

NOTES.

DIAGNOSES SPECIERUM GENERIS JULIANA, SCHLECHT.,
AMERICAE TROPICAE. Auctoribus W. BOTTING HEMSLEY et
J. N. ROSE.

Arbores mediocres et frutices Mexici et Peruviae incolae, dioicae, adspectu *Burserae* specierum nonnullarum. Folia decidua, alterna, imparipinnata, in apicibus ramorum hornotinorum floriferorum conferta, foliolis oppositis diverse dentatis. Flores masculi parvi, numerosissimi, in amenta vel racemos compositos axillares gracillimos pendentes dispositi; perianthium simplex, tenuissimum, 6-8-partitum, segmentis linearibus acutissimis; stamina isomera, quam perianthii segmenta paullo breviora; gynaecei rudimentum nullum. Flores feminei e solis pistillis constantes, saepius quatuor receptaculo fere clauso inclusi, collaterales (haud concentrici, i. e. circa axin centram positi), duo exteriores saepissime imperfecti, abortivi. Receptacula parva, per anthesin obscura, circiter semipollicaria, axillaria, pedunculata, gemina singulave, erecta, apice minute paucidentata. Ovarium uniloculare, uniovulatum, stylo tripartito e receptaculi orificio exserto. Fructus cum pedicello plano-compresso dilatato corpus indehiscens apice incrassatum deorsum alatum formans, pendulus; ala e basi cuneata sursum sensim oblique vel aequilateraliter dilatata. Semen unicum, in fundo loculi affixum, perispermo nullo; embryo horizontalis, radícula elongata cotyledonibus plano-convexis accumbente.

Juliania adstringens, Schlecht. in *Linnaea*, vol. xvii. (1843), p. 746, *Hemsl. in Hook. Ic. Pl.* tab. 2723.

Folia quoad foliolorum numerum, circumscriptionem ac magnitudinem valde variabilia, primum plus minusve hirsuta, demum glabrescentia, nunc in eodem ramo omnia 3-foliolata, nunc in eodem ramo alia 3-foliolata alia 5-foliolata, interdum 5- vel 7-foliolata vel omnia 7-foliolata, cum petiolo communi 2-7 poll. longa; foliola crasse papyracea, sessilia vel brevissime petiolulata, saepius obovata vel oblanceolata, plerumque supra medium latiora et diverse crenata vel serrata, rarissime usque ad basin dentata, basi saepius cuneata, apice

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gradatim vel abrupte acuminata, obtusa, rotundata vel truncata, maxima 3 poll. longa et 2 poll. lata, sed saepius multo minora; venae primariae costae utrinque circiter 10-12. Pedunculi fructiferi brevissimi. Fructus pendulus, oblongus, basi cuneatus, rectus vel plus minusve obliquus, 1-2 poll. longus, tarde glabrescens.—*Hypopterygium adstringens*, Schlecht. in *Linnaea*, vol. xvii. (1843), p. 635. *Amphipterygium adstringens*, Schiede in schedula, ex Schlecht., loc. cit., p. 746.

Mexico Australis: Morelos, *Schiede*; alt. 5,000 ped., *Pringle*, n. 7,243 et 8,533; *Rose et Hay*, n. 5,341; Michoacan et Guerrero, *Langlassé*, n. 319 bis; Oaxaca, *Nelson*, n. 1,706 et 1,827.

***Juliania mollis*, Hemsl. in *Hook. Ic. Pl.* tab. 2722.**

Folia juvenilia omnino albido-villosa, 3- vel 5-foliolata, petiolo communi 2-5 poll. longo; foliola crassa, sessilia vel brevissime petiolulata, oblonga, ovato-oblonga, elliptica, vel terminali distincte petiolulato, interdum fere orbiculari, 1-2 poll. longa, crenato- vel serrato-dentata; venae primariae costae utrinque circiter 10, venis ultimis ob indumentum obscuris. Fructus ignotus.—*Amphipterygium molle*.

Mexico Australis: Barranca de Guadalajara, Jalisco, alt. 4,000 ped., *Pringle*, n. 6,871.

***Juliania amplifolia*, species nova.**

Folia juvenilia molliter villosula, adulta glabrescentia, 7- vel 9-foliolata, 6-15 poll. longa, petiolo communi subtereti; foliola mollia, papyracea, crassiuscula, brevissime petiolulata, lanceolata vel ovato-lanceolata, maxima $3\frac{1}{2}$ - $4\frac{1}{2}$ poll. longa, sed saepius 2-3-pollicaria, acuminata, interdum longe acuminata, acuta vel acutissima, basi saepius rotundata, crenato-serrata vel interdum argute serrata; venae primariae numerosae. Pedunculi fructiferi $\frac{1}{2}$ -1 poll. longi, validi. Fructus glaber vel cito glabrescens, pendulus, obliquus, $1\frac{3}{4}$ - $2\frac{1}{4}$ poll. longus, pedicello dilatato usque ad 1 poll. diametro.—*Amphipterygium amplifolium*.

Mexico Australis: Jalisco et Durango, *Pringle*, n. 5,002; *Rose et Hough*, n. 2,302, 3,735, 4,755, et 4,819.

