

BOLETIM
DO
MUSEU BOTÂNICO MUNICIPAL
PREFEITURA MUNICIPAL
CURITIBA - PARANÁ - BRASIL
CORRESPONDÊNCIA: CAIXA POSTAL - 1142

JANEIRO

BOLETIM N.º 43

1 9 8 1

MALPIGHIACEAE NOVAE, II
STIGMAPHYLLON

WILLIAM R. ANDERSON *

RESUMO

São descritas duas novas espécies, *Stigmaphyllon harleyi* e *S. mathiasiae*. Ambas são de interesse porque faltam estruturas típicas do gênero — *S. harleyi* falta asa no fruto, e *S. mathiasiae* falta extensão no estigma.

A recurrent phenomenon in the *Malpighiaceae* is the discovery of species that lack one or more of the usual characters diagnostic of the genus to which they are most appropriately assigned. When the generic affinities are nevertheless unmistakable, I generally prefer to retain such species in the parent genus instead of segregating them as small satellite genera. Two such species are described here.

Stigmaphyllon harleyi W. R. Anderson, sp. nov.

Fig. 1.

Suffrutex usque 50 cm altus, ramunculis intricatis, dense flavido vel cinereo-tomentosis vel subsericeis, demum glabrat. Folia decussata; lamina foliorum majorum 13-18 mm longa, 13-19 mm lata, $\pm$ orbicularis, basi rotundata vel saepius paulo cordata, apice rotundata interdum paulo emarginata, glabra vel subtus praecipue basi sparsim sericea, eglandulosa, nervis non pro-

* University of Michigan Herbarium, North University Building, Ann Arbor, Michigan 48109, E.U.A.

minentibus sed visibilibus praecipue subtus; petiolus 2-3 mm longus, subsericeus vel glabrescens, apice vel prope apicem biglandulosus; stipulae minutae (usque 0.2 mm longae), triangulares, in ramulo prope basim petioli portatae. Flores 2(-3) terminales; bractea florifera usque 1 mm longa, ovata vel triangularis, scariosa; pedunculus 0.4-1.2 mm longus, apice 2 bracteolis bractee similibus sed minoribus munitus. Pedicellus 9-13 mm longus, appresso-tomentosus vel sero glabrescens. Alabastrum circinatum. Sepala ca. 3 mm longa et 2 mm lata, ovata, abaxialiter albo-tomentosa, adaxialiter glabra, 4 lateralialia biglandulosa glandulis 1.4-1.7 mm longis, anticum eglandulosum. Petala lutea, glabra, corrugata, 4 lateralialia patentia, ungue ca. 1.5 mm longo, limbo 7.0-8.5 mm longo, 6.5-8.0 mm lato, $\pm$ orbicular: margine eroso eglanduloso vel basi biglanduloso; petalum posticum erectum, ungue 1.6 mm longo, crasso, limbo 5 mm longo, 3.5 mm lato, oblongo basi cuneato, margine eroso basi biglanduloso. Filamenta 2.0-2.5 mm longa, breviora petalo postico et petalis antico-lateralibus opposita, recta vel leviter incurvata, glabra vel abaxialiter paucipilifera, basi connata; antherae 0.8-1.2 mm longae, omnes 10 fertiles, subaequales, glabrae, connectivo proximaliter atrorubro glandulosoque. Ovarium ca. 1 mm altum, albo-tomentosum, 3 carpellis omnino connatis omnibus uniovulatis; styli 3, 2.5 mm longi; proximaliter sericei distaliter glabri, antico versus petalum posticum inclinato, apice in foliolum symmetricum horizontali-dorsale triangulare vel rhombicum 1.2 mm longum et 2.0 mm latum dilatato, 2 posticis leviter divergentibus, apice in uncum 1.2 mm longum, 0.5 mm latum, asymmetricum lunatum productis. Fructus ex 3 coccis non alatis constans; coccus immaturus 4 mm altus, 3 mm latus, apice et dorsaliter cristatus crista usque 0.5 mm lata, in lateribus reticulatus, albo-tomentosus.

TYPE: Brazil, Bahia, Serra do Açuruá, São Inácio, on rocky hillside called Pedra da Mulher just south of town, 42° 44' W, 11° 7' S, elev. ca. 500-600 m, 25 Feb 1977, Harley 19026 (CEPEC, holotype; MICH, isotype).

