

It appears to vary a good deal. I have specimens sent by E. Fernandez from Malacca, under the name *Rotang Pusaisur*, which is of smaller size, the spadix (with young fruit) not a foot in length, and the flowers with two bracteoles. But otherwise the plants are so much alike, and there appears to be so great a tendency to vary in the length of the spadices, that I have thought it better to unite the two, particularly as so little is yet known of the real value of the characters employed in the distinction of the species.

The female spikes in flower resemble a good deal the same parts of *C. leptopus*; and it is to be remarked that the lowermost spathe, though persistent for a long time, presents scarcely any sheath.

In the armature of the petioles it may be considered to approach in some degree to *C. castaneus*, the thorns in both being often or generally solitary, and very unequal in size.

Rumph's figure of *Palmijuncus verus angustifolius*\* gives, with the exception of the want of the long spines, a good idea of this species in fruit.

### SECT. III.—(PLATYSPATHÆ.)

Huic sectioni pertinet *Katu-tsjurel*, Rheede. Hort. Mal. 12. t. 65.† *Roxburghio ad Calamum suum latifolium* refertus.

34. (24) *C. leptopus*, (n. sp.) spinis vaginarum seriatis, petiolorum (flagellifer:) partis inferioris nudæ seriatis, aculeis partis pinniferæ uncinatis, pinnis æquidistantibus lineari-lanceolatis (long. 15-16-uncialibus lat. 12-13-linealibus) cirrhoso-acuminatis supra 1-carinatis sub-glabris subtus sæpius

\* Herb. Amb. v. t. 54. f. 2. *C. verus* of most authors. *C. platyacanthos*. Mart. loc. cit.

† This species may be distinguished as *C. (Platyspatha) Rheedei*, petiolis spadicebusque aculeatis, pinnis distanter fasciculatis lineari-lanceolatis.

venis 3 setigeris, spadice nutante vel pendulo decomposito infra spathas spinis subulatis armato, spathis coriaceis infima spathiformi secus carinas duas armata reliquis planis inermibus, spicis ascendenti-convergentibus, floribus oblongis.

HAB.—Malacca. *Rotang Chinchin* of the Malays.

DESCR.\*—Scandent; diameter of the stem and sheaths about one inch. *Sheaths* about a span long, armed with fascicles of flat rather deflexed spines, shorter and stouter than usual; at the base of the petiole swollen transversely. *Petiole* in its lower naked part about two feet long, triangular, armed with similar and generally solitary but smaller spines, those of the margin subulate and slender: pinniferous part convex-trigonal, under convex-face armed with clawed prickles three or four together, upper unarmed or with smaller prickles. *Pinnæ* many, alternating, sometimes almost opposite, linear-lanceolate, 15-16 inches long, 12-13 lines broad, acuminate into a long cirrhose bristle, midvein prominent above and generally smooth, underneath with a few bristles, as have also two lateral veins: margins bristly especially towards the point.

*Spadix* (young) club-shaped, mature pendulous (?); peduncle about a foot long; exerted part flattened, slender, about a span long, much armed chiefly along the edges with short stout spines in twos or threes; alternately and distantly branched, each branch suffuted by a large leathery ascending *spathe*; of these the outermost is spatheform, the margins revolute towards the apex, indistinctly bi-carinate, with stoutish solitary spines along the keels; the rest flat, unarmed, about a span in length. *Branches* 2 or 3 times shorter than their spathes, nearly of the same direction with the spadix, with distichous slightly spreading ramifications. These (the *spikes*) are  $1\frac{1}{2}$ -3 inches long, distinctly flexuose: bearing at each flexure a scale-like amplectent bracte, and one flower.

*Flowers* all pushed to the posticous side, on short stalks or nearly sessile, surrounded at the base by a short, somewhat 3-toothed cup,

\* Specimens: apex of a flower bearing stem of a female plant.

outside which is on the posticous side a larger bracte, and on the anticous side a smaller one.

