

In summary, the concept of the aptly named *I. polymorpha* would include a wide range of variations. Its habitat ranges from sea level to 1500m or more. In habit it is always caespitose, stilt rooted, with fine or stout stems, 1m to 3.5m in height, leaves always abscising, trapezoidal, variable in divisions, leaflet widths and apical tip angles, with short or long peduncles and inflorescences fine or stout, with or without ferruginous indumentum, with three (rarely one or two) to nine branches, sometimes branching to second order with up to 18 or more branches, with fruit ovoid to curved, ripening from white to pink and red.

Distribution: Kelantan, Pahang, Perak, Terengganu:

Type: Perak, c. 1886, *Scortechini 318b*, (holotype FI)

Reference Collections:-

Kelantan, Sg. Bring, 1990, *Kiew 2808* UPM; Kota Bharu, *Gwynne-Vaughan 560* CAL, K; Sg. Kerteh, *Nur 12052* K, SING; Jeli FR, *Chelliah FRI 6528* KEP, K; 1911, *Anderson 165, 173* SING; 1899, *Fox 162, 10684* SING; *Burkill & Haniff 12715* SING; *Barnard CF 29* SING; Ulu Sat, C.K. *Lim H 1164, 1509* PSM Collection; Sg. Mekong C.K. *Lim H 1302* KEP; Lojing, C.K. *Lim H 1247, H 1264, H 1347, H 1630* PSM Collection; **Pahang**, Sg. Gasoh, *Jaamar 28264* SING; Merapoh, C.K. *Lim H 1543* PSM, *H 1576* PSM Collection; **Penang**, Ara Kuda, *Ridley 7027* (Type for *I. arakudensis*) SING; **Perak**, *Scortechini s.n.* (Type for *I. polymorpha* var. *canina*), FI; Taiping Hills, 1881, *King's Collector 2029* (Type for *I. brevipes*) K; 1891, *Ridley s.n.* (Type for *I. ferruginea*) SING; Larut, 1899, *Fox 10684* SING; *Ridley 3157* FI, SING; *Wray 714* FI, *Ridley 11405* CAL, SING; *Curtis 2078* SING; G. Batu Puteh, *Wray 396* SING; Bujang Melaka, *Curtis 3164* (Syntype *I. ferruginea*) SING; *Ridley 9803* FI, SING; Tapah, *Avé 132* K; Tambun, *Burkill 6299* SING; Padang Rengas, *Burkill & Haniff 13577* SING; Kati, C.K. *Lim H 1109, H 1202* PSM Collection; Nenering C.K. *Lim H 1411* PSM Collection; Belum FR, C.K. *Lim H 1132* PSM Collection; C.K. *Lim H 1671* KEP, K; Kroh, *Furtado s.n.* SING; **Terengganu**, Kg. Tok Dor C.K. *Lim H 1156, H 1440* PSM Collection; Dungun, C.K. *Lim H 1169* PSM Collection; G. Tebu FR, *Sinclair & Kiah 40821* K, SING; C.K. *Lim H 1416* PSM Collection; Besut, *J. Drans. 6504* K; Sg. Tong FR, *Meijer & Yong, KEP 94780* KEP, K,

14. *Iguanura belumensis* C.K. Lim sp. nov.

I. polymorphae affinis sed habitu solitario, inflorescentiis rachillis 10-14, distincta. *Typus:* Perak, Belum FR, 1992, C.K. *Lim H 1281* (holotypus KEP).

Solitary, stilt-rooted, stem grey or brown, erect to 4m or more, to 1.5cm diam., leaves abscising, nine or more in crown, pinnate three to five pairs leaflets, trapezoidal (size and variations similar to *I. polymorpha*), leaf sheath brown, internode 1-1.4cm, inflorescence often numerous, inter or infrafoliar, finely



Plate 31 *I. belumensis*: Solitary, with infrafoliar, multi-branched inflorescence.

