The African Species of *Gouania*

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890. **Philodendron (Boursia) teretipes**, *Sprague* [Araceae—Philodendreae]; affine *P. Glaziovii*, Hook. f., a quo petiolis teretibus, inflorescentia minore sessile, ovulis paucioribus distinguitur.

Caulis sub inflorescentia circiter 1–3 cm. diametro. *Folia* longipetiolata; petioli erecto-ascendentes, apice recurvati, teretes, 11–16 cm. longi, medio 6–7 mm diametro, flavidi, apicem versus rubro-tincti; petiolus folii supremi basi 1·3 cm. vaginans; laminae deflexae, lanceolatae, breviter acute acuminatae, in basin subdeltoideo-angustatae, 14·5–21·5 cm. longae, 3·8–6·2 cm. latae, marginibus leviter recurvatis rubris, basi supra petiolum anguste connatis; nervi primarii utrinsecus circiter 12, quam intermedii vix conspicuiores. *Pedunculus* communis nullus; spatha inferne ad pedunculum spadiceis adnata, 11 cm. longa, crenea, intus coccinea, apice cuspidata, parte expansa obovata 6·5 cm. longa, 3·2 cm. lata; pedunculus spadiceis 1·5 cm. longus, per totam longitudinem ad basin spathae adnatus; spadix 8·5 cm. longus, parte feminea 2 cm. longa. *Pistilla* 1·6–1·8 mm. longa, stigmatibus discoideo 1·2 mm. diametro; ovarium 7-loculare, loculis paullum ultra medium productis; ovula pro loculo 2–3, e basi erecta.

TROPICAL AMERICA. Described from a fresh specimen of a plant grown in the Royal Botanic Gardens, Glasnevin, where it was received from Mr. O'Brien in July, 1912, with the statement that it had been imported with *Zygopetalum Sanderianum*, Regel.

XXXVI.—THE AFRICAN SPECIES OF GOUANIA.

M. L. GREEN.

The genus *Gouania* (*Rhamnaceae*) is very widely distributed in the tropics. Its salient characteristics are the watch-spring tendrils, spike-like thyrses, a more or less lobed disc, inferior ovary and longitudinally 3-winged septicidal fruits. The fruits are crowned by the persistent receptacular cup, and their wings are formed by the united margins of adjacent carpels. When mature the fruit separates into its component carpels, and it then consists of the three mericarps suspended from and held together by the three pairs of strands into which the central columella has split up.* The strands arise in pairs at the angles of the columella, run up along the median lines of the carpels which project as narrow ridges, curve sideways a little below the apex towards the top of the wings and pass over them to their outer side where they form a raised network. This network ultimately separates from its mericarp owing to the decay of the sub-jacent parenchyma, but retains the mericarp loosely for a time until it is blown away by the wind or falls out.

* At this stage the fruit recalls that of *Heracleum Sphondylium*, Linn., except that the latter has only two mericarps, each borne on a single strand.

The fruit and its dehiscence were well described by Gaertner* as long ago as 1791 in the following words:—

“*Capsulae* tres, ope corticis communis in fructum triquetrum, rotunde trialatum ac trifariam dehiscentem coadunatae. Cortex tenuis, ex epidermide fugaci et reticulo fibroso capsularum dorso incumbenti compositus. *Capsulae* partiales crustaceae, duriusculae, ad utrumque suum marginem in alam rotundatam, suberosam et sebi adinstar fragilem ampliatae, hinc depressiusculae, albae, inde angulatae et ferrugineo-sphacelatae, uniloculares, evalves. *Receptaculum commune* in axi fructus positum, sexfidum, filiforme; filis per paria junctis, secundum angulum ventralem capsularum adscendentibus, deinde vero in earundem dorsum reflexis atque fibrosum rete formantibus, cujus ope capsulae in situ pendulo post dehiscentiam fructus sustententur; *proprium* nullum, praeter cicatriculam in fundo loculamentorum, cui semina affixa sunt.”

In the *Flora of Tropical Africa* vol. 1. p. 383 (1868) only one species, *Gouania longipetala*, Hemsl., was recorded from Tropical Africa. The description of the flower was drawn up from specimens collected by Mann in Fernando Po and at the river Kongui, Spanish Guinea, whilst the fruit was described from a specimen collected by Kirk in Portuguese East Africa. Since 1868, however, ample fruiting material has arrived of the West African plant, and it is now evident that Kirk's specimen represents a new species, which is described below as *G. mozambicensis*. It differs from *G. longipetala* in the laxer infructescence with distinct lateral branches and the much larger fruits.