This delightful plant is named in honor of Dr. R. M. Harley, organizer and leader of the Anglo-Brazilian expedition that collected the type, which is the only known collection. *Stigma-phyllon harleyi* is so atypical as to not resemble most of its congeners at all. It has an almost undifferentiated androecium with ten subequal anthers, whereas many species have some anthers large and others much reduced or perhaps even sterile. The very small, rounded leaves and twiggy habit are unique. The tiny,

wingless mericarp resembles only that of *Stigmaphyllon ovatum* Cav. and *S. paralias* Adr. Juss., which have been segregated by some workers as *Brachypterys*. In its styles *S. harleyi* is intermediate between *S. ovatum* and *S. paralias*, having the dorsal projection on the anterior style broadly folioso and on the posterior two very narrow, almost uncinat. However, it is the inflorescence that is most interesting in *S. harleyi*. The typical inflorescence in *Stigmaphyllon* is a dichasium of umbels, i.e. the shoot terminates in an umbel or very congested pseudoraceme, then the shoots axillary to the last pair of leaves grow out and terminate in umbels, etc. In *S. harleyi* the same thing occurs, but each umbel contains only two (or rarely three) flowers, with each flower subtended by a tiny scarious bract. One or both of the subtending axillary buds produce shoots and the process is repeated many times, resulting in the twiggy, intricate habit.

Stigmaphyllon mathiasiae W. R. Anderson, sp. nov.

Fig. 2

Banisteria cornifolia var. *seibertii* Macbr., Fl. Peru, Field Mus. Nat. Hist., Bot. Ser. 13 (pt. 3): 826. 1950. Type: Seibert 2122 (US! holotype; MO! isotype).

Liana lignosa, ramis sericeis. Folia decussata; lamina foliorum majorum 10-16(-19) cm longa, 6-10(-11.5) cm lata, elliptica vel ovata vel suborbicularis, basi obtusa vel rotundata vel raro paulo cordata, apice abrupte acuminata, matura supra glabra vel basi costa sericea et saepe nitida, subtus sparse sericea costa densius sericea praecipue versus basim, eglandulosa vel margine aliquot parvis glandulis (laesionibus?) sessilibus munita, reticulo subtus visibili vel prominulo supra plerumque prominenti; petiolus 10-20(-30) mm longus, sericeus, apice vel prope apicem biglandulosus; stipulae minutae (circa 0.2 mm longae), subulatae, in ramulo prope basim petioli portatae. Inflorescentia dichasium, floribus in pseudoracemis congestis (10-)15-35-floris portatis; pedunculus florifer 0-0.5 mm longus; bractea bracteolaeque 0.5-1.5 mm longae, triangulares vel ovatae. Pedicellus 7-15 mm longus, sericeus. Alabastrum circinatum. Sepala glandulas 1.0-2.5 mm superantia, 1.3-1.5 mm lata, apice rotundata, abaxialiter sericea, adaxialiter glabra, 4 lateralia biglandulosa glandulis 2-3 mm longis, compressis, apice plerumque revolutis, 2-3 saepe decurrentibus. Petala glabra, margine repanda vel erosa et eglandulosa, 4 lateralia lutea, patentia, ungue 0.5-1.5 mm longo ala-

to, limbo 7.5-11.0 mm longo latoque, obovato vel orbiculari; petalum posticum luteum nervis rubris, $\pm$ erectum, ungue 2.5-3.0 mm longo, crasso, limbo 7.0-9.0 mm longo latoque, $\pm$ orbiculari. Filamenta 1.8-2.5 mm longa, recta vel apice reflexa, glabra vel abaxialiter paucipilifera, $1/4 - 1/2$ connata; antherae 0.9-1.4 mm longae, omnes 10 fertiles, 3 posteriores minores, glabrae vel paucipiliferae praecipue basi, connectivo rubro. Ovarium ca. 1.3 mm altum, dense sericea, 3 carpellis omnino connatis omnibus uniovulatis; styli 3, 1.5-2.5 mm longi, dense sericei vel tomentosi in dimidio proximali, divergentes distaliter recurvati, subaequales anticus crassior et saepe paulo longior, apice truncati et rotundati, stigmatibus apicali vel parum interno. Samara 45-55 mm longa, sparse sericea vel glabrata; nux globosa 7 x 10 mm, in lateribus reticulata non vel vix cristata, sine carpophoro; ala dorsalis 40-45 mm longa, 17-20 mm lata, basi latissima et appendicula rotundata 3-4 mm alta munita.

TYPE: Perú, Loreto, Pucallpa-Aguaytía road, Km 34 just west of Tournavista, 31 Jul 1962 flr/frt, Mathias & Taylor 6078 (MICH, holotype; Col., F, LA, MBM, MO, NY, RB, U, ^USM, isotypes).

