

pinnatisectis, subcoriaceis, pinnis 3-jugis, oppositis rhomboideo-subfalcatis, $\cdot 20^m\text{-}\cdot 50^m \times \cdot 050^m\text{-}\cdot 100^m$, vel jugis 2 pinnarum graminearum interpositis; venis utrinque (23) 28-36, ad basin flexis, medio rectis, angulo costali $30^\circ\text{-}48^\circ$, apice incurvis; spadice $\cdot 30^m\text{-}\cdot 45^m$, ramos 10-12, 3-5 infimos ramulos 2-6-edentes proferente, ramuli $\cdot 125^m\text{-}\cdot 250^m$; spathis teneris, caducis, $\cdot 075^m\text{-}\cdot 100^m$.

Hab.—Per totam provinciam Amazonensem.

Sub var. *gramineifolia* (Trail hb. Palm., 177 in parte, et 200 in parte).—Pinnis 12-16-jugis gramineis, plerumque univeniis $\cdot 225^m\text{-}\cdot 350^m \times \cdot 009^m$, basalibus, apicalibus et aliis mediis latioribus ligulari-rhomboideis, 2-10-veniis.

Hab.—Cum forma typica ad Tabatinga et ad Barreiras de Maturá in ripas fl. Solimoês, et ad fl. Javary.

- γ . Var. *microspatha* (Trail hb. Palm., 70, 71, 72, 73, 74, 131; = *Geonoma microspatha*, sp.n., Spruce hb. Palm., 28.)—Caudice $\cdot 90^m\text{-}1\cdot 80^m \times \cdot 008^m\text{-}\cdot 012^m$; foliis $\cdot 60^m\text{-}\cdot 90^m$ iis var. *cosmiophyllæ* similibus sed minoribus, tenuioribus, et rarius nitentibus, pinnis 3-jugis oppositis, rarius 2 gramineis interpositi; venis utrinque (24) 27-29, angulo costali $30^\circ\text{-}46^\circ$; spadice subglabro, vix $\cdot 3^m$, ramos 8-10 simplices vel solum 2 infimos bifidos vel trifidos $\cdot 10^m\text{-}\cdot 20^m$ proferente; spathis $\cdot 038^m\text{-}\cdot 060^m$.

Hab.—Ad flumina Negro et Purus.

Obs. 1.—*G. flaccida*, Wendland, seems identical with *G. paniculigera*, Mart.

Obs. 2.—*G. trijugata*, Barb. Rod. (Enum. Palm. nov. Amazon, 1875, no. 9, p. 12), so far as can be made out from the very brief description, is *G. paniculigera*, var. *microspatha*.

Obs. 3.—It is somewhat difficult to determine whether the variety *papyracea* or *cosmiophylla* is the type of Martius' species, as the figure in Palm. Bras., t. x., shows the latter form, while the description applies rather to the former. I have not followed Martius' division into the varieties *hirsutula* and *glabrata*, as I have not observed the spadices notably more pubescent than in other *Geonomæ*, nor have I observed marked difference between different examples of this very common species.

†† Alveoli obscure 5-stichi, labio inferiore bifido.

8. *G. LEPTOSPADIX*, sp. n. (Trail hb. Palm., 172).—Caudice arundinaceo, $\cdot 15^m\text{-}\cdot 90^m \times \cdot 010^m$, fulvo, glaberrimo; foliis 10-12 contemporaneis, simplicibus, bifurcis, $\cdot 60^m\text{-}\cdot 75^m$, lamina $\cdot 50^m \times \cdot 10^m\text{-}\cdot 125^m$, membranacea supra subtusque læte viridi; ala quaque triangulari-rhomboidea, acumine paullo incurvato, margine exteriori ultra medium emargi-