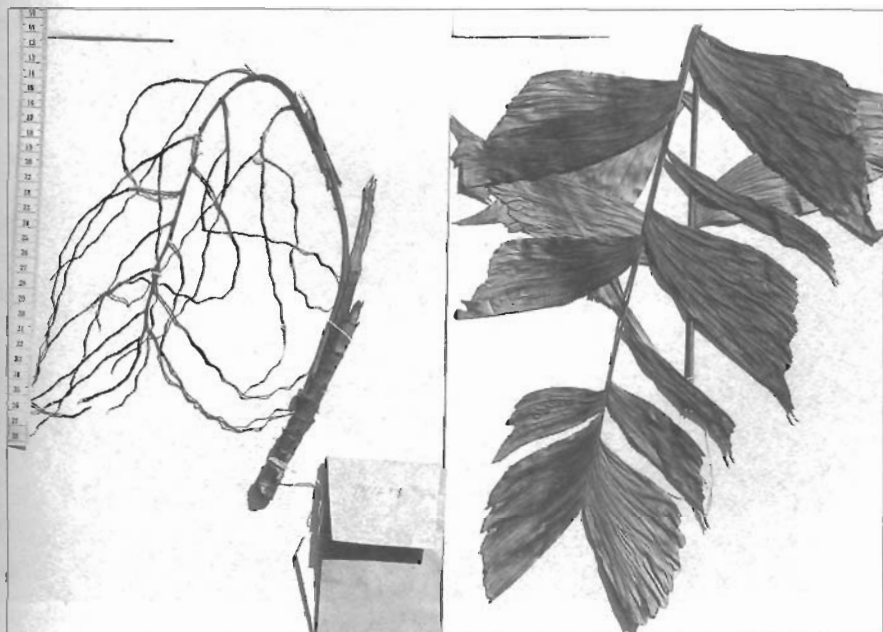


Plate 32 *I. belumensis*: Type specimen: Perak: Belum FR, 1992, C.K.Lim H1281 (KEP)

paniculate with many branches, 10-14, often sub-branching, usually profuse in flower or fruit; fruit ovoid (also known to be curved), white, pink tinged, ripening red; seed not ridged.

Found on hill forest slopes at alt. c. 800m, not seen on lower locations, its solitary habit and more robust erect stem sets it apart, as does the profuse inflorescence (though sometimes sparse in poor soil conditions), flowering from 1m to 4m or more. Not uncommon but endangered by logging along the E.W. Highway, it has so far been encountered only in isolation from other *Iguanura* taxa, although *I. bicornis*, *I. wallichiana* and *I. geonomiformis* have been seen at similar altitude. In the Belum FR, other sympatric palm species include *Pinanga subintegra* var., *P. simplicifrons*, *P. perakensis*, *P. malaiana*, *Nenga macrocarpa* and *Johannesteijsmannia altifrons*. In that area, visited over four years, *I. polymorpha* has not been found at this altitude, although to the east and west, at lower levels, that taxon abounds, and also to the north (probably extending into Thailand), where robust colonies of the clustering relative are dominant.

On G. Bubu, a specimen collected in 1972 at 1000m (*Evans* 722, UPM) displayed curved fruit, but in another (*FSP Ng FRI* 6134) they were ovoid. Like others, the fine specimen with robust stems from Bujang Melaka (*Shah* 3369) was thought to be *I. polymorpha*. The epithet *belumensis* was chosen for the locality in which we found it in 1989, and used (ined.), for purposes of herbarium depositions; the choice becomes especially appropriate in the light of more recent national conservation efforts in the type area.

Distribution: Perak.

Type: Perak: Belum FR, 1992, *C.K. Lim* H 1281 (holotype KEP)

Reference Collections:-

Perak, Bujang Melaka, 1975, *Mohd. Shah* 3369 SING; G. Bubu, 1966, *Whitmore FRI* 633 KEP, SING; *F.S.P. Ng FRI* 6134 KEP; *Evans* 722 UPM; Belum FR, *C.K. Lim* H 64, H 122, H 531, H 606, H 621, H 787, H 800, H 991, H 1128, H 1153, H 1163, H 1195, H 1243, H 1277, H 1306, H 1438, H 1466, H 1468, H 1472 PSM Collection.

15. *Iguanura perdana* C.K. Lim sp. nov.

Affinis I. bicorni sed habitu solitario raro caespitoso; elatior, erecta ad 4.5m, laminiis majoribus inflorescentiis robustis fructa non bicorni, excentrico apico plano bene distincta. Typus: Perak: Kroh, 1992, *C.K. Lim*, H 1125 (holotypus KEP)