PARATYPES: PERU. Loreto: Prov. Coronel Portillo, cerca a Neshuya, entre Pucallpa y Tingo María, selva tropical, 250-260 m, Aug fl/frt, Ferreyra 17226 (US); Pucallpa, 200 m, Aug flr, Soukup 3075 (F); Pucallpa, Tessmann 3106 (NY, S). Huanuco: Río Pachitea 20 km arriba de la confluencia con el Río Ucayali, en campo abierto, 300-400 m, Sep flr, Schunke V. 2169 (NY). Madre de Dios: Iberia, vic. Río Tahuamanu, in old clearing, Aug flr/frt, Seibert 2122 (MO, US). BRAZIL. Acre: near mouth of Rio Macauhan (tributary of Rio Yaco), 9° 20' S, 69° W, on terra firme, Aug flr, Krukoff 5300 (F, MICH, MO, NY, US) and Krukoff 5536 (NY). Amazonas: near mouth of Rio Embira (tributary of Rio Tarauaca), 7° 30' S, 70° 15' W, old secondary clearing, Jun flr/frt (NY).

This distinctive species is named in honor of Mildred E. Mathias, student of *Umbelliferae* and intrepid field botanist. It is notable for these characteristics: Style-tips unappendaged and dorsally rounded; stamens all fertile and hardly differentiated; samara wing with a rounded projection at the adaxial base; pedicels sessile or subsessile; inflorescences many-flowered; lamina rounded at the base and thinly sericeous below, not at all to-

mentose; calyx glands reflexed at the apex. The rounded style-tips are especially interesting. Other species of *Stigmaphyllon* with unappendaged style-tips usually have them at least triangular dorsally, but here the loss has been complete. However, other characteristics, especially those of the inflorescence and fruit, show that this species is certainly those of the inflorescence and fruit, show that this species is certainly assignable to *Stigmaphyllon*. The only other species in western South America with unappendaged style-tips are *S. bogotense* Tr. & Pl., *S. primaevum* Nied., and *S. felixii* Cuatr. The first two differ from *S. mathiasiae* in having the lamina tomentose below and often cordate at the base; also, their pedicels are pedunculate, their samaras are smaller, and their calyx glands are appressed. *Stigmaphyllon felixii* has smaller leaves, triangular instead of rounded style-tips, few-flowered inflorescences (4-6 flowers per umbel), pedunculate pedicels, smaller samaras, and appressed calyx glands.

