

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,

linear, acuminate, 2 inches long, green. Fruit ovoid, shortly broadly stipitate at base; apex abruptly beaked; beak half an inch long, obscurely trigonous; scales ovate, triangular, obtuse, margins paler, thin, shortly fimbriate.

On the drier part of the hill at Kuala Teku.

A very distinct plant from the only other Peninsular species, *E. tristis*, Griff., in its smaller clumps, broad leaflets, and short inflorescence. It only occurs on the drier parts of the hills and woods at Kwala Teku.]

#### ARACEÆ.

260. HOMALOMENA ANGUSTIFOLIA, *Hook. fil.* Abundant in cracks in the rocks of the Teku River to a height of about 5,000 feet. There are two forms, the ordinary long-leaved form with leaves 5 inches long on a four-inch petiole, and a dwarf form forming dense mats 2 to 3 inches high. This form has spathes as big as those of the taller plant, and both have cusps rather longer than usual.

It occurs in mountain-streams all over the Peninsula, varying in form according to the rapidity of the stream at its place of growth.

261. HOMALOMENA PUMILA, *Hook. fil. antea*, p. 60. Wet woods on the first stream on the Padang; local.

Common in the Malay Peninsula from sea-level to about 4,000 or 5,000 feet elevation; also Borneo.

\*262. SCINDAPSUS SCORTECHINII, *Hook. fil.; Ridl. op. cit.* p. 332. Woods on the Teku, where it joins the stream from the Camp, and a short way up that stream. Collected here also by Robinson. Out of flower in July.

Usually common on rocks and trees at 3,000 to 4,000 feet in Selangor, Perak, and Kedah, but not common on Gunong Tahan. It does not seem to go over 5,000 feet elevation.

#### PANDANACEÆ.

263. PANDANUS KLOSSII, n. sp.

Stems usually solitary, 8 to 20 feet tall, 3 inches through, rounded, grey and bare, leafy at the top only. Leaves linear, somewhat abruptly cuspidate, over 5 feet long, 3 inches wide, hard and coriaceous, with strong black-hooked or ascending thorns  $\frac{1}{4}$  inch long along the edge and keel to the lower part, smaller and closer-set on the edges upwards, very small and close on the cusp. Cusp slender, stiff, 1 inch long. Capitulum globose or oblong, as big as the head, on a short stout peduncle 6 inches long, breaking up into syncarps of 6 or 7 fruits,  $2\frac{1}{2}$  inches long, above bluntly angled; apex of fruit shortly free, truncate, obscurely angled, and cone-shaped. Style  $\frac{1}{8}$  inch long, slightly bent, acute, dark brown, simple or branched, broad with two spreading points. Stigma linear for the whole length.

Common all over the Padang. In the more open exposed spots the stem is short and erect, about 6 to 8 feet tall; in the woods the stems are long and weaker, often falling about at