nato; venis primariis utrinque 27-28, haud conspicuis, rectis, angulo costali 21° - 23° ; vagina $\cdot 075^m$; petiolo $\cdot 050^m$ supra sulcato, costa $\cdot 30^m$ - $\cdot 38^m$; spadicebus 3-14 subcontemporaneis, rubris, $\cdot 25^m$ - $\cdot 38^m$, pedunculo $\cdot 13^m$ - $1\cdot 18^m$ compresso, spadiceis florentis erecto, dein plerumque saepe inflexo, ramos 5, infimum bifidum, tenuissimos, $\cdot 15^m$, cauda sterili apiculatos proferente; spathis $\cdot 075^m \times \cdot 010^m$ ancipitibus, papyraceis; alveolis longe dissitis, obscure 5-stichis, magnis, labio inferiore profunde emarginato vel bifido; fl. ♂ petalis sepala subaequantibus ad medium coalitis; fl. ♀ tubo stamineo urceolato, ore subintegro vel brevissime 6-dentato; fructibus globosis, diam. $\cdot 006^m$ et supra, leviter tuberculosus, nigro-purpureis.

Hab.—In sylvis primævis nunquam inundatis ad Tonantins et ad Fonteboa in prov. Amazonas.

Obs. 1.—The stem is almost always buried under a mass of earth and rubbish, in which lie the fruiting spadices, a position favoured by the peduncle being very much shortened by its repeated flexures. May not this habit (not shared in by any other species that I am acquainted with) favour the development of the seeds, as in *Trifolium subterraneum*, *Arachis hypogæa*, &c. ? On one occasion I found a specimen about 3 feet high, bearing spadices with mature fruit, though its stem was clear of the usual accumulation. The large number of spadices occurring in nearly the same stage of development is also remarkable. On one plant I found fourteen spadices, the lower ten bearing fruits, the others flowers.

†† Fl. ♀ tubus stamineus trigonus, ore 3-crenatus vel in lobos 6-digiti-formes ad medium fissus; alveoli 5-7-stichi, labio inferiore bifido.

9. G. SPRUCEANA, sp. n. (Trail hb. Palm., 24, 41, 42, 43, 170, 176, 164, 125, 120, 174, 29, 111, 93, 147, 47, 25, 26, 118, 56, 84, 89, 138, 90, 97, 54, 143, 144).—Caudicibus 3-4 ex eodem rhizomate ortis, $1\cdot 20^m$ - $2\cdot 40^m$ (rarius $3\cdot 0^m$ - $6\cdot 0^m$) $\times \cdot 008^m$ - $\cdot 025^m$; foliis pinnatisectis $\cdot 75^m$ - $1\cdot 20^m$ (rarius $\cdot 45^m$ vel $1\cdot 20^m$ - $1\cdot 80^m$), petiolo 30^m - $\cdot 70^m$ incluso; costa $\cdot 15^m$ - $\cdot 55^m$; pinnis 2-21-jugis lanceolato-rhomboides vel ligularibus vel gramineis, subfalcato acuminatis subcoriaceis, supra subtusque concoloribus $\cdot 30^m$ - $\cdot 60^m$ (rarius $\cdot 15^m$ - $\cdot 30^m$ vel $\cdot 60^m$ - $\cdot 75^m$) $\times \cdot 009^m$ - $\cdot 075^m$ (rarius $\cdot 112^m$); venis primariis utrinque 16-20 (11-15), bis flexis, angulum 20° - 40° (40° - 60°) cum costa efformantibus, pinnis gramineis semper triveniis (i.e., vena primaria 1, venis secundariis 2); spadicebus $\cdot 20^m$ - $\cdot 30^m$ (rarius $\cdot 15^m$ - $\cdot 20^m$ vel $\cdot 30^m$ - $\cdot 40^m$) rubris vel viridibus, ramos 8-16 (4-8) simplices vel 2-8 infimos ramulos 2-6-fissos cauda sterili acuminatos $\cdot 075^m$ - $\cdot 125^m$ ($\cdot 035^m$ - $\cdot 075^m$) vel $\cdot 15^m$ subrectos vel subdecumbentes proferentibus, pedunculo $\cdot 075^m$ - 10^m compresso; spathis lanceolatis vel lato-lanceolatis, obtusis $\cdot 075^m$ - 112^m ($\cdot 112^m$ - $\cdot 175^m$)