

NEW PLANTS IN CUBA II.

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The present study (second publication of the authors in this series) involves the descriptions of further 16 new taxa discovered in Cuba by the authors on their expeditions of vegetation mapping. At the same time the paper contains the taxonomic revision of some problematic polymorphic species of the Flora of Cuba, e.g.: *Amyris stromatophylla* P. Wils., and *Tabebuia petrophila* Greenm. as well as the phototypes or photoisotypes of some earlier (in BORHIDI, A.—MUÑIZ, O.: New Plants in Cuba I; Acta Bot. Acad. Sci. Hung. 17, 1971. 1-36.) taxa.

The new taxa are as follows: Rutaceae: *Amyris* (2 ssp.); Euphorbiaceae: *Leucocroton* (1 sp.), *Platygyne* (2 sp.); Buxaceae: *Buxus* (1 sp., 1 var.); Celastraceae: *Gyminda* (1 sp.); Sapindaceae: *Thouinia* (1 var.); Rhamnaceae: *Rhamnidium* (1 sp.); Bignoniaceae: *Tabebuia* (1 ssp.); Gesneriaceae: *Rhytidophyllum* (1 sp.); Rubiaceae: *Exostema* (1 var.); Asteraceae: *Heptanthus* (1 sp.), *Eupatorium* (1 sp.), *Vernonia* (1 var.).

Rutaceae

Amyris stromatophylla P. Wils.

- 1 a Foliola obtusa, emarginata vel incisa, apice non mucronata, margine integro, pedunculus 2—8 mm longus 2
b Foliola plerumque acuta, apice mucronata, margine denticulato-serrato; inflorescentia laxa, pedunculus 5—15 mm longus (Valle de Yumuri, solo calcareo) ssp. *yumuriensis*
2 a Foliola oblongo-obovata vel oblongo-elliptica, 2—3 cm lata; fructus 5—7 mm diam. (Sierra de Nipe; solo lateritico in rupestribus serpentinicis) ssp. *stromatophylla*
b Foliola rhomboidea vel late elliptica, 3—5.5 cm lata; fructus globosus, 8—10 mm diam. (Sierra de Moa; solo lateritico in rupestribus serpentinicis) ssp. *moaënsis*

ssp. *yumuriensis* Borhidi et Muñiz ssp. nova

A typo differt: foliolis apice acuminatis vel acutis, mucronatis, margine serrulato-denticulato, inflorescentia laxiore, pedunculo 5—15 mm longo et 0.5 mm in diam., pedicellis 2—5 mm longis, 0.2—0.3 mm crassis.

Typus: Prov. Oriente: Valle de Rio Yumuri inter Baracoa et Maisi; leg.: HNO LEÓN 17400 LS.

ssp. moaënsis Borhidi et Muñiz *ssp. nova*

A typo differt: foliis rhombeis vel late ellipticis, ovatis vel obovatis, apice profunde incisis, 6–9 cm longis, 3–5.5 cm latis, inflorescentia terminalis, densa, breviter corymbosa, pedunculo 3–4 mm longo et 0.8–1.0 mm in diam., pedicellis 1–3 mm longis, fructibus 8–10 mm diam.

Typus: Prov. Oriente: Moa: Mina Delta; leg. J. ACUÑA 12453 SV. — Moa: Mina Cayoguan; leg. HNO ALAIN, CLEMENTE et CRISÓGONO, AL. 882. LS.

Euphorbiaceae

***Leucocroton moaënsis* Borhidi et Muñiz *sp. nova* (Fig. 1)**

Frutex vel arbor parva dioica, 4–5 m alta. Rami vetustiores glabri, cortice grisacei, striati, hornotini squamulis inaequaliter et radiatim ramulosis albidis floccoso-tomentosuli, internodiis variis, 4–20 mm longis. Folia petiolis 6–10 mm longis, supra profunde sulcatis, glabrescentibus, muricato-tuberculatis, anguste oblongo-oblancoolata vel lineari-lanceolata, 5–13 cm longa, 0.8–1.6 cm lata, apice obtusa et mucronulata, basi longe cuneata, nervo medio supra anguste profundeque impresso, subtus valde prominente, lateralibus utroque latere 25–40 pinnatim dispositis sub angulo 80–90° abeuntibus, plerumque rectis, supra obsoletis, subtus valde prominentibus, reticulatis et transversim anastomisantibus, in statu juvenili utrinque dense albo-lanata, demum glabra, supra nitida et in sicco olivaceo-viridia, subtus opaca, pilis multiradiatis albedo-tomentosa, adjectis pilis ad nervos venasque paullo longioribus obtecta, postremo glabra, vel inter nervos, pulverulenta margine revoluta coriacea.

Inflorescentiae in apice ramorum ex axillis hypsophyllorum bracteiformium lineari oblancoolorum, 5–8 mm longorum prodeutes, masculae tantum visae, pedunculis 0.8–1.5 cm longis, pilis rectis albo-pubescentibus, apice capitatae, 6–10 mm in diametro. Bractee lanceolatae, obtusae, concavae, usque ad 3 mm longae, crassae; pedicelli nulli. Flores masculi: Alabastra globulosa, albo-tomentosa, usque ad 2 mm diam. Sepala 5, ovata, acuta. Discus tenuis. Stamina 8, margine receptaculi convexi dense albedo-pilosi inserta; antherae subquadrate. Ovarii rudimentum nullum. Inflorescentia feminea nobis ignota.

Obs.: E sectione *Asystemon* Urb., *L. Ekmanii* Urb. affinis, quis foliis obovatis, 2–5.5 cm latis, subtus permanente flavido-tomentosis, nervis lateralibus supra tenuiter prominulis et reticulatis, pedunculis 2–4 cm longis, quadrangularibus, 1–2 mm crassis, flavido-floccosis, sepalis obtusis bene discrepat

Typus: Prov. Oriente; Region de Moa; in pluviisilvis saxosis serpentinosis montanis reservationis Cupeyal del Norte, supra rivum Rio Toa, 800 m. s. m. Leg. A. BORHIDI, O. MUÑIZ et S. VAZQUEZ, 10. II. 1970. SV sine num.; isotypus: Bp.

Platygyne triandra* Borhidi *sp. nova

Caulis volubilis fruticosus; folia subcoriacea, breviter petiolata, linearia vel lineari-elliptica, 1.5–3 cm longa, 0.6–1.2 cm lata, apice acuta et mucronato-denticulata, basi rotundata vel subcordata, margine denticulato, supra lucida, sparse ferrugineo-setulosa, demum glabra, subtus pallida et glabrescentia, ad nervos pilis brevibus et patentibus ferrugineis, pilis urentibus utrinque obsita, nervis utrinque prominentibus.

Flores masculini in inflorescentia spiciformi, densiter bracteosa, 1–2 cm longa, pedicellis brevibus vel nullis; sepalia 3–4, late ovata, 1.5–2 mm longa, apice acuta; stamina 3 (4). filamentis brevibus, glabris; receptaculum ferrugineo-pilosum. Flores feminei: sepalia 5–6, lanceolata, acuta, 3.5–4.5 mm longa, ferrugineo-pilosa; styli 3, oblongo-lineares, apice emarginati et breviter bifidi; ovarium triloculare, extus albo-setulosum.

