*, e.g. *Tan Ah King 23* from Mawai, 1959, SING (but note: *Tan Ah King 23A*, SING, collected contiguously is *P. johorensis*). It is also one of the few Malayan *Pinanga* species that appears to have an affinity with Sarawak ones, in particular, *P. mirabilis* Becc. (1886).

*Note: Within this account, as in my other taxonomic papers, certain specimens (prefix: *H) currently kept in the Palm Search Malaysia collection are cited to supplement herbarium collections examined. Although it is intended eventually to deposit more specimens in the major reference herbaria, many items represent field records of the in situ conservation status, which the PSM project is in the process of monitoring.*

1. *Pinanga jamariensis* C.K.Lim **sp. nov**

P. auriculatae var. merguensi similis sed foliis parvidissectis et glaucis bene distincta.

Typus: Johor: Bukit Jamari, 1993, *C.K.Lim H1456* (holotypus SING, isotypus KEP).
Plates 1–4.

Solitary, stilt-rooted; stem grey-brown, erect, 3–8.5m tall, slender, 2 cm diam., internodes 5–12 cm. Crown with eight or more leaves; leaf sheath c. 28 cm, distinctly glaucous, white, tinged pink within; petiole 5 mm diam. to 30 cm long, glaucous; lamina thick and fleshy, 65 x 40 cm, glaucous, darker green above, lighter below and white to silvery, sometimes prominently whitish along nerves; blade often entire in juveniles, later divided into three or more irregular pairs of leaflets, with three to five nerves, leaves sometimes (rarely, e.g. **H1460*) with serrated leaf edges. Inflorescence infrafoliar, pendent, with 3–4 branches; prophyll thin, papery, brown, often lingering though shrivelled; peduncle short c. 10 cm, 6 mm wide; rachillae slender, to 15 cm, reddish, with distichous floral pits. Staminate and pistillate

flowers not seen. Fruit distichously borne, c. 24 pairs per rachilla; immature drupes light green with darker tips, ellipsoid, elongate and pointed, ripening to buff colour then blood red to black, broadening ellipsoid, c.12 x 10 mm; testa fibrous. Seedling leaf entire-bifid, acute, dark green, glabrous.

Notes: This handsome and elegant palm is relatively rare, found so far in Johor from Gunung Panti (where I first saw it) to Kahang, Mersing Forest Reserve, and at its type location in Bukit Jamari (Plate 3), which its epithet identifies. Its glaucousness is indeed quite diagnostic, and the thick white

