

## BURMANNIACEAE

Trib. 1. BURMANNIEAE  
Section \* Ovary 1-locular  
Gen. 1. GYMNOSIPHON Bl.

Blume, Enum. plant. Javae. p. 29 (1827). – *Ptychomeria* Benth. in Kew Gard. misc. VII, pag. 14.

Perianth petaloid, tubular higher up; tube cylindrical, superficially 6-ribbed not winged or carinate; 6-edged, interior lobes 3, small; stamens as in *Burmannieae*, 3, with a deciduous limb, minor lobes opposite; pollen granular, sticky; style simple, apex tripartite; stigma somewhat widely open-mouthed. Ovary cylindrical or obconic continuous with the perigone, placentae 3, parietal, ovules numerous, anatropous. Capsule cylindrical straight to curved, perianth tube as a persistent crown (limb deciduous), marcescent [drying but not falling off] skeletonized, interior perforate, unilocular, placentae 3 filiform somewhat free; seeds oval, subangular, exterior reticulate-rugose.

Remarks. - I have not seen authentic specimens of the type species, *G. aphyllum* Bl. of Java; but it does not seem to me to be doubtful that my species are not generically identical to that of Blume. But I made the generic diagnosis according to my specimens. - Blume describes the perigonium as simply 3-fid; it may be that in his species the very small inner lobes were actually missing, as they seem to be lacking in *Burmanniea tridentata* and in *Gonyanthes candida* Bl.; but it may also be that due to their smallness they have gone unnoticed. The capsule differs from that of *Burmanniea* because in these all perigonium remains are persistent and rots at the apex of the capsule; in *Gymnosiphon*, on the other hand, the expanded part of perigonium falls disjointed from the tube, which remains to crown the lower [must mean upper] part of the ovary. The tube is often curved; the mature capsule dehisces due to the destruction of the diaphragm, which divides the ovariferous cavity from the perigonial tube; the 3 enlarged and hardened placentas detach from the walls; these are skeletalized due to the destruction of the parenchyma, thus appearing reticulated and bucherellate [riddled with holes] over time.

It seems I am able to identify with enough confidence the genus *Ptychomeria* Benth. with the genus *Gymnosiphon* Bl. They are therefore those distinct species of *Gymnosiphon* of Bentham with the names of *P. fimbriata*, *capitata*, *cymosa*, *divaricata*, *cornuta*, *mutica*, and *tenella*. If there can still be some doubt that the *Ptychomeria* are *Gymnosiphon* Bl., there is none, however, that the plants described by me as *Gymnosiphon* are congeners of the American species described by Bentham as *Ptychomeria*, having been able to examine most of the species mentioned above; indeed I can add, that the Malaysian species, even in the habit, have the greatest analogy with American forms.

*Gymnosiphon borneense* sp. n. – Parasitic, small (8-13 cm high) leafless; roots perennial; Scale leaves [squamate bracts] sparsely spiraled on stem, smooth, terete, filiform, stramineous when dry, often with bifid erect branches, apex distichous, branches divaricate-patent [widely spreading]. Flowers 3-10; 1 at bifurcation at the tip of the stem, the rest subsecund ascending, 6-9 mm long, narrow tubular, slightly curved, supported by a filiform pedicel 2-3 mm long; outer perigonial lobes widely triangular, multi-nerved, shortly acuminate, expanded margin crenate, internal lobes linear-lanceolate acute; ovary tube is longer; capsule 6-7 mm. long. (Table XIV, s. 5-9).