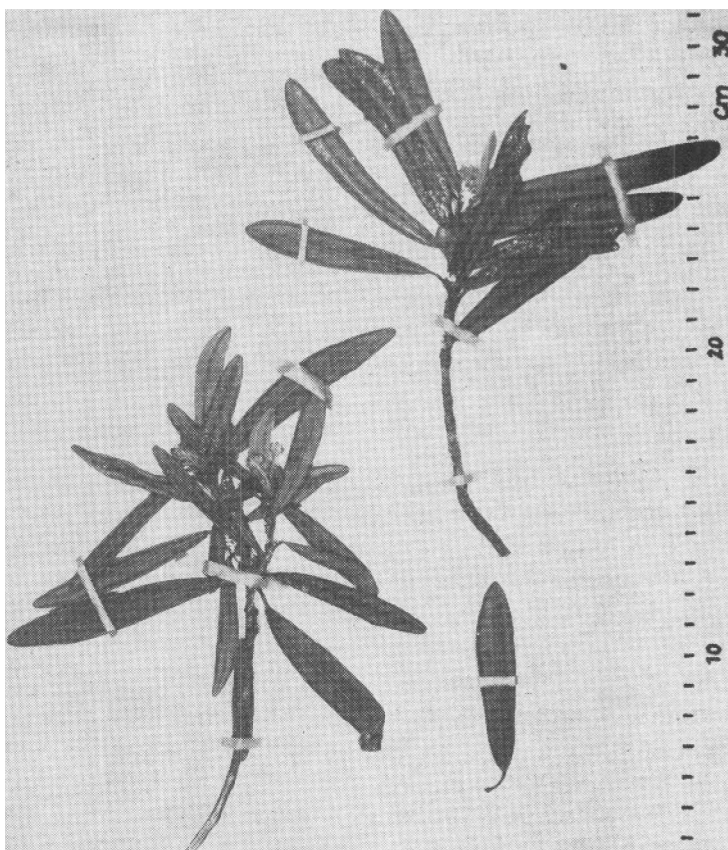


Fig. 1. *Leucocroton moaënsis* Borhidi et Muñiz, isotype specimen, Bp.

Obs.: Habitu, forma foliorum *P. hexandrae* (Jacq.) Muell. Arg. affinis, quae staminibus 5—8, sepalis masculinis lanceolatis, foliis subtus albo-sericeis, stylis apice dilatatis et crenulatis valde differt.

Typus: BORHIDI 1721. Prov. Oriente; Sierra de Nipe: in fruticetis sempervirentibus montanis solo lateritico serpentinoso montis. Loma Mensura supra Pinares de Mayari 650—950 m. s. m. — Leg. A. BORHIDI et O. MUÑIZ, 18. VII. 1970. Bp; isotypus: SV.

Specimina examinata: LF 1593; Sierra de Nipe: Finca la Caridad, leg. M. LOPEZ FIGUEIRAS. — Alain 4666; Falda Sur de la Sierra de Cristal, leg. HNO ALAIN et M. LOPEZ FIGUEIRAS. — LF 1255; Moa: Cerro de Miraflores de Cananova, leg. M. LOPEZ FIGUEIRAS. — LEÓN 21246; Región de Moa, leg. HNO LEÓN.

Platygyne obovata Borhidi sp. nova (Fig. 2)

Caulis volubilis fruticosus; folia chartacea, usque ad 5 mm longe petiolata, petiolis dense ferrugineo-setulosis, 3–5.5 cm longa, 1–3 cm lata, obovata vel oblongo-obovata, apice rotundata et mucronulato-denticulata, basi obtusa vel rotundata, rariter subcuneata, margine remote mucronulato-denticulata, pilis urticantibus utrinque obsita, supra sparse ferrugineo-setosa, demum glabra, subtus ad nervos ferrugineo-setoso-hirsuta, demum glabrescentia, nervis supra prominulis, subtus valde prominentibus.

Flores masculini fasciculati, pedicellati, sepala 4–6, late ovata, 2–2.5 mm longa, apice acuta, ferrugineo-hirsuta; stamina 5–8, antherae ellipticae, filamenta glabra, receptaculum ferrugineo-pilosum. Flores feminei: sepala 5–6, lanceolata vel lineari-lanceolata, 5–7 mm longa, acuta et acuminata; styli 3–4, oblongo-ovati vel lineari-oblongati, pars libera 3–4 mm longa, apice integri et acuti. Ovarium albo-setulosum, 3 (4)-loculare; ovulum 1.

Obs.: Habitu, forma foliorum *P. Leonis* Alain affinis, quae filamenta pilosa, stamina 8–10, antheris orbicularibus bene differt. *P. volubilis* Howard a planta nostra foliis basi cuneatis subtus pilis urentibus absentibus sepalis femineis 6–9, longioribus et styli bifidis differt.

Typus: Bp 503529. Prov. Oriente: Region de Moa; in pinetis humidis vallis rivi Rio Toa, in reservatione Cupeyal del Norte, 500 m. s. m. Leg. A. BORHIDI, O. MUÑIZ et S. VAZQUEZ, 9. II. 1970. Isotypus: SV.

Specimina examinata: Bp 503298; Prov. Oriente: Region de Moa, in pluviisilvis saxosis montanis vallis superioris rivi Rio Toa, in reservatione Cupeyal del Norte, 800 m. s. m. Leg. A BORHIDI, O. MUÑIZ et S. VAZQUEZ, 10. II. 1970. — Prov. Oriente: Region de Moa, in pinetis pr. pag. Punta Gorda. Leg. A. BORHIDI, O. MUÑIZ et S. VAZQUEZ, 18. II. 1970. — Prov. Oriente: Region de Moa, in pinetis ad Cayo Chico supra pag. Moa, in 450 m. s. m. Leg. A. BORHIDI, O. MUÑIZ et S. VAZQUEZ, 25. III. 1970. — Prov. Oriente: Region de Baracoa, in fruticetis sempervirentibus serpentinosi ad “El Pino”, Peladeros de Jauco inter pag. La Tinta et Baracoa. Leg. A. BORHIDI, O. MUÑIZ et S. VAZQUEZ, 21. III. 1970.

Euphorbia Munizii Borhidi (Fig. 3)

See the description of the species in Acta Bot. Acad. Sci. Hung., 17, (1971) p. 11.

Euphorbia helenae Urb. ssp. **grandifolia** Borhidi et Muñiz (Fig. 4)

Diagnosis of the subspecies to be found in Acta Bot. Acad. Sci Hung., 17, (1971) p. 11.

