

(ANACLASMUS ABERRANS.)

80. (11) *A. paradoxa*, (n. sp.) fruticosa, nana, foliis pinnatim fissis, pinnis inæqualibus oblique acuminatis, spadice simplici, fructu subulato curvato (albo) albumine æquabili.

HABIT.—Dense forests near the base of Goonoong Miring, Mount Ophir; in fruit February, 1841.

DESCR.—*Stem* slender, 5-7 feet high, 3-4 lines in diameter, annulate, upwards roughish with ferruginous down. *Crown* of 6-8 leaves. *Leaves* 1½ foot long, 8 inches broad; *petiole* with a long, coriaceous, striate, ferruginously downy sheath, above which it is channelled, lower naked part about 6 inches long; *lamina* pinnate, *pinnæ* 6-8 inches long, and very obliquely cuspidato-acuminate, very unequal, with 3 or 4 or many keels; terminal unequal at the base, bifurcate to the middle, irregularly toothed, teeth bifid sometimes split.

Spadix issuing from the stem below the crown, simple, 4-5 inches long, obtuse, pendulous, glaucescent. *Fruit* distichous, suffulted by a minute but broad bracte, and by a double cup, (calyx and corolla) of six round imbricate broad scales. They are of a white colour, obtusely subulate, 8 lines long, 1½ diameter in the widest part or just above the base, curved in shape, and of a fibrous substance. *Seed* one, conform; *tegument* very thin, membrano-cellular; *raphe* of three fascicles, the central one reflexed near the apex of the seed, becoming confluent with the longer of the lateral vessels; the shorter one reflexed about the middle of the dorsum. *Albumen* solid, horny, slightly furrowed along the course of the vessels. *Embryo* minute, basilar, conical.

The specimen is scarcely distinguishable, except in the form and structure of the fruit and seeds, from *A. disticha*. That structure however is so different as to suggest the probability of its constituting a new genus.

SECT. III.—EUOPLUS.

81. (12) *A. tigillaria*, arborea, pinnis bipedalibus pendulis, spatha exteriore pedunculoque armatis, interiore subinermi, floribus distantibus, sæpe 1 fæmineo 1 masculo, petalis ovatis in setas subito attenuatis, fructibus globuli sclopeti minoris magnitudine.

A. tigillaria. *Jack. Mal. Misc.* (*Calc. Journ. Nat. Hist.* 4, p. 12.)

HABIT.—On the borders of Paddy swamps, Malacca, common. Malayan name, *Nibong*. In forests, Laineer, to the South of Mergui?

DESCR.—A very elegant Palm. *Trunk* 30-40 feet high, distinctly annulate, armed, surrounded with offsets at the base. *Crown* thick, graceful. *Leaves* pinnate, 10-12 feet in length; *petiole* roundish, armed, upwards very scurfy; *pinnæ* about 2 feet long, conduplicate at the base, very much acuminate, pendulous, coriaceous, many veined, principal keel above excentric, ferruginous scurfy, underneath bearing scales attached by their middle.

Spadices from the axillæ of lately fallen leaves; *peduncle* slightly armed; branches many, long, undulato-flexuose, lower ones divided, upper simple. A rudimentary *bractea* at the base of the lower ones. *Spathes* (complete) two, boat-shaped, bicarinate, of a stout texture, outer green, covered here and there with whitish-ferruginous scurf, armed on the dorsum especially about the carinæ; inner almost unarmed, more scurfy, velvety to the touch.

Flowers crowded, one female between two males, or in pairs, one male and one female, the former more advanced. *Male*; *sepals* subcordate, cuspidate, carinate, anticous one the largest. *Petals* 3, valvate, coriaceous, suddenly acuminate into subulate bristles, spreading. *Stamina* 6; *filaments* short, stout, cohering slightly with the petals; *anthers* large, sagittate, obtuse. Rudiment of a *Pistillum* rather large, white, of three carpel leaves distinct nearly from the base.

Female flowers suffulted by a broad inconspicuous bracte. *Sepals* imbricate, suborbicular, concave, fleshy, coriaceous. *Petals* larger, imbricate. *Rudimentary* stamina 3 or none. *Ovarium* roundish, of the size of a small pea, 1-celled. *Style* none. *Stigmata* 3, connivent. *Ovulum* appense pendulous.

Spadix of the fruit: branches 1-2 feet long, pendulous, purplish-sanguineous, with an articulated appearance. *Berry* globose, size of a carbine bullet, surrounded at the base by the perianth, marked towards the apex on one side with an areola, bearing in the centre the remains of the stigmata; *endocarp*; fibres few, thin. *Seed* appense just below the areola; funicle large, sub-intrant, so that the transverse section is sub-reniform. *Tegument* thin, scarcely separable from the endocarp. *Albumen* horny, deeply ruminant. *Embryo* oblong-conical, basilar.

The trunk of this palm is in much request for making posts. Jack (l. c.) says, that there is only one spathe, and that the flowers are one male to two females. He does not notice any obliquity of the fruit.

82. (13) *A. horrida*,* (n. sp.) arborea, pinnis 2-3 pedibus patentibus, spathis pedunculoque spadiceis armatissimis, floribus congestis, fæmineo inter duos masculos, petalis lanceolato-oblongis in setas attenuatis, fructibus globuli sclopeti majoris magnitudine.

A. Nibung.† *Mart. Palm. t. 153, f. V?*

HABIT.—Common in densely wooded valleys and ravines, Ching. On wooded hills, Laydang Soobubi, but rare. In woods at the base of Battoo Bakar, Malacca. Malayan name, *Bhyass*.

DESCR.‡—An elegant Palm, 30-40 feet in height, sending off offsets at the base. *Trunk* annulate, the spaces between the rings much armed. *Crown* rather thin. *Leaves* spreading in every direction, 14-16 feet long, 5 feet broad; *sheaths* leathery, much armed, 2 feet long; *petiole* bearing pinnæ nearly from the base, green, stout, flattened at the base, compressed at the apex, otherwise trigonal, covered with brown irregular scales, armed throughout, but especially underneath, with black-brown flat not very strong spines§; *pinnæ* alternate or sub-opposite, nearly linear, 2-3 feet long, subulate-acuminate, coriaceous, dark-green, above keeled along the centre, with two lateral plaits on either side, spreading or oblique, never pendulous, as in *A. tigillaria*; a few scales attached by the middle along the central vein underneath. *Threads* very fine, pendulous, at length deciduous.

Spadix axillary; *peduncle* stout, yellow, flattened at the base, much armed on the spaces between the insertion of the spathes, above these

* A third species of the section, with the habit of this species but smaller, is common on the cliffs of the sea-shore a little to the North of Koondoor, near Malacca. Its Malayan name is *Nibong Paday*. I have not seen it in flower or fruit.

† This name is scarcely tenable, the true Nibung being *Areca tigillaria*, Jack.

‡ Partly from dried specimens: perfect spadices at time of opening of the spathes not seen.

§ This is the general character of the armature.