

both localities in Sarawak. The leaves are very variable in shape, the fully developed ones being ovate. I refer this plant, very variable as it is in leaf, to *S. peguana* of Burmah, as described in the 'Flora of British India.'

250. *SMILAX LÆVIS*, Wall. Woods on the Padang, in fruit only. It occurs on all our higher mountains from 2,500 to 5,000 feet and also in China.

XYRIDEÆ.

*251. *XYRIS GRANDIS*, Ridl. *op. cit.* p. 332. This remarkable plant occurs very abundantly in damp spots by streams from Wray's Camp to the Padang, 3,300 to nearly 6,000 feet elevation. It grows in shady woods, the flowers are small in proportion to the size of the plant, dark yellow, the base of the corolla is tubular. Stamens, 3 fertile and 3 sterile. It is pollinated partly at least by the *Bombus*. Endemic.

*252. *XYRIS RIDLEYI*, Rendle; Ridl. *op. cit.* p. 332. Extremely abundant all over the Padang in slightly damp spots. A most attractive little plant with its bright yellow flowers. It varies much in size, and in damp sunny spots attains a height of over a foot with bright red stems. It also occurs on Kedah Peak in grassy spots.

TRIURIDEÆ.

253. *SCIAPHILA AFFINIS*, Becc. *antea*, p. 59. From Wray's Camp to the stream on the Padang.

Distribution. Whole Peninsula and Borneo.

254. [*SCIAPHILA ASTERIAS*, n. sp.

Stems slender, 10-11 inches tall. Leaves lanceolate-acuminate, $\frac{1}{10}$ inch long, not sheathing. Raceme lax; flowers distant, white. Bracts $\frac{3}{4}$ the length of the pedicel, which is $\frac{1}{8}$ inch long. Perianth $\frac{1}{4}$ inch across; lobes nearly equal, linear, subulate, very narrow from a broader lanceolate base. Stamens in the male flower 3, orbicular or oblong, sessile, closely approximate, glabrous. Female perianth shorter; carpels numerous, oblong, clavate, papillose, whole head $\frac{1}{10}$ inch across.

Wray's Camp at 3,300 feet.

Allied to *S. major*, Becc., but the perianth-lobes are much longer and narrower.

255. *SCIAPHILA MAJOR*, Becc. Wray's Camp at 3,600 feet.

Distribution. The Malay Peninsula and Borneo.]

PALMÆ.

256. *PINANGA BREWSTERIANA*, n. sp.

A tufted or solitary stemmed palm with the stems attaining a height of about 6 feet and a diameter of about half an inch, reddish brown. Leaves usually simple, occasionally lobed; sheaths 7 or 8 inches long, scurfy, dark brown; petiole 6 to 12 inches long, stout, brown, scurfy; blade obtuse, narrowed to the base, apex deeply bilobed (more rarely with a pair of

lobes at the lower part); terminal lobes with 9 or 10 acute teeth about an inch long and half an inch wide at the base; whole blade about 2 feet long and 8 inches across in the widest part; terminal lobes 6 inches long; nerves and midrib very prominent on both surfaces, above dark green, beneath glaucescent. Spathes boat-shaped, about 6 inches long. Spadix 2-3 branched; peduncle 3 inches long; branches 4 inches wide, densely covered with reddish wool. Flowers spirally arranged, remote. Male flower $\frac{1}{8}$ inch long; petals triangular, acuminate. Female $\frac{1}{8}$ inch long, subglobose. Sepals orbicular, striate, glabrous. Fruit (not quite ripe) olive-shaped, half an inch long. Seed nearly as long, base blunt, ribbed externally. Albumen ruminant, with rather large intrusions running nearly to the centre.

This palm is the only one, except two *Calameæ*, occurring on the Padang. It is abundant in all the wet woods from below the Gully to nearly 6,000 feet elevation. It constantly emits lateral buds from the stems. I had a great difficulty in finding any male flowers, till by cutting into a leaf-sheath that appeared to be swollen I found a much decomposed spathe with some rotten flowers on the spadix, and the female flowers, though not yet free from the leaf-sheath, were fairly developed. I suspect that this palm is usually self-fertilized before the spathe opens. Spadices with female flowers and young fruit were abundant. The rachis of the spadix is red and the fruits apparently black when ripe.

*257. [*LIVISTONA TAHANENSIS*, *Becc.* Abundant by Wray's Camp up to about 4,000 feet, when it disappears. Endemic.]

258. *CALAMUS ELEGANS*, *Ridl.* Abundant from round Wray's Camp to about 7,000 feet on Gunong Tahan. A slender rattan of no great length, probably the highest-growing palm in the Malay Peninsula.

Distribution. Bujong Malacca, in Perak.

259. [*EUGEISSONA BRACHYSTACHYS*, n. sp.]

A bush-palm smaller than *E. tristis*. Leaves erect, 14 to 20 feet long, the petiole terete, 12 feet long, an inch through, glaucous green finely speckled with dull red, with two rows of short spines, one on the back and one on the front; spines black, half an inch or less long, in pairs, one pointing upwards, the other downwards; leaflets deep green, alternate, lanceolate, caudate, broad, base shortly narrowed, 2 feet long, 3 inches wide; tail 4 inches long, midrib raised, nerves 14; rachis, back rounded, upper surface flat. Flower-spike about 3 feet tall; peduncle short, stout. Spathes broad, lanceolate, cuspidate, clasping the stem, base green above, red, scurfy, with short erect black spines increasing in length towards the apex; cusp acuminate, 6 inches long; upper sheaths shorter, about 15 in number. Lower flowers paniced, upper branches racemose, on peduncles of dark brown ovate bracts; peduncles $1\frac{1}{2}$ inch long. Calyx cylindric, irregularly lobed, green. Petals narrow,