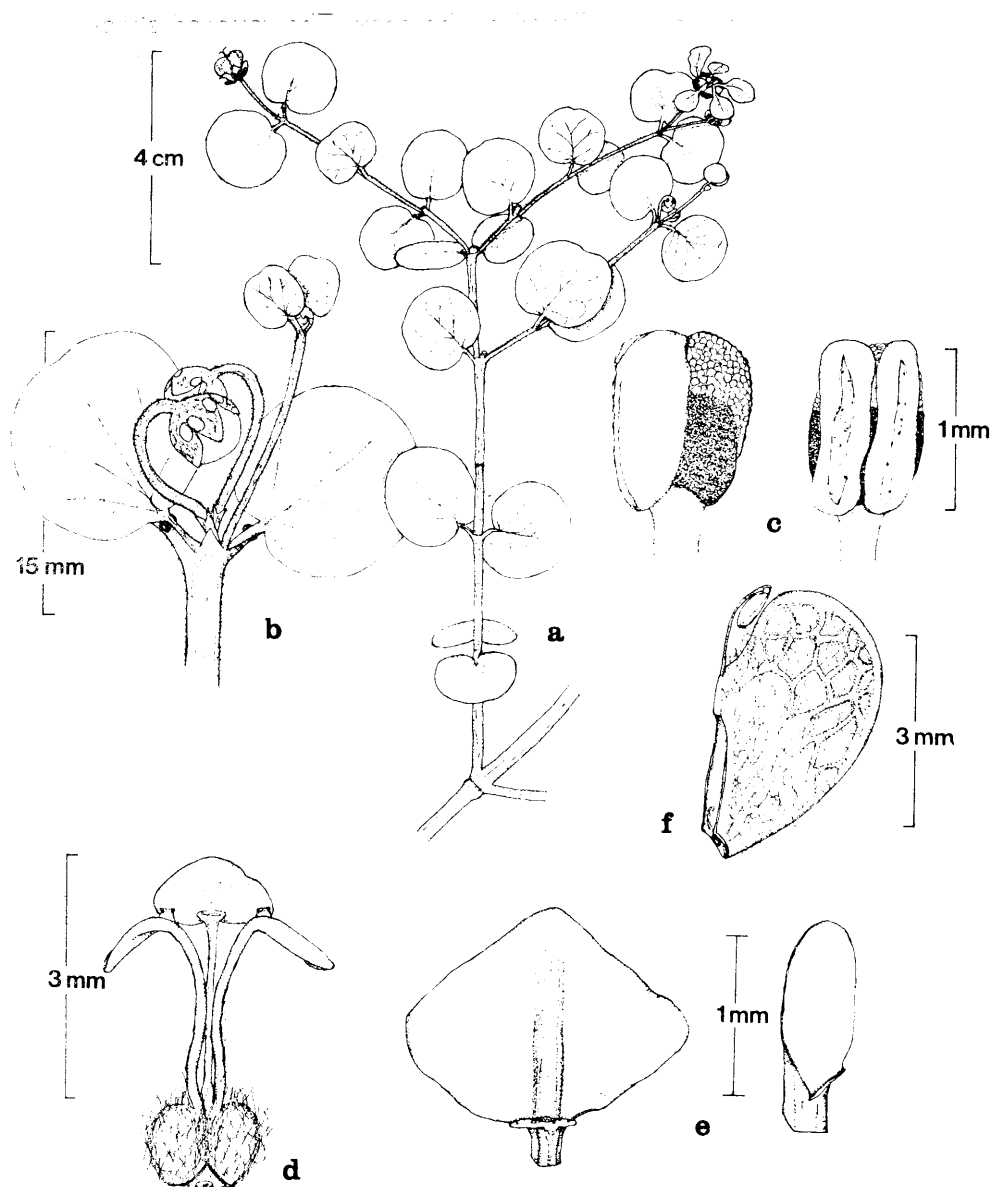


Fig. 1. *Stigmaphyllon harleyi*. a) Flowering branch; b) inflorescence; c) anthers: side view (left), adaxial view (right); d) gynoecium, as viewed from the posterior petal, with the anterior style in the center; e) style appendages as viewed from above: anterior style (left), posterior style (right); f) mericarp. Drawn from the type.

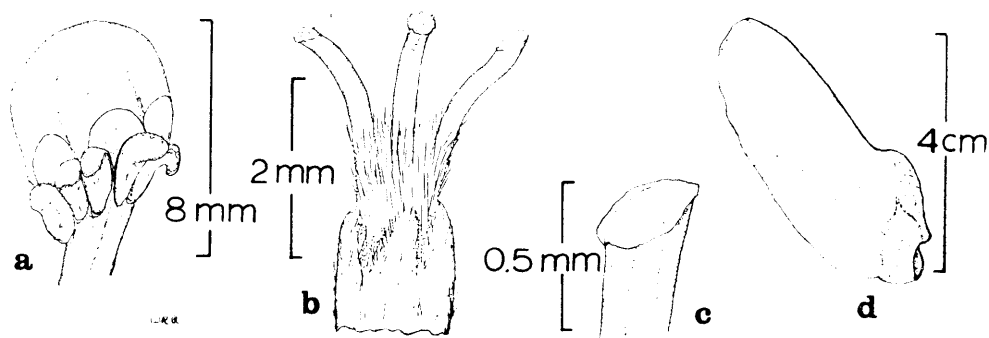


Fig. 2. *Stigmaphyllon mathiasiae*. a) Flower bud; b) gynoecium, anterior style in the center; c) apex of a posterior style, side view; d) samara. Drawn from the type.

CORRECTIONS

- p. 1 footnote: "Building" not "Bulding" and "Arbor" not "Arbos"
- p. 2 line 13: "orbiculari," not "orbicular:"
 line 16: "biglandulo-" not "biglandula-"
 line 23: "longi," not "longi;"
 line 33: "11° 7'" not "11° 7,"
- p. 3 line 2: "(Cav.) Nied." not "Cav."
 line 3: "Brachypterys. In" not "Brachypterys In"
 line 5: "foliose" not "folioso"
 line 6: "narrow" not "narrw"
 line 8: "cence" not "cense"
 line 32: "0.5" not "0,5"
- p. 4 line 17: "Pucallpa" not "Puccallpa"
 line 19: "COL" not "COL." and "USM" not "uSM"
 line 24: "Huánuco" not "Huanuco"
- p. 5 lines 6-7: "fruit, show that this species is certainly assignable to"
 delete repeated "those of ... is certainly"