

the amount of free space the fruits have for their development; if many of the fruits drop off when young or fail to develop, the remaining fruits have more space and then often have a rounded base, or a less cuneate base than fruits growing closely together.

From the data given of plantings in the Botanic Gardens, Buitenzorg, *S. sumatrana* is also cultivated (or wild?) in Java and Borneo, and probably we have to locate the original home of this species in this region extending as far as Sumatra. *S. vermicularis*, which is closely allied to *S. sumatrana* and to *S. edulis*, is found wild in Borneo, reaching the Kinabalu Mountains at an altitude of about 1000–1500m.

2. *Salacca flabellata* Furtado sp. nov.

Ab omnibus hujus generis speciebus haec differt foliis parvissimis flabellatis apice bifidis, spadicebus flagelliformibus gracillimis, caule brevissimo cum vaginis ad 5 cm. in diam.

Caulis gracilis, brevissimus, in parte folioferente circa 7 cm. altus, cum vaginis ad 5 cm. in diam., in altera parte repens, subterraneus, brevis, plures radices gerens. *Frondes* flabellatae, dimensione variabiles, hic majores tantum designatae; petiolus 1.5–2 m. longus, 5–10 mm. in diam., trigonus vel subteres, basi longe canaliculatus et alis semi-coriaceis mox marcescentibus deciduis vaginatus, aculeis 5–25 mm. longis rigidis saepe porrectis irregulariter sitis, apicem versus paucioribus, minoribus secus dorsum tantum praeditus; flabellum subtus albescens, ambitu elongato obovatum, 80–100 cm. longum, apice latissimum, bifidum, 40–45 cm. latum, basin versus sensim angustatum, infimo oblique cuneatum, summo pinnis paulo sejunctis apice et secus margines liberis setosis, rachidi 50–60 cm. longa, basi tantum armata vel non. *Spadices masculi* 1–2 m. longi, axi 3–4 mm. in diam., funiculati, gracillimi, indivisi, in axilla frondis solitarii, basi petioli perforata orientes, spiculas 1.5–3 cm. longas, in spathae axilla primariae solitarias, longe pedicellatas, pedicello quam internodus paulo brevior, spathas secundarias, fere chartaceas ferentes; spathis primariis quam internodi 5–10 cm. longi longioribus, coriaceis, apice mox fibrosis; floribus masculis clavatis, circa 4 mm. longis; corolla quam calyx fere duplo longiore.

Stem smallest in the genus, with sheaths 5 cm. through, hardly above ground. *Leaves* similar, of varying dimensions, the largest as follows: petiole 1.5–2 m. long, 5–10 mm. in diam., trigonal in its basal half, almost terete in the