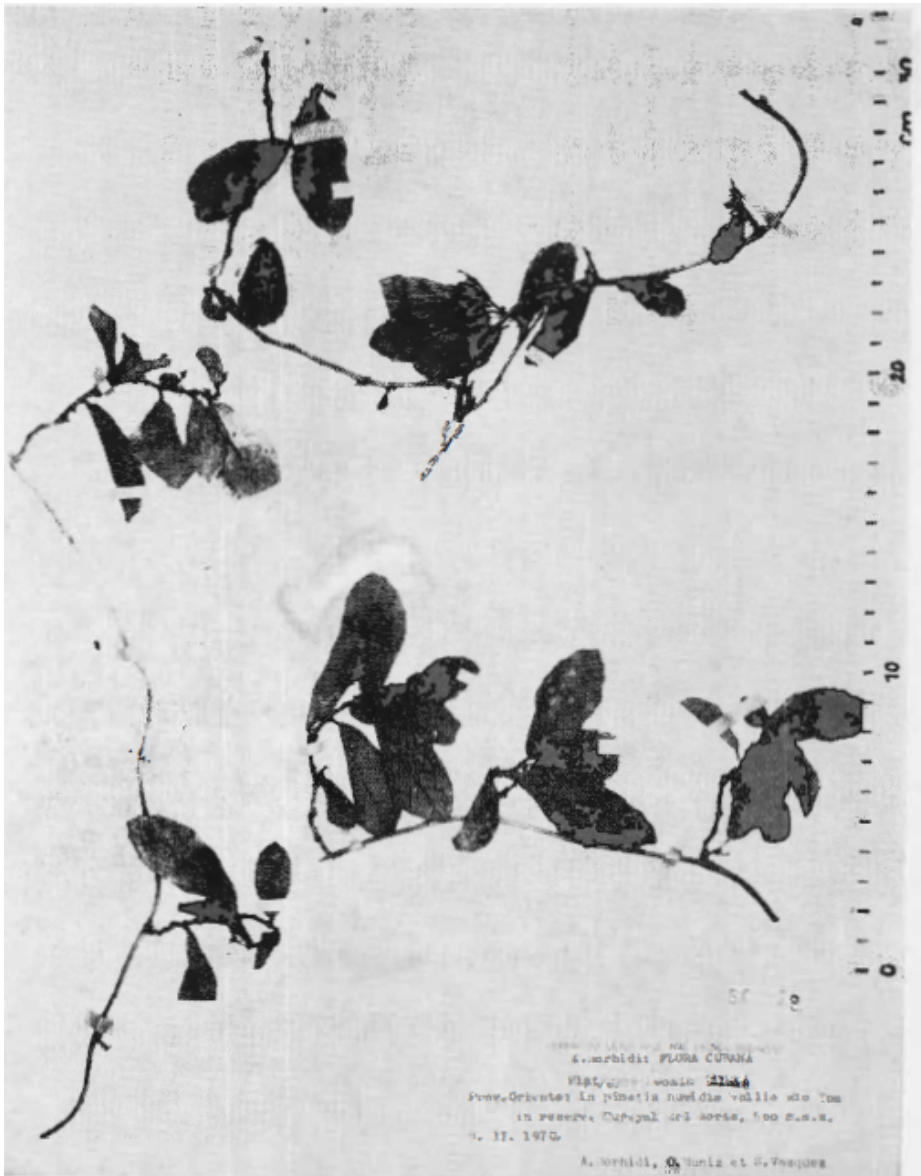


Fig. 2. Type specimen (Bp 503529) of Platygynis obovata Borhidi

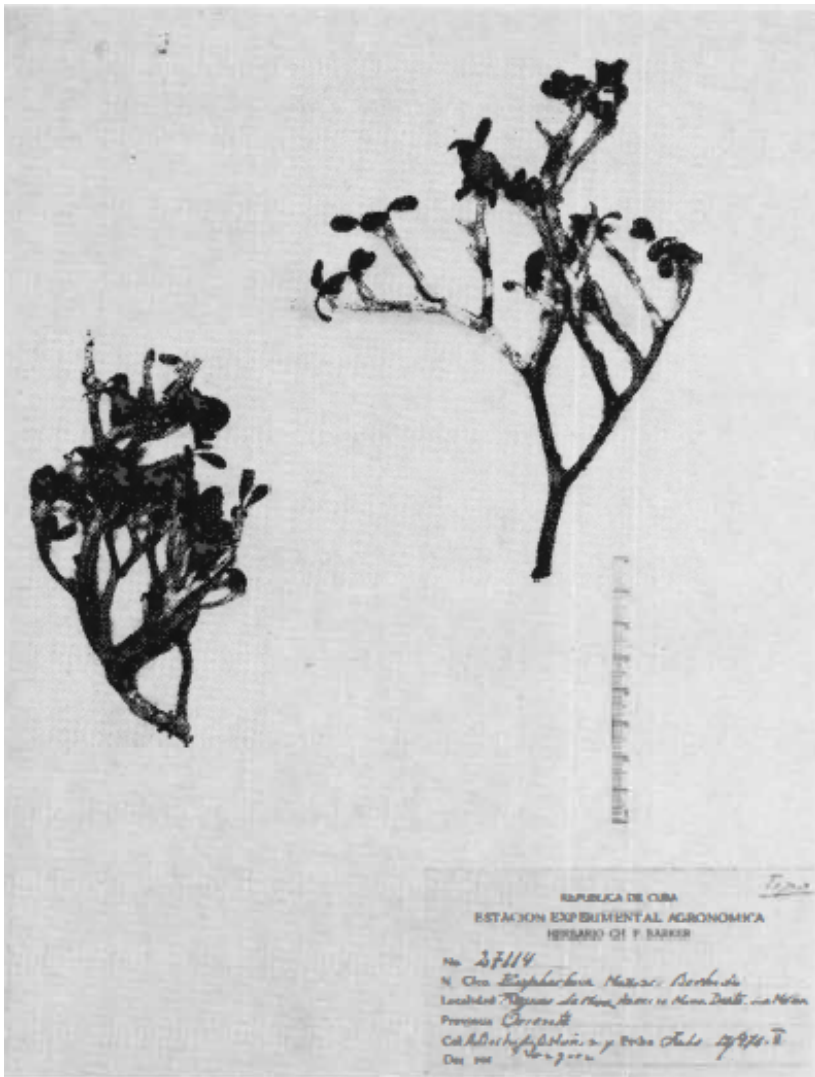


Fig. 3. Type specimen (SV 27114) of *Euphorbia Munizii* Borhidi

Buxaceae

Buxus baracoënsis Borhidi et Muñiz sp. nova

Frutex 2–3 m altus. Rami vetustiores quadrangulares, hornotini anguste 4-alati, glaberrimi; internodiis 1–1.5 cm longis. Folia coriacea, 2–3 mm longe petiolata, petiolis alatis, basi dilatatis, ad nodum proximum decurrentibus, elliptica vel ovato-elliptica, basi breviter angustata et in petiolum contracta, antice rotundata et emarginata, minute mucronulata, 1–1.8 cm longa, 0.5–0.9 cm lata, nervo medio supra impresso, subtus inferne crassiuscule prominente, versus apicem plano vel paullo impresso, nervis lateralibus utrinque inconspicuis,



Fig. 4. Type specimen (SV sine numero) of *Euphorbia helenae* ssp. *grandifolia* Borhidi et Muñoz

supra in sicco flavo-viridia, nitida, subtus pallide glauca, punctulis albis prominulis dense obtecta, margine incrassata, revoluta.