Three other species have been recorded from Tropical Africa, *G. longispicata*, Engl., *G. pannigera*, Tul. and *G. Sereti*, De Wild.

G. longispicata was described by Engler in *Pflanzenw. Ost.-Afr. C.* p. 256 (1895) and is widely distributed in Tropical East Africa. In the same work Engler recorded *G. pannigera* from the Zambesi Region; this species is a native of Madagascar, and was not previously known to occur in Africa. Confirmation of its occurrence there is desirable. *G. Sereti* was described by De Wildeman in *Ann. Mus. Congo, Sér. V. ii.* p. 45 (1907) and appears to be confined to the Belgian Congo. The differential characters of the five species may be summarised thus:—

1. ***G. longipetala***, Hemsl.—*Ramuli* puberuli. *Petoli* 0·8–1 cm. longi. *Folia* subtiliter (rarius manifeste) crenulata, subtus secus nervos pilosa; nervi laterales 3–4. *Pedicelli* circiter 2 mm. longi. *Calyx* extra sparse hirsutus. *Petala* calycis lobis longiora. *Discus* in lobos haud productus. *Merica* glabra, 9 mm. longa, 1·1 cm. lata.

2. ***G. longispicata***, Engl.—*Ramuli* juniores ferrugineo-tomentosi, vetustiores glabri. *Petoli* 1–4 cm. longi. *Folia* acute serrulata, subtus dense tomentosa; nervi laterales 5–7. *Pedicelli* 4–5 mm. longi. *Calyx* extra tomentosus. *Petala* calycis lobis

* Gaertner, *De Fructibus et Seminibus Plantarum*, ii. p. 187 t. 120, fig. 4 (1791).

aequilonga. *Disci* lobi transverse oblongi, breviter retusi vel subtruncati, 0.25 mm. longi, 0.5 mm. lati. *Mericalypia* leviter hirsuta, 8 mm. longa, 9.5 mm. lata.

3. **G. pannigera**, *Tul.*—*Ramuli* ferrugineo-tomentosi. *Petioli* 1.1–1.3 cm. longi, pariter induti. *Folia* integra sed interdum margine crispulato, apice rotundata, supra pubescentia, subtus tomentosa, nervis ferrugineis exceptis albido-fulva; nervi laterales 5–6. *Pedicelli* circiter 1 mm. longi. *Calyx* extra tomentosus. *Petala* calycis lobis aequilonga. *Disci* lobi transverse oblongi vel subtruncati, 0.3 mm. longi, 0.5 mm. lati. *Mericalypia* dense hirsuta, circiter 8 mm. longa, 7 mm. lata.

4. **G. mozambicensis**, *M. L. Green.*—*Ramuli* juniores pilosuli, vetustiores glabri. *Petioli* 2–4 cm. longi. *Folia* inconspicue crenata vel subintegra, subtus secus nervos subappresse pilosa; nervi laterales 7–8. *Pedicelli* circiter 3 mm. longi. *Mericalypia* glabra, 1.5–1.7 cm. longa, 1.5–1.8 cm. lata.

5. **G. Sereti**, *De Wild.*—*Ramuli* breviter pilosi. *Petioli* 0.6–1.2 cm. longi, griseo-tomentosi. *Folia* crenulato-dentata, subtus albo-velutina. *Pedicelli* 3–5 mm. longi, tomentosi. *Calyx* extra sparse pilosus, lobis 1.5 mm. longis. *Petala* calycis lobos haud superantia. *Disci* lobi profunde bilobulati. *Mericalypia* ignota.

Their synonymy and geographical distribution are as follows:—

1. **G. longipetala**, *Hemsl.* in *Oliv. Fl. Trop. Afr.* i. p. 383 (1868), specimen fructifero excluso.

DISTRIB. French Guinea: Kouria, *Chevalier* 14969. Sierra Leone: Scarcies; near Kukuna, *Scott Elliot* 4741. Liberia: Kaka town, *Whyte*. Gold Coast: Ashanti; W. of Obuari, *Aininam*, *Chipp* 582. Larte Hills, *Johnson* 812. Ashanti, *Cummins* 14. S. Nigeria: Oban, *Talbot* 1361; *Dennett* 23. Cameroons: Yaunde, *Zenker & Staudt* 586; near Efulen, *Bates* 443; Bipinde, *Zenker* 1134, 3458. Fernando Po: *Mann* 17. Spanish Guinea: River Kongui; *Mann* 1813. Angola: *Monteiro*.

