

vel armato, rachi $\cdot 2^m$, ramos plurimos $\cdot 08^m$ - $\cdot 1^m$ inermes, pedicellis $\cdot 025^m$ - $\cdot 04^m$ ornatos proferente; fl. ♂ alveolatis, solitariis, hexandris, alveolis hexastichis; fl. ♀ solitariis, in basi ramulorum sessilibus; calyce et corolla subæqualibus, urceolaribus, ore tridenticulatis, extus aculeolis subnigris nitidis dense armatis; andrœceo sterili quam corolla duplo brevior, eidem que arcte adhærente; drupis (immaturis $\cdot 02^m$ - $\cdot 04^m$) obovatis, ad basin pressione mutua polygonis, rostellatis, aculeis $\cdot 01^m$ nitidis, subnigris, contortis adpressis crebris armatis.

Hab.—In sylvis ad Camaná, fl. Javary. Ab Indis “Murumurú” nuncupatur.

Obs. 1.—From *A. Paramaca* the above palm differs chiefly in the slighter armature of the spadix, in the sessile ♀ flowers, in the absence of spines or setæ below the ♀ flower, in the corolla and the calyx being of equal length and thickly covered with spines, and in the fruit also being more spiny. I know *A. Paramaca* only from the description; hence it is possible that on comparing specimens of the two palms *A. Javarense* may prove to be a distinct species.

Obs. 2.—From *A. Murumurú*, Mart., it differs in being stemless or nearly so, in the longer leaves, in the more numerous pinnæ, in the 6 stichous alveoli of the male flowers, in the calyx being equal to the corolla and both being very spiny, and in the larger and far more numerous spines on the fruit.

From *A. Ayri*, Mart., it differs in being stemless or nearly so, in the longer leaves, in the inner spathe, in the unarmed or slightly armed spadix, the spines when present being adpressed, in the unarmed pedicels of the ramuli which are longer than in *A. Ayri*, in the unarmed bracts of the female flowers, in the hexastichous alveoli, in the calyx equalling the corolla, and lastly in the habitat.

It can hardly be mistaken for any other species than those mentioned.

43. *A. MINUS*, *sp.n.* (Trail hb. Palm., 213).—Mediocre; caudice solitario, $2\cdot 4^m \times 1^m$ (ad basin)- $\cdot 07^m$ (ad apicem), nudo, valide annulato, inter annulos aculeis transverse subseriatis, $\cdot 01^m$ - $\cdot 03^m$, nigris armato; foliis compluribus contemporaneis, $5\cdot 5^m$ - 6^m , æqualiter pinnatis, ad vaginas petiolorum et costas aculeis nigris $\cdot 01^m$ - $\cdot 08^m$ valide armatis; pinnis 60-70-jugis, suboppositis, lineari-lanceolatis, acuminatis, $1^m \times \cdot 03^m$, sursum brevioribus, 5-7-venosis, valide plicatis, supra glabris, subtus albidis, ad margines setoso-ciliatis; spatha (unica?) sublignea fusco-setoso-pellita, et apicem versus aculeis $\cdot 01^m$ - $\cdot 03^m$ fuscis armata; spadice $1\cdot 6^m$, pedunculo $1\cdot 3^m$ ferrugineo-leproso et aculeis $\cdot 005^m$ - $\cdot 01^m$ nigris adpressis sparsis armato, rachi $\cdot 3^m$ ramos plurimos $\cdot 09^m$ flexuosos pedicellis $\cdot 01^m$ - $\cdot 02^m$ setosis ad basin in receptaculum subligneam dilatatis præditos proferente; fl. ♂ ?; alveolis 5-stichis; fl. ♀ sessilibus in receptaculis; calyce et corolla subæquilongis, urceolaribus, ore tridenticulatis, a symmetricis, extus aculeis $\cdot 01^m$ contortis subnigris adpressis vestitis; andrœceo sterili corolla $\frac{1}{3}$ brevior, ovario ovoideo.

Hab.—In sylvis primævis ad Barreiras de Mutum, fl. Jutahi, ab indigenis “Murumuru-i” vocatur.

Obs.—This species has much the habit of *A. Tucumá*, Mart., in miniature, but it can hardly be confounded with any species save *A. gynacanthum*, Mart., or its variety *A. Munbaca*, Mart. (sp.). From

these it is readily distinguished by its larger size, much longer leaves with more numerous pinnæ, longer pinnæ, and longer spadix. Comparison of examples of the two species shows at once that they are distinct, though it is rather difficult to express the points of difference in a description.

44. Dr. Rodriguez (l.c., p. 20, no. 1) has described a species of *Astrocaryum* under the name *A. aculeatum*, Mart., quoting also as a synonym *A. aculeatum*, G. W. F. Meyer, Esseq., 266.

Meyer in his description (which is quoted by Martius) says, "pinnis linearibus præmorsis . . . drupa subglobosa inermi." This can certainly not refer to the same species as Dr. Rodriguez describes, as will be seen from his description quoted below. I brought a spadix with ripe fruit and pinnæ from near the lowest rapids on the Trombetas, and can corroborate the accuracy of the description. My specimens (Trail hb. Palm., 17) were identified by Dr. Rodriguez as *A. aculeatum*, Meyer.

"1. *Astrocaryum aculeatum*, Mart.—Stipite procero, solitario, aculeato. Frondibus curvo-patentibus; petiolo supra canaliculato et dorso convexo, ubi regulariter et transverse lineis aculeorum obliquo-ornatur; foliolis oblique acuminatis, linearibus; drupa oblonga pistillo persistente, aculeata, rubro-aurantiaca.

"*Hab.*—In montibus lacui José Açu proximis, in districto de Villa Bella, in Provincia Amazonum. Fructificat in Febuario. (Barb. Rod. hb. Palm., 320.)

Stipes ut altus 16^m, diametro 0·11^m; internodia 0·2^m, aculeis referta; folia 25 contemporanea, 7^m longa; petiolus 2^m; rachis 5^m; foliola 90-100 utrinque, linearia, oblique acuminata, 1·06^m longa, 0·045^m lata; spadix ramosus 2·5^m, longus; rachi 0·40^m longa."

As it is certainly not *A. aculeatum*, Meyer, and as I believe it to be distinct from all previously described species, I would propose for it the name of *A. Rodriguezii*, in honour of its discoverer. To his description I have to add that the stem varies much in height, and is sometimes wanting, and that the fruits are closely packed on the simple rachis, the female flowers being sessile, each situated at the base of a ramulus, and that the calyx and corolla of the ♀ fl. are setose.

A. acanthopodium, Barb. Rod. (l.c., p. 21, no. 2), seems to me, so far as one can judge by the brief description, to be the stemless variety of the species just discussed, but I do not venture to unite them, in absence of sufficient information.

COCOSINÆ INERMES.

45. *Cocos Inajai*, Spruce (Trail hb. Palm., 113).

= *Maximiliana Inajai*, Spruce (Palmae Amazonicæ, p. 163);
(S. hb. Palm., 9).

= *Cocos aequatorialis*, Barb. Rod. (l.c., p. 31).

Caudice 2·5^m-6^m × 0·08^m-1^m, ligno molli, albo; foliis pluribus contemporaneis, suberectis vel patulis, subcrispis, 2·5^m-3^m, irregulariter pinnatis; pinnis 74-84-jugis, 2-6-natis aggregatis ut in *Maximiliana regia*, lineari-lanceolatis abrupte et inæqualiter cuspidato-acuminatis, 45^m-65^m × 0·025^m-0·03^m, sursum minoribus, venis secundariis 6-8;