Inflorescentiae axillares, 2—2.5 mm longe pedunculatae, 6—7 mm longae. Bractee inferiores vacuae, triangulares, acutae, 1 mm longae, flores suffulcantes obtusiusculae, omnes

puberulae et margine dense ciliatae. Flores masculi: pedicelli quadrangulares, 1–2 mm longi; sepala ovato-elliptica, obtusa vel truncata, 1.5–2 mm longa, margine breviter ciliata, filamenta 1.4–1.8 mm longa, superne paullo dilatata, antherae oblongo-ellipticae, 0.6–0.8 mm longae. Ovarium rudimentum ovoideum. Flores feminei: sepala ovata, externa 0.6–0.7, interna 1 mm longa, dense ciliata. Ovarium globosum, minute et dense albido-pilosum, 1–1.5 mm in diametro, stylis 2–3-plo brevius. Styli inter sese liberi, 2.5–3 mm longi, in 3/4–4/5 parte superiore stigmatosi, stigmatibus late linearibus, aequilatis, 0.6 mm latis, intus longitrorsum profunde sulcatis ad apicem recurvis, dimidii intus convexis.

Obs.: *B. Shaferi* (Britt.) Urb. affinis, quae foliis majoribus, 1.5–3.5 cm longis, nervis lateralibus conspicuis, capsula stylis duplo longiore valde discrepat.

Typus: Prov. Oriente: in fruticetis serpentinosi "El Pino" ad Palderos de Jauco, inter opp. Baracoa et pag. La Tinta. Leg. A. BORHIDI, O. MUÑIZ et S. VAZQUEZ, 21. III. 1970. SV sine numero; isotypus: Bp.

Buxus crassifolia (Britt.) Urb.

var. *crassifolia*: foliis elliptico-obovatis, 3–6 cm latis;

var. *oblongata* Borhidi et Muñiz var. nova: foliis oblongo-ellipticis, 1.5–2.5 cm latis. Typus: CLEMENTE 3627; Prov. Oriente: Region de Moa, Rio Yagrumaje. LS.

Celastraceae

Gyminda orbicularis Borhidi et Muñiz sp. nova

Arbor parva, dioica, ramosissima, usque ad 3 m alta; ramuli hornotini quadrangulares, brunnescentes, glabri, vetustiores cortice albicanti glabri adhaerente. Folia opposita vel subopposita usque ad 1 mm longe petiolata, orbicularia vel late orbicularia, 5–10 mm longa et 6–11 mm lata, utrinque glabra, supra in sicco, pallide glaucescentia, subtus pallide punctata, apice emarginata, basi rotundata vel subcordata, margine minute crenulata, incrassata et revoluta, nervo medio utrinque prominulo usque ad dimidium limbi, apicem versus applanato vel evanescente, nervis lateralibus supra nullis, subtus in statu juvenili conspicuis, paullo impressis, 2–3 paribus arcuatis, reticulato anastomisantibus demum obsoletis, coriacea vel subcoriacea.

Inflorescentia mascula tantum visa: cyma 3-(5)-flora, axillaris; pedunculus 4–8 mm longus, quadrangularis, glaber, cyma bibracteata, bracteis ovatis, 0.5–0.7 mm longis; flores laterales 1–1.5 mm longe pedicellati, minores, 4-bracteatis, in alabastro 0.5 mm longi, saepe steriles, sine rudimentum ovarii. Flos centralis sessilis, major, in alabastro 1 mm in diametro, sepala 4, ovata, 0.5–0.7 mm longa, basi connata, margine pilosa; petala 4, orbicularia, 1 mm longa, concava, alba vel rosea, glabra. Discus applanatus, 4-lobulatus, stamina 4, in sinibus disci inserta, filamenta glabra, 0.5 mm longa, antherae globosae vel late ovatae, 0.5 mm longae; rudimentum ovarii in disco connatum, verisimiliter 2-loculare. Styli 2, basi connati, sublati, 0.1–0.2 mm longi. Flores feminei fructusque ignoti.

Obs.: Species generis *Gymindae* Sarg. adhuc monotypici cognati. *G. latifolia* (Sw.) Urb. foliis obovatis, basi cuneatis, multo majoribus, sepalis rotundatis, floribus duplo majoribus optime differt.

Typus: SV 27123; Prov. Oriente: in fruticetis saxosis calcareis aridis supra vallem rivi Rio Jauco pr. pag. Jauco. Leg. A. BORHIDI, O. MUÑIZ et S. VAZQUEZ, 17. III. 1970. Isotypus: Bp.

Sapindaceae

Thouinia elliptica Radlk.var. *rotundata* Borhidi et Muñiz var. nova

A typo differt foliis minoribus, late ovatis vel orbicularibus, apice basi que rotundatis, margine integro.

Typus: Prov. Oriente: Yunque de Daiquiri, in saxosis calcareis aridis, alt. 50 m. s. m. Leg. A. BORHIDI 29. XI. 1969. SV. sine numero; isotypus: Bp.

— Prov. Oriente: Yunque de Daiquiri, leg. M. LOPEZ FIGUEIRAS.

Rhamnaceae

Rhamnidium potrerilloanum Borhidi et Muñiz sp. nova

Frutex 1–2 m altus. Rami vetustiores teretes, striati, sparse lenticellati, ± glabri, hornotini dense breviterque puberuli, paullo striati, fuscescentes. Stipulae interpetiolares non connatae, anguste oblongo-lanceolatae, apice brevissime bifidae, 3–4 mm longae, dorso 2 nervis prominentibus, in apiculos excurrentibus, margine ciliatae. Folia opposita vel subopposita 3–5 mm longe petiolata, petiolis 4–6 glandulis prominentibus obsitis, puberulis, oblongo-ovata, oblongo-elliptica vel oblongo-obovata, basi breviter cuneata, truncata vel rariter rotundata, antice subsensim angustata, apice ipso acuta vel obtusa, et brevissime mucronata, rariter emarginata, 3.5–6 cm longa, 1.2–2 cm lata, nervo medio supra vix impresso, subtus valde prominente, nervis lateralibus utroque latere 8–11, sub angulo 50–60° abeuntibus, utrinque tenuiter prominentibus et anastomisantibus, minute reticulatis, margine subcrenulata vel undulata, plana vel anguste recurvata, supra nitida, obscure viridia, in sicco brunnescentia, irregulariter prominenti-punctata, subtus glauco-viridia, in sicco flavo-viridia, opaca, punctis minoribus nigro-punctata, pergamacea vel subcoriacea.

Inflorescentiae fructiferae tantum visae, axillares, biflorae, 7–10 mm longe pedunculatae, pedunculis puberulis, pedicelli 1–3 mm longi, puberuli. Calyx totus sub fructu persistens; tubus semiglobosus, lobi 5, triangulares, 1 mm longi. Petala non visa. Drupae subglobosae vel breviter obovatae, stylo persistente apice mucronatae, 5 mm longae, 4 mm diam., nitidae, biloculares, bispermae.

Obs.: *Rh. nipensi* Urb. affinis, quod ramis hornotinis glabris, foliis basi subcordatis, nervis lateralibus utroque latere 6–7, inflorescentia pruinosa, glabra, pedicellis 5–7 mm longis, drupa duplo majore et semine solitario bene distinguenda.

Typus: Prov. Las Villas; Sierra de Escambray, in fruticetis calcareis montanis montis Pico Potrerillo, supra opp. Trinidad, 950 m. s. m. Leg. A. BORHIDI et O. MUÑIZ, 25. V. 1970.

Clusiaceae

Clusia moaënsis Borhidi et Muñiz (Fig. 5.)

See the description of the species in l. c. p. 17.

