

Original Articles.

A FOURTH NEW HONGKONG *CALAMUS*.

BY H. F. HANCE, PH.D., ETC.

THE hope I expressed, when describing last year* three species of Rattan from our Chinese colony—that I might be successful in procuring specimens of the fourth species known to exist in the island—has happily been realised, through the kind exertions of my friend Dr. George Dods, to whom I was already indebted for two out of the three I have characterised. Like the rest, the male flowers of this last *trouvaille* are unfortunately unknown; but the specimens Dr. Dods has been so good as to communicate are sufficiently perfect to enable a very satisfactory character to be drawn up, and to leave, I believe I may say, no doubt of the precise affinity of the plant, of which I submit the following diagnosis.

Calamus (*Eucalamus*, *Loriferi*) *tetradactylus*, sp. nov.—Caudice scandente 12-pedali et ultra, frondibus 6-15 pollices longis ecirrhiferis subsessilibus, vaginis sub frondis insertione obtuse carinatis paulo tumentibus ore pollicari tubuloso scarioso auctis inferioribus aculeis paucis rectis armatis superioribus sæpius inermibus, rachi triquetra viridi subtus spinis validis sparsis recurvis armata, segmentis in fasciculos 3-4 oppositos v. sub-oppositos intervallo $1\frac{1}{2}$ -4 pollicum sejunctos quovis fasciculo e phyllis 2 v. rarissime 3 conflato digestis lanceolato-oblongis acutis utrinque sed præsertim supra lucidis nervis 3 subtus prominulis nervulisque 5 vix conspicuis præditis præter marginem setaceo-aculeolatum inermibus binis terminalibus sæpius ad medium fere coalitis 5-7 poll. longis pollicem latis, spadiciis feminei (abortivis loriformibus) in lorum elongatum gracile aculeis recurvis nunc semiverticillatis dorso armatum producti fronde proxima dimidio longioris decompositi spathis primariis tubulosis ore vix inflatis acutis inermibus, ramis primariis 3-4 spatham multum superantibus intervallo iis æquilongo inter se distantibus glaberrimis flexuosis cernuis 6-pollicaribus ramulos 10-12 divaricatos tenues sub-bipollicares 10-20-floros proferentibus, spathellis rigidis tubulosis laxis acutis, bracteis scariosis truncatis, fructus breviter stipitati globosi stigmatum basi coronati 4-5 lin. diametro orthostichis 21-23 singulo e squamis 12-14 (summis depauperatis computatis) medio sulcatis stramineis brunneo-apiculatis composito, seminibus ovoideis albumine extus grosse tuberculato.

* Journ. Bot., xii., 263.

Juxta convallem Wongneichung ins. Hongkong, sub initio m. Martii, 1875, detexit Dr. G. Dods. (Herb. propr. n. 18979.)

Though I have examined a considerable number of seeds, I have been unable—probably owing to their having been kept several months—to satisfy myself perfectly as to their internal structure: the albumen appeared to me in all deeply ruminated. If this is not an error, it is a character hitherto supposed peculiar to the *Demonorops* group.

The nearest ally of this pretty and graceful palm is no doubt *C. gracilis*, Roxb., a native of Chittagong. From Roxburgh's description and figure, copied by Griffith,* his plant differs from the Hongkong one by its lanceolate much more acuminate frond-segments with aculeolate nerves; the fruit is unfortunately unknown, or at all events undescribed. *C. radiatus*, Thw., according to Dr. Thwaites's diagnosis,† has its 6-7 linear frond-segments all radiating from the extremity of the rachis and densely spiny vaginæ. *C. pachystemonus*, Thw.‡ may be readily distinguished by its fewer and longer frond-segments, and more especially by its fruit—unknown when Dr. Thwaites's character was published—which is somewhat larger, and has the scales, which are straw-coloured with purple margins, disposed in only 12 vertical series, each series consisting of about eight scales. The numerical relations vertically and laterally of the fruit-scales furnish a character seemingly of great constancy and the highest importance, which has not been sufficiently attended to by writers, with the exception of Blume.

There is yet another character furnished by the loriceæ hitherto, so far as I am aware, unnoticed by any author, and to which my attention was first directed by my valued friend the Rev. Dr. Graves, as distinguishing the fruit of *C. melanochaetes*, Bl., from that of *C. Margaritæ*, mihi. These two species are very close allies, but in the Malayan plant, as figured in Blume's double folio plate and also in his detailed analysis,† the margins of the scales in the same spiral form a continuous line; that is to say, any given scale is not overlapped at the upper limit of its anterior edges by the extremities of the scales situated to the right and left; in *C. Margaritæ*, on the contrary, the lateral scales in each diagonal series project $\frac{3}{4}$ of a line beyond the edge of the scale situated between and immediately beneath them,§ so that the spiral, instead of describing an unbroken line, has a step-like arrangement, or resembles the teeth of a saw. I have found no exception to this in more than one hundred fruits I have examined. The use of such a phrase as *seriebus squamarum spirabilibus* (or *speirostichis*) *planis*, or *gradatis*, as the case might be, would be a convenient mode of indicating this difference, in diagnoses. All the Hongkong *Calami* have *speirostichi gradati*.

* Griffith, "Palms of Brit. India," 64, t. 196.

† Thwaites, "Enum. pl. Zeylan." 431.

‡ Blume, "Rumphia," ii., tt. 134, 137 B. f. 10.

§ As shown in Blume's plate of *Ceratolobus concolor* (op. mox cit., ii., t. 130, f. 1. A).