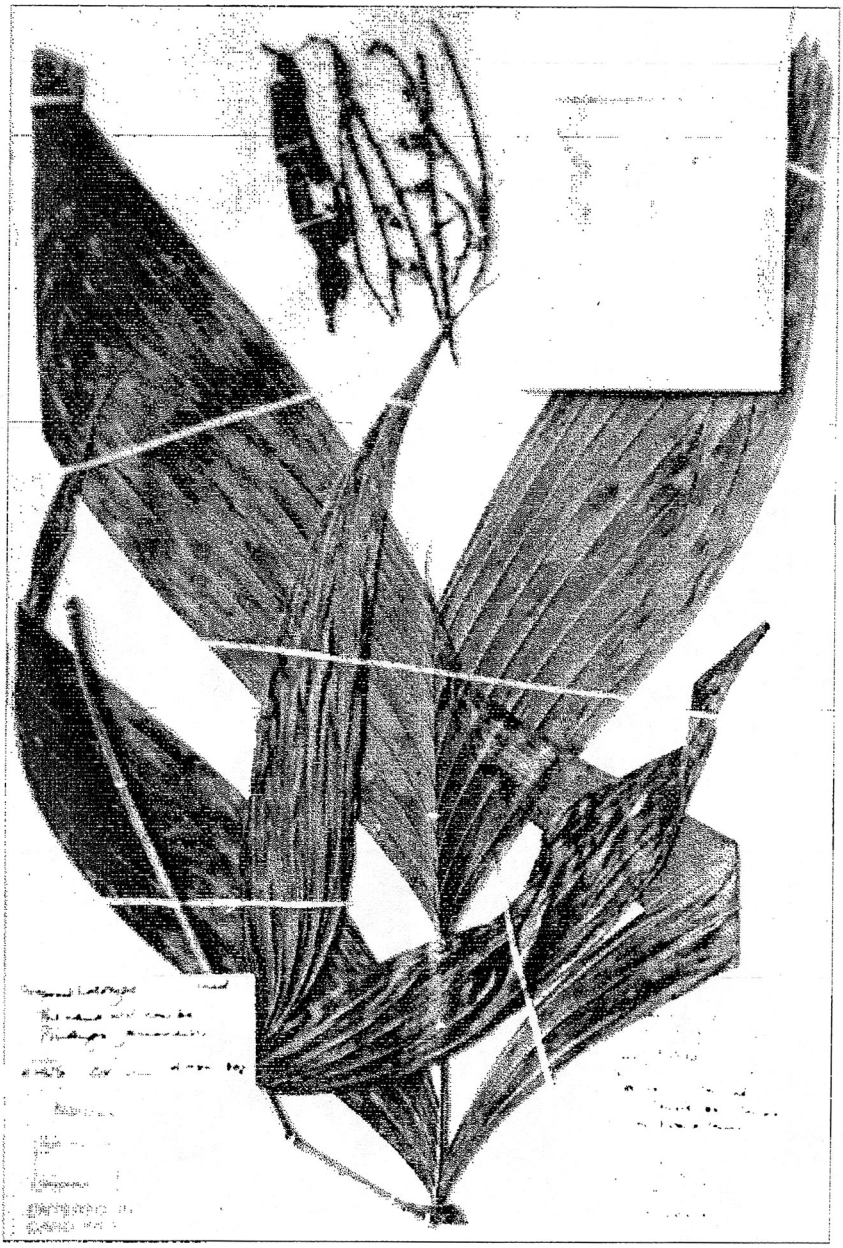

Plate 1. *Pinanga jamariensis* C.K.Lim (holotype: 1993, *C.K.Lim H1456*, SING). By courtesy of SING.

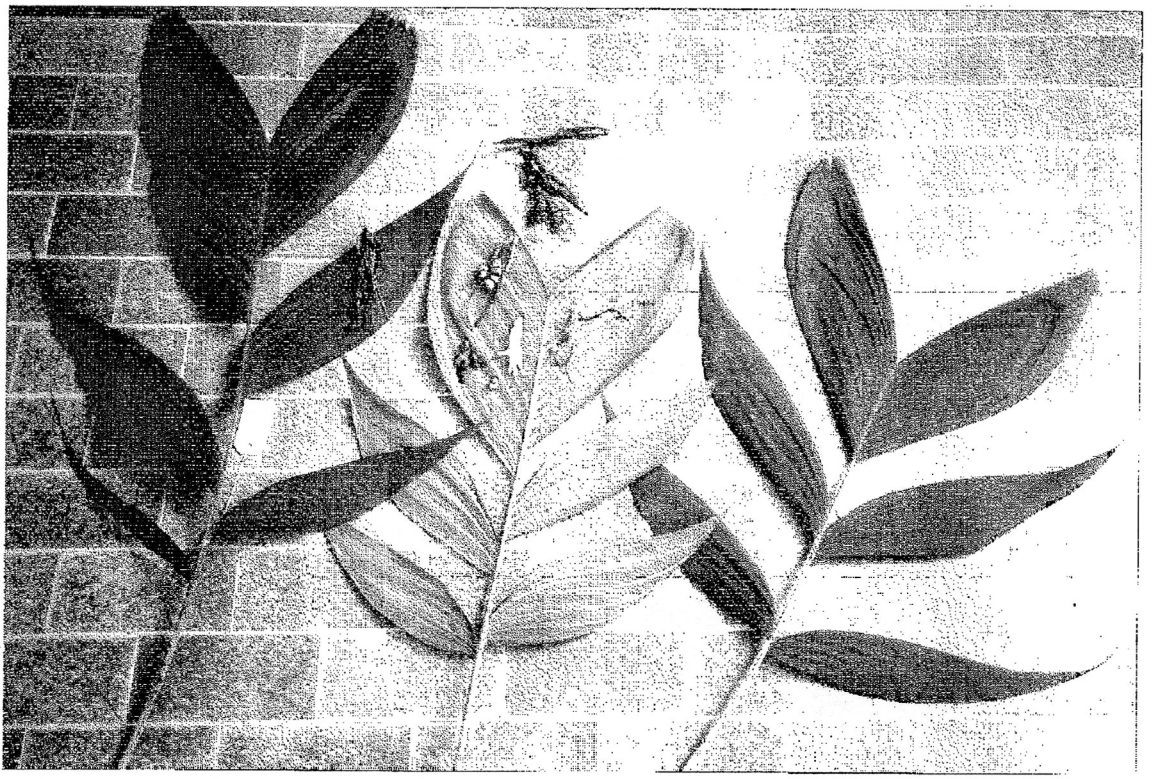

Plate 2. *Pinanga jamariensis*, leaves and inflorescences (**H1455*).