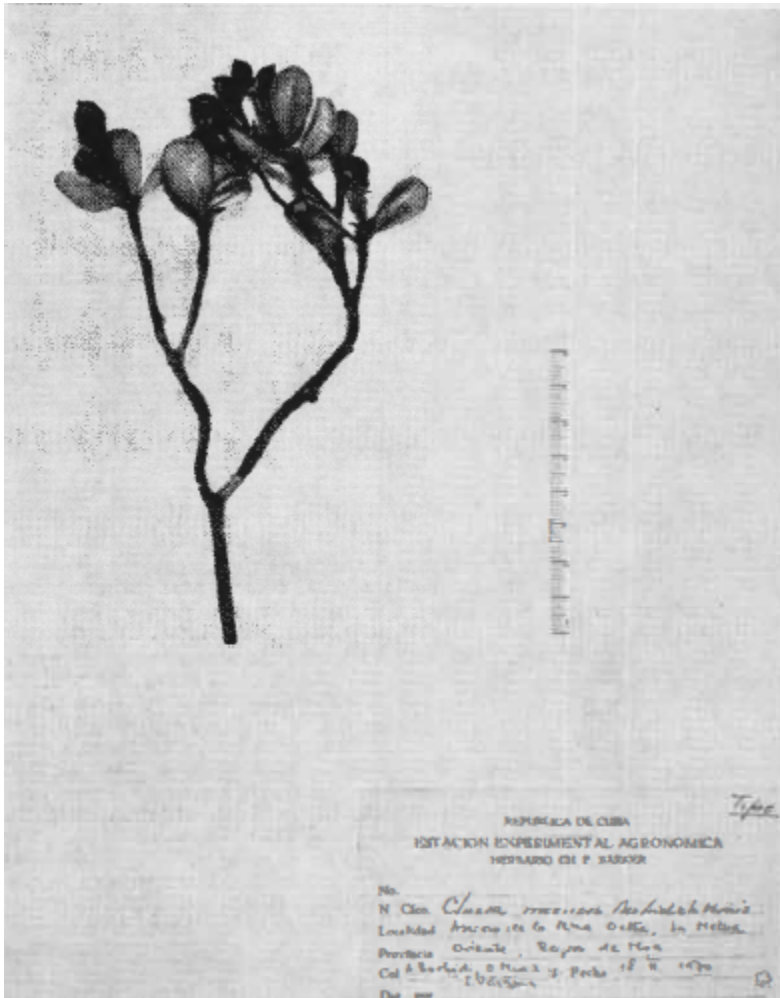


Fig. 5. Type specimen (SV 27135) of *Clusia moaënsis* Borhidi et Muñiz

Myrtaceae

Psidium acunae Borhidi (Fig. 6.)

The diagnosis of the species can be found in l. c. p. 17.

Melastomataceae

Calycogonium Susannae Borhidi (Fig. 7.)

See the description of the species in l. c. p. 18.



Fig. 6. Type specimen (LS Alain 6782) of *Psidium acunae* Borhidi

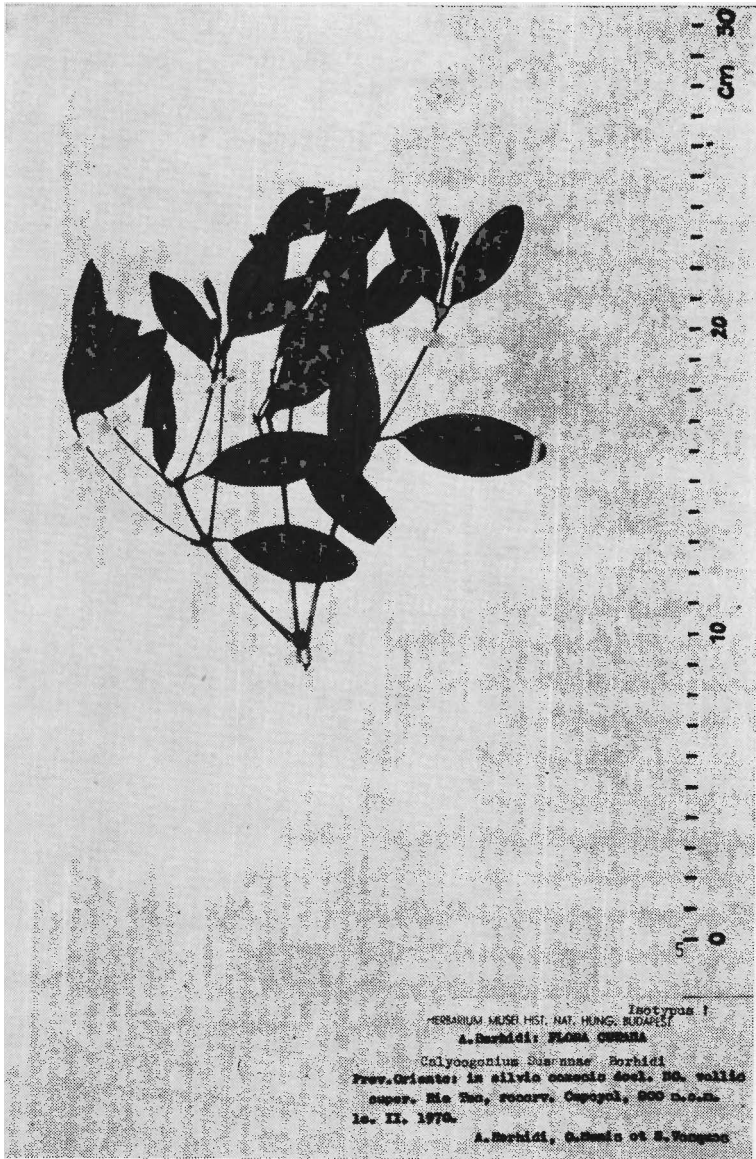


Fig. 7. Isotype specimen (Bp 503369) of *Calycogonium susannae* Borhidi

Bignoniaceae

Tabebuia petrophila Greenm. sensu Alain

- 1 a Folia 2—5 cm longa, apice non emarginata, margine plano; calyx 8—10 mm longus, corolla 4.5—5.5 cm longa, lobis 7 mm latis; capsula 6—7 cm

- longa; prophyllis pedicelli sub calyce abeuntibus (Prov. Las Villas et Oriente)..... **T. petrophila** Greenm.
- b Folia 0.5—2.5 cm longa, apice plerumque emarginata, margine recurvo; calyx 5—8 mm longus, corolla 3—4 cm longa, lobis 12—15 mm latis; capsula 3.5—6 cm longa; prophyllis pedicelli medio vel sub medio abeuntibus (Prov. Pinar del Rio, Habana et Matanzas).... **T. anafensis** Urb.
- 2 a Rami vetustiores ad apicem non spinescentes; folia 1—2.5 cm longa capsulae 4.5—6 cm longae (Prov. Pinar del Rio et Habana) ssp. **anafensis**
- b Rami vetustiores plerumque spiniformes; folia 0.5—1.2 cm longa, capsulae 3.5—4.5 cm longae (Prov. Matanzas) ssp. **Munizii** Borhidi

Tabebuia anafensis Urb. ssp. **Munizii** Borhidi ssp. nova (Fig. 8)