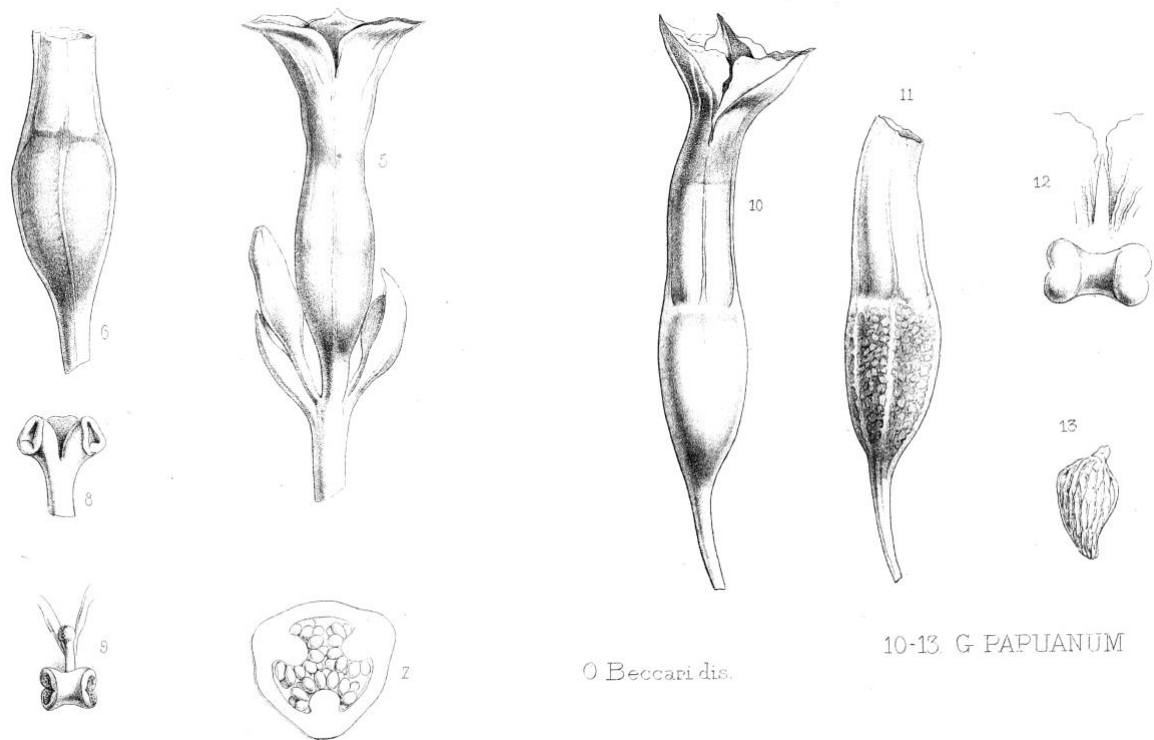
Lives. - On Mount Mattán in Borneo in the prov. of Sarawak.

Remarks. - The typical species the *Gymnosiphon aphyllum* is described by Blume as annual; *G. Borneense* is a parasitic plant and seems to have a perennial root; Blume does not even mention the perigonal tube and the curved capsule, so I very much believe that I can propose a specific new name for the Borneo plant.

***Gymnosiphon papuanum* sp. n.** – Parasitic, small (5-10 cm high) leafless; roots perennial; Scale leaves [squamate bracts] sparsely spiraled on stem, the smallest approximately at the base, often caespitously [tufted]-branched, angular (at least in the dry state), stramineous, rigid, filiform, winding, apex subcorymbose 2-10-flowered, barely subdistichous; flowers on short, thick pedicels, 6-7 mm long; exterior perigonal lobes widely triangular, shortly attenuate-acute, margin wide, repand [a slightly uneven and wavy margin]; interior lobe small, clavate; tube straight, ovary length subequal or more commonly shorter; capsule 4-5 mm long, tube with a straight or a little oblique, neither incurved. (Table XIV, s. 10-13).

Lives. - New Guinea, Andai and Mount Morait.

Remarks. - At first glance this species seems to be identical to the previous one, but in reality it is very well distinguished by the shorter length of the perigonal tube, not as curved, for the internal lobes of the perigonium are clavate and for the smaller length and the non-curved capsule.



5-9 GYMNOSYPHON BORNEENSE

10-13. G. PAPUANUM

O Beccari dis.