*Calyx* oblong-ovate, rather large, with three short stout acute teeth. *Corolla* in the part corresponding to the calyx ovate-ventricose, 3-partite a little below the middle (or to the calyx,) segments linear, acute, rather spreading. *Stamina* 6; *filaments* united to the corolla as far as the base of its segments: thence free, short, broad, subulate ending in bristles; *anthers* deficient. *Ovarium* ovate-oblong, densely covered with shortly ciliate-scales, 3-celled. *Ovules* solitary. *Style* very short, stout, divided nearly to its base into 3 branches which are subulate, spreading or almost recurved, rather longer than the petals, with an elevated line along the centre of their backs; inner face stigmatic.

This species differs from *C. platyspathus*\* abundantly. The petioles (not the spadices) are prolonged into flagelli,

\* *C. platyspathus*: scandens, aculeis vaginarum crebris subulatis rectis petioli rectis et reduncis, pinnis sparsis lineari-lanceolatis long. sub-pedalibus lat; pollicaribus pluriveniis plicatis subtus ferrugineo-tomentosis, spadiceis aculeis rectis abortivis loriformibus, spathis subinermibus, spicis abbreviatis confertis.\*

*C. platyspathus*, Mart. Palm. p. 210.

HAB.—Tavoy, Tennasserim Provinces. W. Gomez.

I subjoin Martius's character and description of this species:—

“*Calamus platyspathus*: caudice scandente tenui; frondibus ecirrosis; pinnis sparsis, terminalibus distinctis lineari-lanceolatis plurinerviis plicatis, subtus ferrugineo-tomentosis, aculeis vaginarum crebris subulatis rectis, petioli rhacheosque rectis et aduncis; spadiceis masculi decompositi julis abbreviatis confertis, aculeis rectis; spathis (primum clausis, dein expansis?) planis, subinermibus; loris aculeatis.

Species distinctissima. Pinnae spithamam ad pedem longae, medio ultra pollicem latae. Spadix sesquipedalis, laxus, rhachi inferne ancipiti superne teretiuscula. Rami florigeri masculi quadripollicares et sursum breviores, primum, uti videtur, spathis membranaceis omnino involuti, quae tandem explanatae, dorso nervis binis nunc passim aculeatis nunc inermibus sunt percursae. Juli cujusvis rhacheos partialis secundo-convergentes, continent flores 7-11 parvulos, pariter in unum idemque latus conversos, quasi uti in racemo scorpioideo. Calyx campanulatus, sinibus rotundatis in denticulos tres breves excisus pallidus. Corolla viridiflava, petalis lanceolatis.”

the spines of the sheaths are distinctly seriate, the pinnæ neither plicate, nor tomentose underneath.

It comes close to the preceding section, its young spadices having a strong resemblance to those of *C. Draco*. The mature spadices again resemble to some extent those of *C. Hystrix*, and there is moreover a tendency in the spathes to be deciduous.

35. (25.) *C. Mastersianus*, (n. sp.) vaginarum spinis plano-subulatis sub-deflexis aculeis irregularibus interspersis, petioli partis nudæ dorsalibus et marginalibus aculeis interspersis, aculeis partis pinniferæ dorsalibus cum vel absque marginalibus, pinnis æquidistantibus linearibus (long. 13-uncialibus lat. 7-linealibus) cirrhoso-acuminatis, supra carina centrali et venula laterali utrinque setigera subtus vena centrali setulosa, spadice (flagellifero) aculeato masculo supra-decomposito, spathis planis coriaceis extus glaucis infima bicarinata secus carinas aculeata, spicis fæmineis distantibus patentibus, floribus conicis, corolla calyce paullo-longiore, fructibus pisiformibus cuspidato-rostratis (albidis), albumine sub-æquabili.

HAB.—Assam, No. 1201, of my Assam collections. *Soon-dee-bet* of the Assamese. The smallest *bet* of Assam; Major Jenkins.

DESCR.\*—*Stem* with the sheaths about half an inch in diameter. *Sheaths* armed with stout flat spines, somewhat deflexed, concave underneath, arising from a large sub-conical base, among these, except perhaps towards the apex of the sheaths, occur smaller prickles very irregular in size. *Ligula* very large, coriaceous. *Petiole* a good deal swollen at its insertion; lower naked part  $3\frac{1}{2}$ -4 inches long, plano-convex, armed on the centre of the under face with a row of distant spines like those of the sheaths but smaller, along the margins with

\* Complete specimens of the female plant in flower and fruit, and portion of a male spadix.