Frutex vel arbor parva, ramosissima. Rami vetustiores teretes, glabri, strigosi, canescentes vel cinerei, apice plerumque spiniformes, hornotini cicatricibus foliorum delapsorum prominulis, internodiis inferne usque ad 1 cm longis, superne decrescentibus, ad apicem saepe subnullis et subsperescentibus, novelli densissime ferrugineo-lepidoti. Folia coriacea, ad apicem ramorum brevium valde conferta, petiolis 0.5—1.0 mm longis, cca. 0.5 mm latis, supra canaliculatis, apice non articulatis; foliola solitaria, persistentia, oblongo-elliptica, oblongo-ovata vel lineari-elliptica, basi obtusa, rotundata vel subcordata plerumque asymmetrica, apice obtusa vel rotundata, plerumque emarginata et brevissime mucronulata, 4—12 mm longa, 3—5 mm lata, nervo medio supra impresso subtus crassiuscule prominente, lateralibus (utroque latere 5—8) supra paullo prominulis subtus bene prominentibus, supra obscure, subtus conspicue reticulato-nervosa, utrinque minute et dense albo- vel flavido-lepidota, margine integro, revoluta.

Flores in apice ramorum 1—3, et in axillis superioribus solitarii; pedicelli 3—8 mm longi, medio vel sub medio prophylla bina, linearia, 1—2 mm longa gerentes; calyx campanulatus, 5—8 mm longus, in statu compresso 4—5 mm latus, basi obtusus vel cuneatus, apice bilabiatus, labiis inaequilongis, tubo 3—5-plo brevioribus, interdum apice incisus, minute et dense ferrugineo-lepidotus. Corolla 3—4 cm longa, tubus in calyce anguste cylindraceo deinde sensim ampliatu, apice in statu compresso 15—18 mm latus, lobi ampli-semiorbiculares, usque ad 12—15 mm lati. Capsula cylindrica, acuminata, 3.5—4 cm longa, 4 mm lata, brunneo-squamosa. Semina cum alis 9—10 mm longa, ipsa 3 mm magna, elliptica vel ovata.

Typus: Prov. Matanzas: Pars superior montis Pan de Matanzas, solo calcareo. Leg. O. MUÑIZ, 16. V. 1970. SV. Isotypus: Bp. — Prov. Matanzas: Peninsula Hicacos, Varadero, leg. HNO LEÓN et W. SEIFRIZ 1940. VII. (LEÓN 17955, exempl. sterile).

Gesneriaceae

Rhytidophyllum mogoticola Borhidi et Muñiz sp. nova (Fig. 9)

Frutex usque ad 1—2 m altus; caulis erectus, simplex, sparse pubescens, inferne glabrescens. Folia ad apicem caulis conferta, breviter (3—12 mm longe) petiolata, oblongo- vel lineari-lanceolata, 7—20 cm longa et 3—5 cm lata, latitudine plerumque 3—5-plo longiora, apice acuminata, margine irregulariter serrulato-crenulata, membranacea, supra non vel vix subbullata, scaberulo-hirsuta, subtus hirsuta et glandulis flavis sessilibus dense disposita.

Inflorescentiae numerosae, multiflorae, folia paullo superantes; pedunculus 10—20 cm longus, dense eglanduloso-hirsutus, bractae lineari-lanceolatae, usque ad 1 cm longae, hirsutae atque subtus glandulis sessilibus flavis obsitae, caducae. Pedicelli 1—5 cm longi, eglanduloso-puberuli. Tubus calycis globosus, inferne rotundatus, eglanduloso-pubescens, lobuli late deltoidei, 4—7 mm longi, longitudine \pm aequilati, breviter acuminati, in fructu atque plerumque

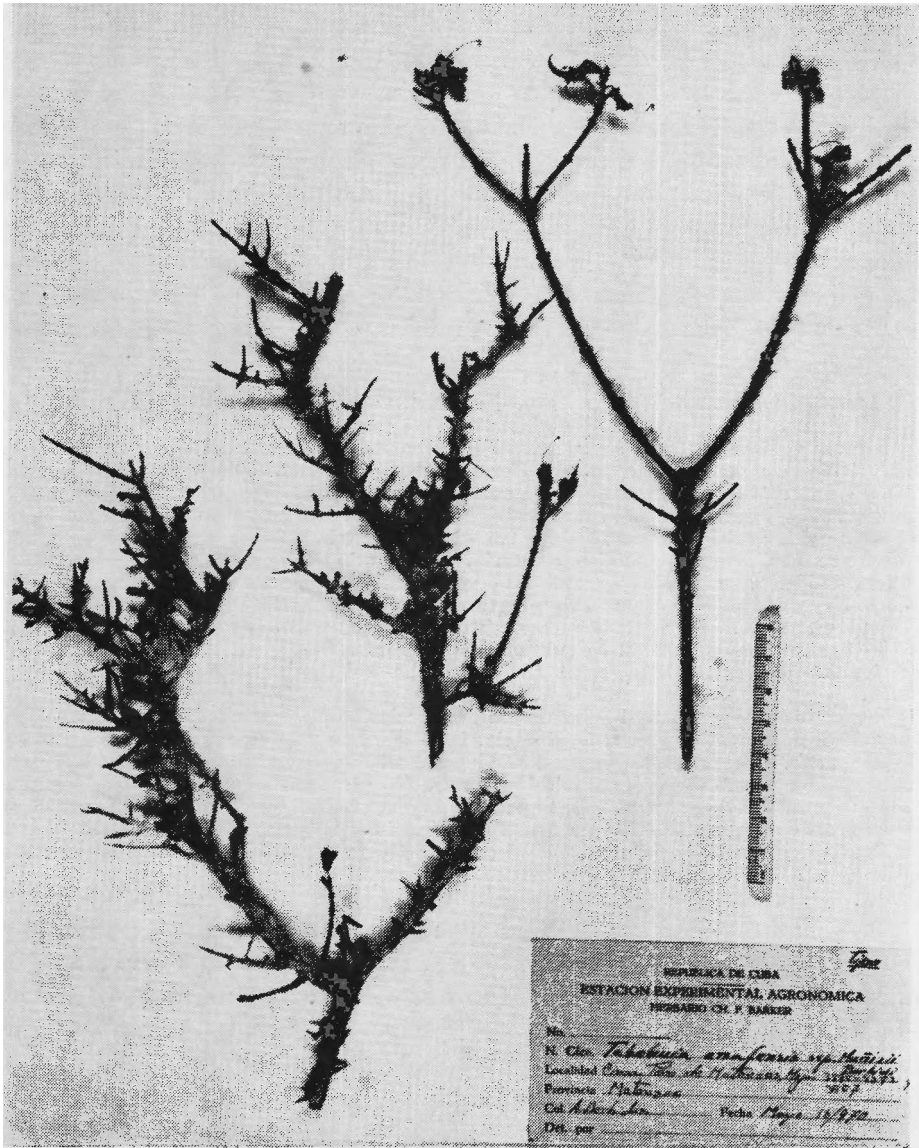


Fig. 8. Type specimen (SV sine numero) of *Tabebuia anafensis* Urb. ssp. *muñizii* Borhidi

in tempore anthesis reflexi, utrinque eglanduloso-puberuli, intus saepe purpurascens. Corolla flavo-viridis vel purpurea, 15–20 mm longa, extus glandulis flavis sessilibus dense obsita; tubus corollae intus glaber, violaceo-maculatus. Stamina paullo exserta. Calyx fructiferus globosus, 6–8 mm diam., lobulis reflexis calycem paullo superantibus, dense pubescentibus. Fructus globosus, apice hirsutus. Semina purpurea, 1 mm longa, lineari-lanceolata, acuminata.