2. **G. longispicata**, *Engl.* *Pflanzenw. Ost.-Afr.* C. 256 (1895); *Engl.* in *Mildbr. Wiss. Ergebn. Deutsch. Zentr.-Afr.-Exped.* 1907–1908, ii. 490 (1912).

DISTRIB. British East Africa: Battiscombe 297; descending the Mau Plateau towards Nandi, *Whyte*. Nyasaland: Masuku Plateau, *Whyte*; Mt. Chiradzulu, *Whyte*. Rhodesia: Chirinda Forest, *Swynnerton* 96.

3. **G. pannigera**, *Tul.* in *Ann. Sc. Nat. Sér. IV.* viii. 134 (1857); *Engl. Pflanzenw. Ost.-Afr.* C. 256 (1895).

DISTRIB. Central and North West Madagascar; Portuguese East Africa: Gorungosa, (fide *Engler* l.c.).

4. **G. mozambicensis**, *M. L. Green*; species nova, *G. longipetalae*, *Hemsl.*, et *G. longispicatae*, *Engl.*, affinis, sed infructescentia laxiore fructu multo majore differt.

Frutex scandens (Kirk). *Ramuli* leviter costati, juniores pilosuli, vetustiores glabri. *Folia* ovata, apice breviter acuminata, basi cordata vel subtruncata, 5–7 cm. longa, 3.5–4.5 cm. lata, inconspicue crenata vel subintegra, chartacea, supra glabra, subtus secus nervos subappresse pilosa; petioli 2–4 cm. longi, pubescentes. *Thyrsi* laxi, fructiferi 4–11 cm. longi, rhachi plus minusve pubescente; pedunculi 5–6 mm. longi; pedicelli 2.3 mm. longi. *Flores* non visi. *Mericalpia* suborbicularia, 1.5–1.7 cm. longa, 1.5–1.8 cm. lata, manifeste reticulata, glabra, sinu basali 1 mm. longo, apicali 1–1.5 mm. longo. *Semina* 5 mm. longa, 3.5–4 mm. lata, nitida, glabra, endospermio corneo.—*G. longipetala*, Hemsl. in Oliv. Fl. Trop. Afr. i. p. 383 (1868), quoad fructum.

DISTRIB. Portuguese East Africa: Shupanga, Kirk (1860).

5. **G. Sereti**, *De Wild.* in Ann. Mus. Congo, Sér. V. ii. 45 (1907).

DISTRIB. Belgian Congo: on the borders of the forest between Niangara and Gumbari, *Seret* 448.

XXXVII.—A NEW EUPHORBIA FROM ST. HELENA.

A. THELLUNG and O. STAFF.

IN the Report on the Botany of the Atlantic Islands Hemsley enumerated a doubtful *Euphorbia Chamaesyce* which since Burchell's day had repeatedly been collected in St. Helena where it was known as "French Grass." He says of it "We have been unable to match this, but in a genus like *Euphorbia* we shrink from founding a new species upon what may be only a slightly altered state of some well-known one, or even exactly the same as a described species. Roxburgh treated it as an introduced plant, and named it *Euphorbia rosea*, which it is not. Burchell who did not distinguish between the native and introduced plants, collected it in Sandy Bay; Melliss expressed his opinion that it is probably indigenous." Recently Dr. Thellung, of Zurich, had an opportunity of examining some fragments of the St. Helena plant and by his studies of alien plants and weeds having made himself familiar with the members of the *Chamaesyceae* group of *Euphorbia*, came to the conclusion that it represented indeed, as Hemsley suggested, a new species. Subsequently he applied to me for the examination of the fairly ample material preserved in the Kew collections and the completion of the description which he had drawn up from the samples at his disposal, the result being the confirmation of his view of the plant as an undescribed member of the *Chamaesyceae* group and the description of it given below.

Although extremely similar in general appearance to several species of the *Chamaesyceae* the structure of the involucre is quite distinct. It is distinctly 5-merous, whilst it is stated to be 4-merous in all the other species of the group. There are 5 fimbriate broad-linear segments and alternating with them 5 linear somewhat narrower and shorter segments. Of these