

setigerous, under face with the same, or with the central only bearing a few bristles; margins bristly. *Spadix* (with the spathes) narrow oblong; peduncle rather slender, somewhat armed. Outer spathe with its beak, which is about half the length, about fourteen inches long, bicarinate, armed (except the beak) with thorns like those of the sheaths, the upper ones rather the longest. Beak quite flat with a tendency to become a cirrus. Second spathe obsoletely bicarinate, with a very few small thorns about the middle of its back. Branches of the spadix pressed into a thick oblong mass; lower divisions decomound.

*Spikes* slender, an inch long, very flexuose, with a single flower at each flexure, sprinkled with rust-coloured scurf. A small amplexent *bracte*, and a *cup* to each flower. *Flowers* 8-10 to each spike, small, oblique. *Calyx* oblong-cylindric, three times longer than the cup, with three small teeth. Corolla 3-times as long as the calyx, divided nearly to the base into three erect segments. *Stamina* six; *filaments* united into a cup; *anthers* linear-sagittate. *Pollen* yellow. A rudiment of a *Pistillum* hidden in the cup of the filaments.

This is a very distinct species in all respects, as well by the armature of the sheaths and petioles and outer spathe, as by the narrow short pinnæ.

\*\* *Erectæ. Petioli foliorum superiorum tantum flagelliferi.*

43. (33) *C. monticola*, (n. sp.) spinis vaginalium longis subulatis deflexis, petiolorum (superiorum) marginalibus inæqualibus et aculeis dorsalibus uncinatis, pinnis æquidistantibus linearibus (long. 10-18 uncialibus lat. 6-8 linealibus) supra carina et venis 2 lateralibus setigeris subtus glabris, spatha extima secus carinas duas spinis gracilibus deflexis armata.

HAB.—Subgregarious in thick Forests on Gonoong Mirring, an off-set of Mt. Ophir, at an altitude of 1500—2000 feet.

DESCR.\*—Erect, about eight feet in height. *Sheaths* armed with long deflexed flat subulate black thorns, disposed in lines but individually distinct; surface dark brown from adhering scurf. *Petioles* of the *upper leaves* gibbous at the base, lower naked part about ten inches long, concavo-convex, armed with a dorsal row of stout hooked prickles, and along the margins with long generally deflexed spines, and within these towards the base short ascending ones; these are extended into the flagellus; pinniferous part convex below and armed with hooked palmate prickles, which are continued into the flagellus, (which is about  $1\frac{1}{2}$  foot long;) above rounded-angular unarmed. *Pinnæ* alternate, equidistant, linear, 10-11 inches long, 6-lines broad, subulato-acuminate, above with the central carina and 2 lateral veins bristle bearing, underneath smooth, margins bristly. *Lower leaves* without flagelli. *Petiole* (of the pinniferous part) convex-trigonal, unarmed. *Pinnæ* alternate or often sub-opposite, linear, eighteen inches long, eight lines broad, otherwise like the others, except that the midvein below bears towards the apex numerous small bristles.

*Spadix* with its peduncle adhering to the next sheath, unarmed, covered with dark brown scurf. *Spathes* more open than in the others; outer one 16-17 inches long, bicarinate, armed between and along the carinæ with weak, long, subulate, deflexed, flat, black spines; the beak 9-10 inches long, erect, flat, sparingly armed except towards the apex, with long deflexed subulate bristles: its surface when young also covered with black scurf. Branches of the spadix 2-3 inches long, included, ascending, ferruginously scurfy. *Spikes* few flowered, stout, flexuose.

*Flowers* on short stalks or sessile, bracteate, inner bracteole cup-shaped, and between it and the outer bracteole a niche. *Calyx* sub-cylindrical, minutely 3-toothed. *Corolla* scarcely twice as long as the calyx, divided nearly to the base into three erect segments. Sterile *stamina* 6. *Ovarium* oblong, covered with denticulate scales: 3-celled. *Ovules* erect, solitary. *Style* three-partite nearly to the base; branches revolute, stigmatose internally.

*Spathes* of the fruit-bearing spadix opened out, or none. *Fruit* surrounded at the base by the flattened out, more or less split, pe-

\* Specimens: complete upper part of a female plant in flower and fruit.

rianth globose, shortly cuspidate by the style, of the size of an ordinary marble; scales tawny with a dark brown intro-marginal line; longitudinal furrows as it were continuous. *Seed* (immature,) erect; tegument fleshy.

\* \* \* *Chaetopathæ; spathis externis setis barbatis. Folia suprema (floralia?) tantum flagellifera.*

44. (34) *C. calicarpus*, (n. sp.) scandens? petiolis infra pinnas pedalis spinis marginalibus longis et aculeis dorsalibus armatis, intra pinnas aculeis dorsalibus palmatis, pinnis æquidistantibus linearibus (long. 12-13 uncialibus lat. 4-5 linearibus) supra carina 1 et venis 2 setigeris subtus vena centrali tantum setigera, calyce (fl: fæm:) oblongo-ovato breviter tridentato.

**HAB.**—Malacca, where the male appears to be known under the name *Rotang Chochoor Minia*, the female under that of *Rotang Chochoor*.

**DESCR.\***—Scandent? Diameter of the *stem* (with the sheaths) about one inch. *Sheaths* covered with rust-coloured scurf, and highly armed with very numerous, long, ascending, rather slender, very unequal spines, generally disposed in series. *Petiole* below the pinnæ about a foot long, channelled convex, armed towards the base, where it is not gibbous or puckered, with spines like those of the sheaths; towards the pinnæ they become much fewer and are chiefly confined to the margin, those of the dorsum more or less aculeiform. In the pinniferous part which is 5½-6 feet long, the prickles are confined to the lower convex surface, are hooked and generally ternate or palmate; these are continued into the *flagellus*. *Pinnæ* equidistant, approximate, very numerous, linear, 12-13 inches long, 4-5 lines broad, distinctly acuminate into a long bristle: upper surface with the central carina and 2 lateral veins setigerous; under surface with more numerous smaller bristles along the mid-

\* Specimens: entire upper parts of male and female plants in flower and fruit.