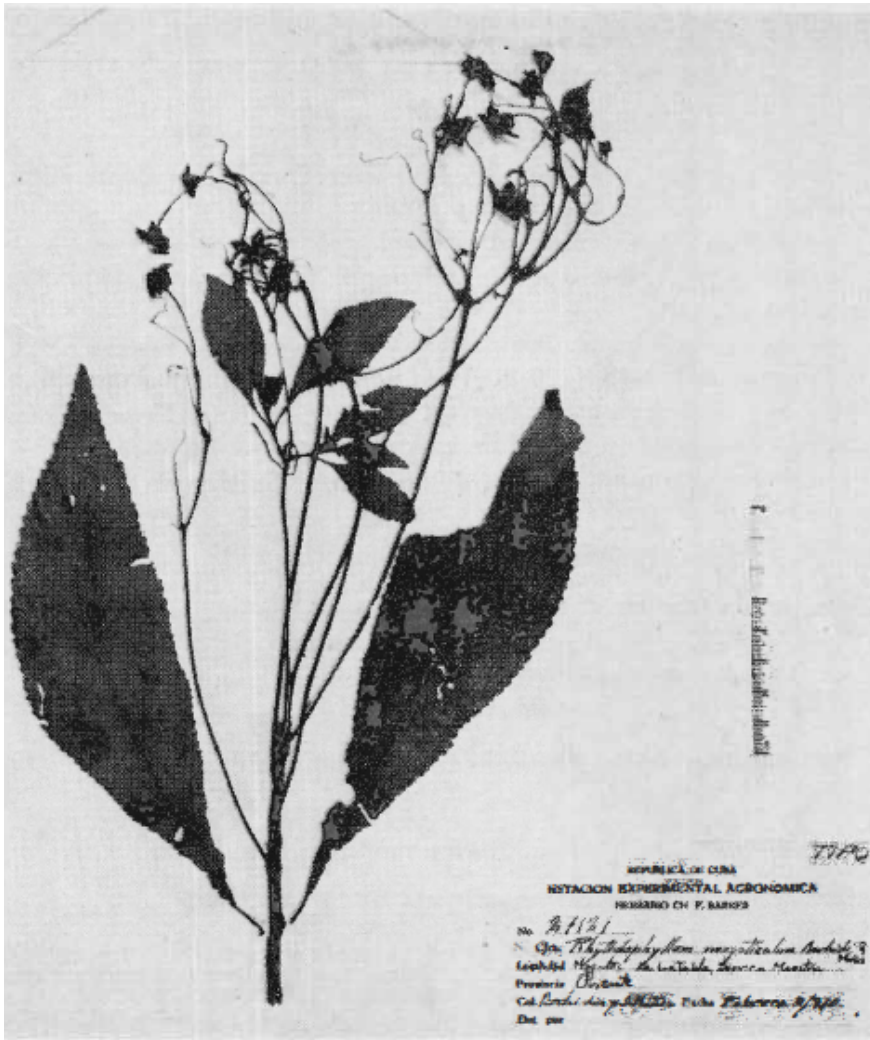


Fig. 9. Type specimen (SV 27121) of *Rhytidophyllum mogoticola* Borhidi et Muñiz

Obs.: *Rh. villosulo* (Urb.) Morton affinis a quo foliis paullo subbullatis, subtus glandulis flavis sessilibus glandulosis, calyce fructifero globoso, lobulis majoribus, corolla extus glandulis sessilibus obtecta valde discrepat. An species hybridogena introgressiva inter *Rh. villosulum* et *Rh. rhodocalycem* Urb.

Typus: Prov. Oriente: Sierra Maestra, in silvis humidis calcareis vallis "mogotis" inter pag. Rihito et La Tabla, 400 m. s. m. Leg. A. BORHIDI, 5. II. 1970. SV 27121; isotypus: Bp.

Rubiaceae

Exostema caribaeum (Jacq.) Roem. et Schult.

var. *pubescens* Borhidi et Muñiz var. nova

A typo stipulis dense puberulis, foliis minoribus, subtus dense pubescentibus differt.

Typus: Prov. Oriente: in fruticetis calcareis siccis prope Versailles, Santiago de Cuba. Leg. A. BORHIDI, O. MUÑIZ et S. VAZQUEZ, 4. II. 1970. SV. sine numero; isotypus: Bp.

Specimina examinata: Prov. Oriente: Aguadores, Santiago de Cuba, leg. A. BORHIDI et O. MUÑIZ, 20. X. 1969. — Prov. Oriente: Santiago de Cuba: El Morro, leg. J. ACUÑA et A. CORREL. — Prov. Oriente: Mesa de Lindero, inter Gran Tierra et Maisi, leg. HNO ALAIN et M. LOPEZ FIGUEIRAS.

Distributio: Litus meridionale Baracoae inter Santiago de Cuba et Maisi.

Guettarda Munizii Borhidi (Fig. 10)

See the description of the species in l. c. p. 33.

Casasia nigrescens (Griseb.) Wr. ex Urb. ssp. *moaënsis*
Borhidi et Muñiz (Fig. 11)

The diagnosis of the subspecies to be found in l. c. p. 31.

Asteraceae

Heptanthus yumuriensis Borhidi sp. nova

Perennans. Folia basalia petiolis 2–5 cm longis, pilosis, ovata vel triangulari-ovata apice obtusa, basi truncata vel subcordata, 5–15 mm longa, 5–10 mm lata, profunde trilobata lobis profunde tridentatis, segmentis ovalis vel oblongo-ovatis, apice obtusis vel rotundatis, supra sparse puberula, demum glabra, glandulis sessilibus vel brevissime stipitatis dense oblecta, subtus ad nervos sparse longe pilosa, glandulis impressis punctata.

Pedunculus filiformis, 3–8 cm longus, laxe pilosus; capitulum campanulatum, 2 mm diam.; squamae involucri 5, 2.5–3 mm longae, obovato-ellipticae, pilosae, margine membranaceo-fimbriatae, fimbria squamae involucralis pilosa. Flores 9–11 per capitula; flores feminei radiales (5)-6, corolla ligulata, 3–3.7 mm longa, ligula elliptica, 2–2.2 mm longa, apice bidentata, tubo filiforme 1–1.5 mm longo. Flores bisexuales (4)-5, corolla 5-lobata, lobis 0.5–0.6 mm longis, limbo \pm aequilongis, tubus 2 mm longus. Achaenia non pleno matura 1–1.2 mm longa, sulcata, apice incrassata.

Typus: BORHIDI 673; Prov. Oriente: in saxosis humidis calcareis vallis rivi Rio Yumuri pr. pag. Sabana. Leg. A. BORHIDI, O. MUÑIZ et S. VAZQUEZ, 20. III. 1970. Bp., isotypus: SV.