Plate 3. *Pinanga jamariensis*, solitary palm at Bukit Jamari, Johor.

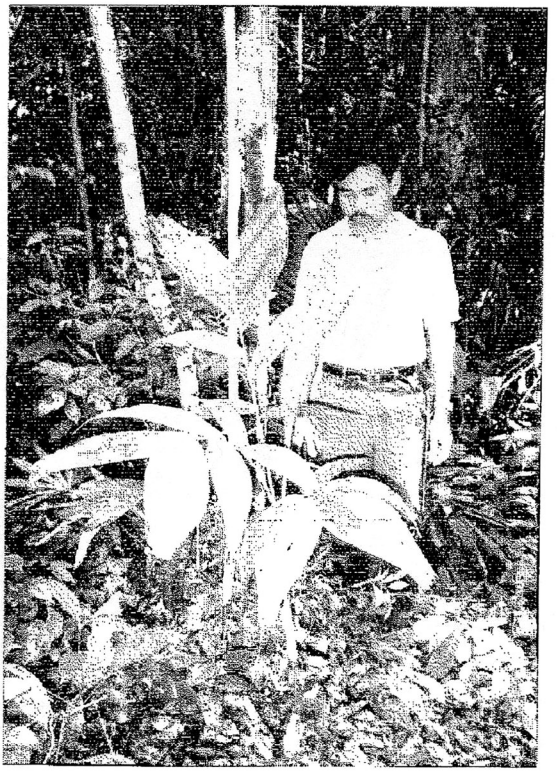

Plate 4. *Pinanga jamariensis*, young adult plant.

leaves with fewer and broad leaflets (Plates 2 & 4) tell it apart from *P. auriculata* Becc. var. *leucocarpa* C.K. Lim (synon: *P. patula sensu* Ridley *non* Blume, see Lim, 1998) found in the same areas, which, however, has leaves with more numerous leaflets that are glabrous and sigmoidal in shape, and fruits that are globose and creamy white when immature, resembling those of *P. limosa* Ridley. Juvenile stages of the new species may indeed also look similar to the diminutive *P. limosa*, which occasionally has glaucous leaves, entire or dissected, and similarly thick; the eophylls are practically indistinguishable, and suggest an affinity within what might be called the *'limosoid* group'. Curiously, in these two *Pinanga* taxa, serrations to leaf edges beyond the apical teeth have been observed (which I have also seen in *P. subintegra* Ridley), although as a rare occurrence.

Although compared with *P. auriculata* Becc. var. *merguensis* C.K. Lim (1998), the precedent variety, in the diagnosis (the habit and infructescence are similar), the drupes of that taxon are, however, different in colour, being distinctively shiny, wine-red, and its leaves (similarly with var. *leucocarpa*) are glabrous, and quite different in dissection and shape. Furthermore, their respective domains are geographically distant and disjunct. The new species is often sympatric with *P. auriculata* var. *leucocarpa,* as mentioned above, and also with *P. limosa, P. simplicifrons* (Miq.) Becc. and the other new species to be described in this paper, *P. johorensis*, and *P. singaporensis* Ridley in the Kahang area and at Gunung Panti.

It may be found fruiting at less than 2 m in height, contrasting with the surprisingly tall individuals towering at over 8 m, with disproportionately slender stems, able to endure in wind-sheltered habitat at Jamari, where *P. johorensis* and *Johannesteijsmannia altifrons* Reichenb.*f.* & Zoll. are also luxuriant. This new and attractive *Pinanga* can easily become endangered due to deforestation, as at Kahang, where it is already rare, and may require protection.

Distribution: Johor: Mersing F.R., Bukit Jamari, Kahang, Gunung Panti.

Habitat: lowland dipterocarp forest, to 50 m a.s.l., not common.

Specimens examined: Johor: Gunung Panti, 1990, *C.K.Lim *H0515*, Bukit Jamari, 1991, *C.K.Lim H1004* , 1992, *C.K.Lim H1149* , 1993, *C.K.Lim H1455,* 1993, *C.K.Lim H1457* (SING), *C.K.Lim H1402, H1459, H1460, H1526*, 1994, *C.K.Lim H1674, H1682*, 1995, *C.K.Lim H1895, H1923* , 1996, *C.K.Lim H195.*