

Notes: This variety was discovered early in the botanical exploration of Malaya being relatively accessible on the west coast from Penang and was avidly taken into cultivation by Victorian society which appreciated lush foliage — thus it was introduced into Europe by Curtis at the Ghent Exhibition where it was described by Masters (1898) as “strikingly handsome”. This exhibition plant was sterile and was named *Geonoma pynaertiana*. Ridley (1907) later described this taxon as *Iguanura spectabilis*. However, Beccari's earlier variety (Hooker f. 1894), var *major*, included pinnate and simple forms and these were described as larger than *I. wallichiana*. In fact the pinnate forms in this population are not as large as var *major* but the leaflets are wider and closer together than typical plants of var. *wallichiana* but as the range of the pinnate forms is large these can easily be accommodated in the concept of var. *wallichiana*. It is not known whether these two varieties are inter-fertile. Whitmore (1973) considers this taxon a variant of *I. wallichiana*.

This taxon comprises the largest plants of *Iguanura* growing in Malaya and it is interesting to note that *Johannesteijsmannia perakensis* which is the only trunked member of its genus, is also found on these hills, Gunong Kledang and G. Bubu fide Dransfield (1972).

Subsp. **malaccensis** (Becc) Kiew stat nov

Iguanura malaccensis Beccari, Malesia. 3: 102 (1886); Hooker f., Fl. Brit. Ind. 6: 416 (1892), Whitmore, Palms of Malaya. 114, (1973).

Synonyms: *Iguanura geonomaeformis* var. *malaccensis* (Becc) Ridl. Mat. Fl. Mal. Pen. (Monoc) 2: 150 (1907); Fl. Mal. Pen. 5: 14 (1925). *Iguanura geonomaeformis* var. *ramosa* Ridl., Mat. Fl. Mal. Pen. 2: 151 (1907); Fl. Mal. Pen. 5: 14 (1907).

Inflorescence usually unbranched with about a fifth of the collections examined with narrowly bifurcating inflorescences. Fruit $1 \times \frac{3}{4}$ cm.

Distribution: Malaya: widespread and common south of the Genting Simpah in the main range and south of Kemaman in the east coast. Sarawak: G. Mattang 1st Division.

Ecology: This subspecies appears to be strictly limited in its habitat, as suggested by the fact that dense populations dominating the undergrowth beside streams will cease abruptly not far from the streams where there is no apparent competition from other plants in the undergrowth layer. It is tolerant of waterlogging and plants are often found growing in shallow water near the banks of streams or pools. I have seen seedlings growing in areas seasonally flooded to a depth of about 5 cm, a depth which would almost submerge them. Their distribution is particularly conspicuous in their confinement to damp flushes in forests at low altitudes and their absence elsewhere.

Notes: I have recognised three varieties: one with pinnate leaves and two new varieties with simple leaves, both with a very local distribution, one taller than the pinnate variety and the other smaller.

Var **malaccensis**

Generally 1–2 m tall, upto 3.5 m. Leaves commonly with (3) 5 (7) segment pairs, less commonly with numerous segments (9) 13 (21), rarely simple and then on acaulescent plants to 0.5 m tall. Lamina (42) 69 (98) cm long and (11) 24 (40) cm wide. Lamina of simple leaves (17) 47 (67) cm long and (13) 20 (26) cm wide, apex rounded, sides parallel and cuneate at the base. Peduncle 20–50 cm long, floral pits in distal (10) 33 (65) cm of inflorescence.

Distribution: as for subspecies *malaccensis*.

Collections examined: Keheding (1878) Klang (type) K (!) Fl (!). About 150 Malayan specimens from herbaria and about 30 of my own collection.

Sarawak: G. Mattang Dransfield 768.

Notes: Beccari (1886) distinguished *I. malaccensis* by the unbranched inflorescence. This is the first description which distinguishes a taxon with unbranched inflorescences from those with branched ones i.e. *I. wallichiana* and *I. geonomaeformis*. However the situation became confused when *I. geonomaeformis* was used by Ridley to describe the unbranched taxon, while *I. malaccensis* was reduced to the varietal level and was distinguished from the "typical" variety only by being more tomentose. The situation is further confused by Whitmore (1973) who mistakenly described *I. malaccensis* as "one of the branched forms".

In accordance with Griffith's original sense, *I. geonomaeformis* is treated as synonymous with *I. wallichiana* so that *I. malaccensis* is the correct name for the taxon with unbranched inflorescences. I have used it in a slightly wider sense by including plants which have both simple and bifurcating inflorescences on the same plant. A problem then arises about Ridley's *I. geonomaeformis* var *ramosa* which he described as having two or three branches. After consideration, I have reduced this to synonymy with var *malaccensis* as all the plants cited by Ridley have a southern distribution. However plants with one, two, three or four-branched inflorescences on the same plant are rare and form less than 2% of the populations I examined.

Var **humilis** Kiew var. nov.

Palma humilis solitaria saepe acaulescentia, vel caule breve 10 cm — 1 m alto, 2 cm crasso. Annuli aggregati ad 2.5 mm distantes. Plantae caulescentiae radicibus grilliformibus. Vagina folii ramis radicum grilli formium tecta. Folium indivisum 8–10 in corona. Lamina anguste — oblonga, base cuneate, apice rotundata, margine leviter serrato. Petiolus 30 cm longus. Lamina (46) 50 (55) cm longus, (13) 15 (20) cm latus, nervis lateralibus (21) 23 (26). Inflorescentia c. 42 cm longa, c. 17 cm florifera. Inflorescentia indumento aurantiaco tecta. Spatha exterior c. 10 cm longa, interior c. 20 cm longa, indumentum dense tecta. Foveae conspicuae, bracteolo magna.

Typus: *Corner 30095* Ulu Bendong, Malaya. Holotypus (SING).

Solitary, often acaulescent or with short trunk 10 cm to 1 m tall. Stem stout c. 2 cm thick. Annuli crowded, upto $\frac{1}{4}$ cm apart. In plants with a stem, stilt roots at stem base give rise above to a mat of thin branched roots covering the leaf sheaths. Leaf simple, 8–10 leaves in the crown. Lamina narrowly oblong, gradually cuneate at base, rounded above. Margin shallowly serrate. Petiole c. 30 cm long. Lamina (46) 50 (55) cm long and (13) 15 (20) cm wide. Lateral veins (21) 23 (26). Inflorescence c. 42 cm long, c. 17 cm bearing floral pits. Inflorescence covered by wiry ginger hairs. Outer spathe c. 10 cm long, inner c. 20 cm long. Spathes covered by a felt of fluff. Pits conspicuous with large covering bract.

Distribution: Malaya: Kemaman.

Collections examined: Ulu Bendong, *Corner 30095* SING (!); L (!); *Corner s.n.* BO (!), SING (!) BM (!); Ulu Ayam, *Corner 30258* SING (!); *30259* SING (!); *30260* SING (!); Bukit Kajang, *Corner s.n.* SING (!); *Kiew 4, 5, 8, 12, 13, 14, 15, 16.*