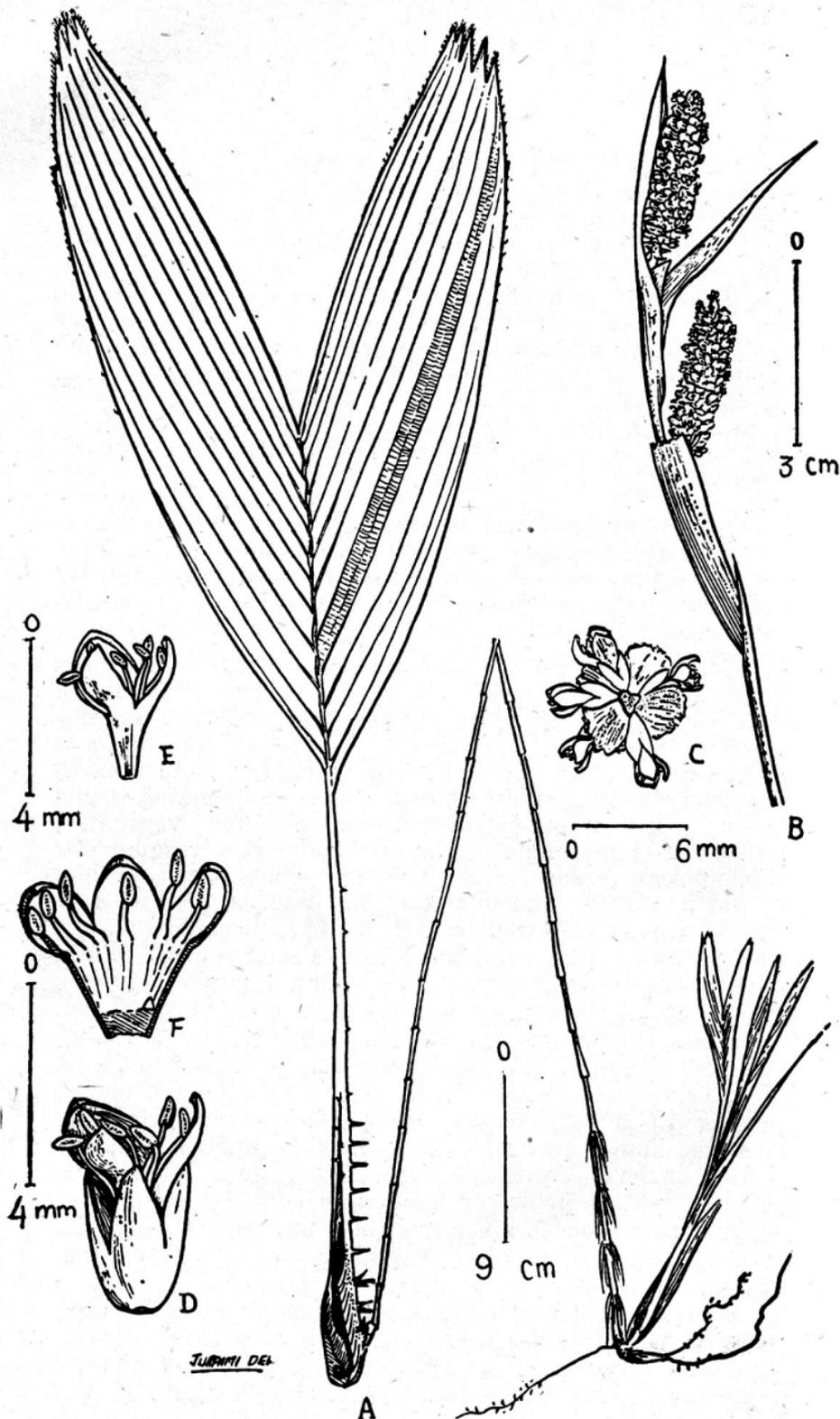


Fig. 2. *S. flabellata*, ♂. (Holotypus: Corner 30,525).

A. Frons, cum spadice apice foliis parvissimis praedito. B. Spadicis apex cum spathis spicisque. C. Sectio horizontalis ex spicae medio. D. Flos sub anthesi. E. Flos, sepala resecta. F. Corolla aperta cum staminibus.

upper; channelled and provided with deciduous, vaginal wings at base, armed irregularly with 5–25 mm. long rigid spines, which become fewer, smaller towards the apex (where they are dorsal only) and in the base of the leaf rachis; lamina flabellate, deeply bifid at apex, whitish beneath, obovate, 80–100 cm. long, 40–45 cm. wide at apex, gradually narrowed towards the base where it is obliquely cuneate; rachis 50–60 cm. long and armed or not at base; the lamina with a short free tip corresponding to each vein, setose along the margins and at apices. *Male spadix* emerging through a puncture in the dorsum of the petiole-base, whip-like, solitary, 1–2 m. long, 3–4 mm. in diam., with internodes 5–10 cm. long; primary spathes slightly longer than the internodes, tubular, soon split into a fibrous limb in the upper half; spike one in the axil of each spathe, 1.5–3 cm. long, 10–12 mm. through, provided with a pedicel slightly longer than the spadix-internode; secondary (empty) spathes on the pedicels, chartaceous; flowers male, clavate, 4 mm. long.

MALAYA: *Kemaman*, Sungei Nipah, on hillsides and in swamps by streams (Corner, 30,525, vern. nom. *Salak Chabang*).

Plants with much smaller leaves and spadices are also found in the same clump, which is formed of distant stems united together by whip-like branches or spadix-axes. However in the description given above measurements are those of the largest specimens seen in the collection.

The collector notes that this species is quite common also at Bukit Kajang, *Kemaman*, on the hillside near Ulu Ayam swamp. The spadices are reported to grow first upwards and then down or straight over the surface of the ground, sometimes burrowing under humus or becoming silted over in swampy places; the flowers are recorded to be produced on the spadix even after it has produced a young palmlet at the end. This phenomenon of producing a new stem at the end of a spadix is noticed also in *S. Rumphii*. Both this species and *S. flabellata* have long spadices which reach the ground, where a spadix will receive the necessary stimulus to produce shoots and roots; in other species such conditions are only possible when the stems are very young, and hence it has not been possible in these to observe the phenomenon of branching.

S. flabellata is the only species in the genus to produce leaves having their pinnae united even in adult stages; in other species the phenomenon may be noticed in seedling stages only.