***Juliania glauca*, species nova.**

Folia glabra vel cito glabrescentia, subtus glauca, 3- vel 5-foliolata, petiolo communi gracillimo subtereti $2\frac{1}{2}$ - $3\frac{1}{2}$ poll. longo; foliola papyracea, nisi terminale distincte petiolulatum sessilia, lanceolata, ovato-lanceolata vel oblanceolata, sine petiolulo $1\frac{1}{2}$ -3 poll. longa, acuta,

basi saepius cuneata, margine leviter incrassata, praecipue supra medium crenulata, vel dentata; venae primariae utrinque circiter 10, venis ultimis minute reticulatis. Pedunculi fructiferi graciles, 1-1½ poll. longi. Fructus pendulus, cum pedicello dilatato circumscriptione pyriformis, 1½-2 poll. longus, glaucus.—*Amphipterygium glaucum*.

Mexico Australis: Jilotlan, Michoacan, *Lumholtz*.

Juliania Huaucui, *A. Gray, U. S. Expl. Exped.*, vol. i. p. 371.

Folia primum tomentosa demum, saltem supra, glabrescentia, saepissime 7-foliolata, petiolo communi gracili tereti 2-3 poll. longo; foliola mollia, papyracea, sessilia vel brevissime petiolulata, oblonga vel ovato-oblonga, maxima visa vix sesquipollicaria, saepius utrinque rotundata, crenulata; venae primariae utrinque circiter 12, venis ultimis obscuris. Pedunculi fructiferi brevissimi. Fructus pendulus, fere linearis, 2½ poll. longus et medio 4-5 lin. latus, glaber vel glabrescens.—*Amphipterygium Huaucui*.

Peruvia Occidentalis: *A. Mathews*, n. 591; *A. J. Maclean*, sine numero.

Explanatory Note by W. B. H.

In 1843 Dr. F. L. von Schlechtendal described a Mexican tree at considerable length (*Linnaea*, vol. xvii. pp. 635-8) under the name of *Hypopterygium adstringens*, which he subsequently (op. cit. p. 745) changed to *Juliania adstringens*. In the same place Schlechtendal concludes with the following statement: 'Epitheton adstringens a beato amico [Schiede] in schedula datum verosimiliter vim adstringentem hujus arboris indicat. Amici nomen genericum *Amphipterygium*, quum ala basalis tantum nec cingens adsit, rejecimus¹.' With regard to its position in the Natural System he could only indicate remote affinities to various orders. Bentham and Hooker (*Genera Plantarum*, vol. i. p. 428) placed it doubtingly at the end of the Anacardiaceae. Engler (*DC. Monogr. Phanerog.* vol. iv. p. 500) places it in the 'genera ex Anacardiaceis excludenda,' adding: 'Quamvis canales resiniferi

¹ It is a pity that Schlechtendal did not adopt Schiede's generic name *Amphipterygium*, especially as he gave publicity to it himself, because both *Hypopterygium* and *Juliania* had already been used, and his objection to Schiede's name is unsound, the fruit being winged on both sides of the axis. As it is not improbable that Schiede's name will be revived by somebody, we have repeated our names under *Amphipterygium*, though we should prefer retaining *Juliania*.

adsint, attamen non tales sunt quales in Anacardiaceis observantur. Planta locus systematicus, cum flores nondum cogniti sint, mihi plane dubius remanet.'

In the Botany of the *Biologia Centrali-Americana*, having no specimens before me, I could do no more than record the name; and it was not till 1901, when Kew acquired specimens of the male of my *J. mollis*, and fruiting specimens of what I take to be the original *J. adstringens*, that I was able to throw a little more light on the subject by publishing (Hooker's *Icones Plantarum*, t. 2722 et 2723) figures of the structure, so far as the material permitted. This was done with the idea of directing attention to this singular genus, and of obtaining better specimens. It resulted in Dr. J. N. Rose, Assistant Curator of the Botanical Collections of the United States National Museum at Washington, generously offering to procure for me the privilege and advantage of examining the whole of the material belonging to that Institution, collected partly by himself, partly by Messrs. Pringle, Nelson, Lumholtz, Hay, Langlassé and Hough, together with his notes. At the present time we are engaged on a fully illustrated monograph of the genus, including an account of its anatomy and organogeny by Dr. F. E. Fritsch; and in that we shall fully discuss its affinities. This preliminary communication, it is hoped, will bring us further material of some of the species; more female flowers especially are wanted to enable us to complete our researches. I may add that Dr. A. Engler, of Berlin, Dr. C. Mez, of Halle, and Dr. A. Zahlbruckner, of Vienna, have failed to find any of the original specimens collected by Dr. C. J. W. Schiede, the discoverer.

NOTE TO ARTICLE IN THE ANNALS OF BOTANY, VOL. XVI, NO. 63, SEPTEMBER, 1902, ON 'THE "SADD" OF THE UPPER NILE.'

Grasses of the 'Sadd.'

At p. 501 of the *Annals of Botany*, in the article above cited, Sir William Garstin, the Under-Secretary to the Government of Egypt, in the Public Works Department, was quoted by me as saying that a specimen of the 'umsoof' grass, *Vossia procera*, which had been sent to the British Museum, was there identified as *Phragmites communis*. And Sir William did not mention it anywhere in his report as being one of the components of 'Sadd'; nor, so far as I had