Obs.: Habitu, forma foliorum *H. lobati* Britt. affinis, qui floribus radialibus 2, ligula apice 3-dentata bene distinguenda est. *H. Shaferi* Britt. a planta nostra capitulis minoribus, 5–7-floribus, foliis margine denticulatis differt.

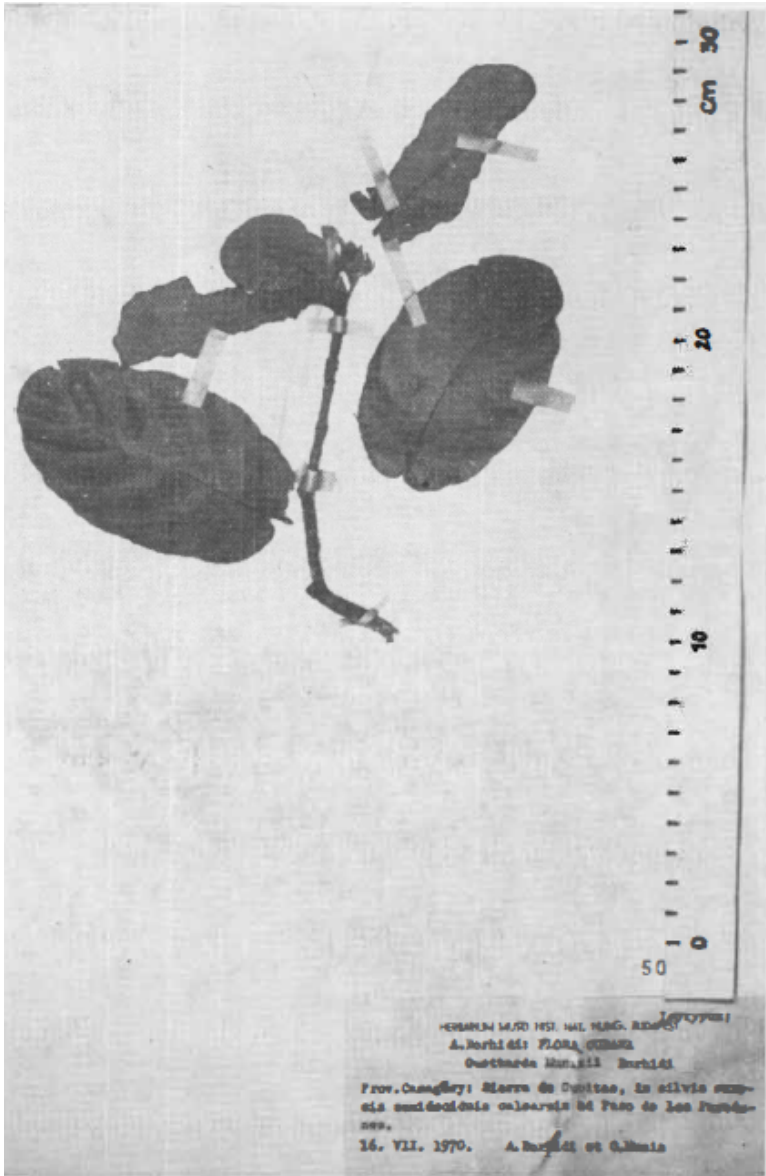


Fig. 10. Isotype specimen (Bp 503371) of *Guettarda munizii* Borhidi

***Eupatorium carsticola* Borhidi et Muñiz sp. nova (Fig. 12)**

Frutex vel suffrutex, usque ad 1.5–2 m altus. Caulis erectus, vix ramosus albo araneoso-lanuginosus. Folia opposita vel subopposita, late triangulari-ovata, 5–7 mm longe petiolata, 2–5 cm longa, 1.5–4 cm lata, apice obtusa et mucronulata, basi truncata, rotundata vel

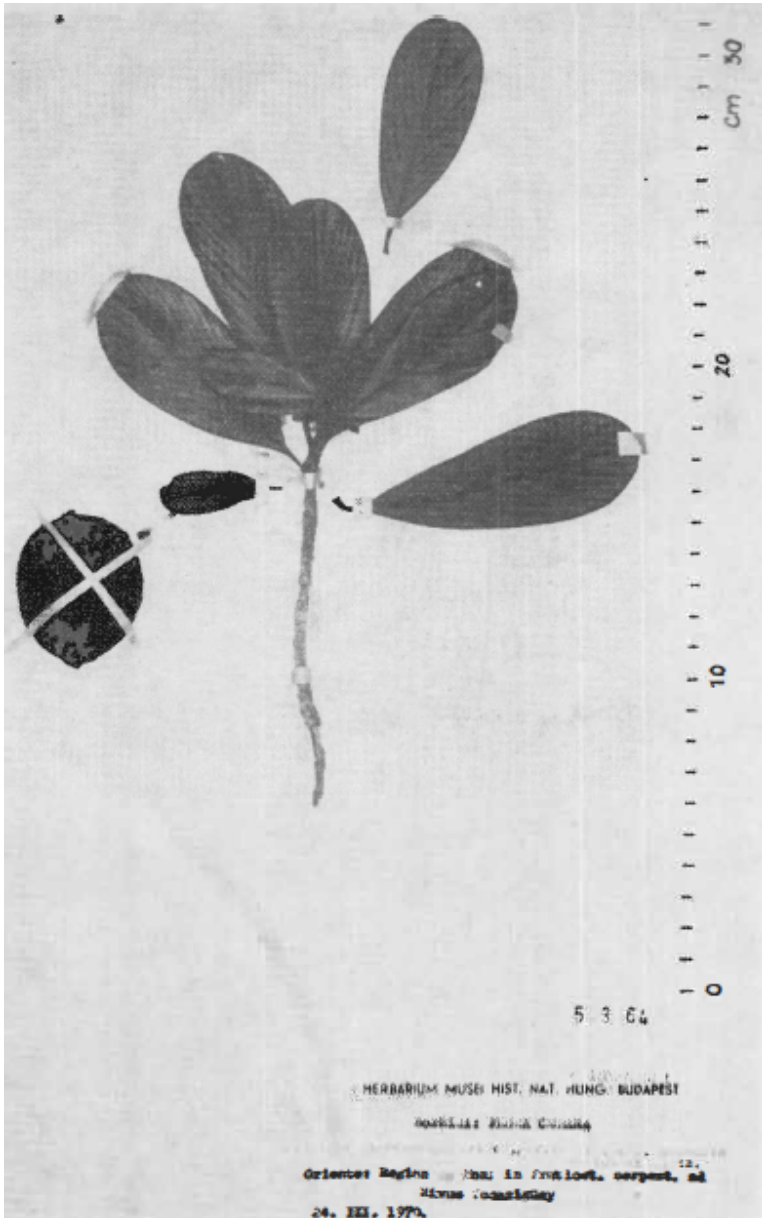


Fig. 11. Isotype specimen (Bp 503064) of *Casasia nigrescens* ssp. *moaënsis* Borhidi et Muñiz

plerumque cordata, margine crenulato-denticulata, supra in statu juvenili tomentosa, demum glabra, dense glanduloso-punctata et nervis impressis basi 3-(5)-nervia, apicem versus pinnatim disposita, conspicue reticulato-venosa, subtus densissime et permanente albo-tomentosa, nervis prominentibus et anastomisantibus reticulata.

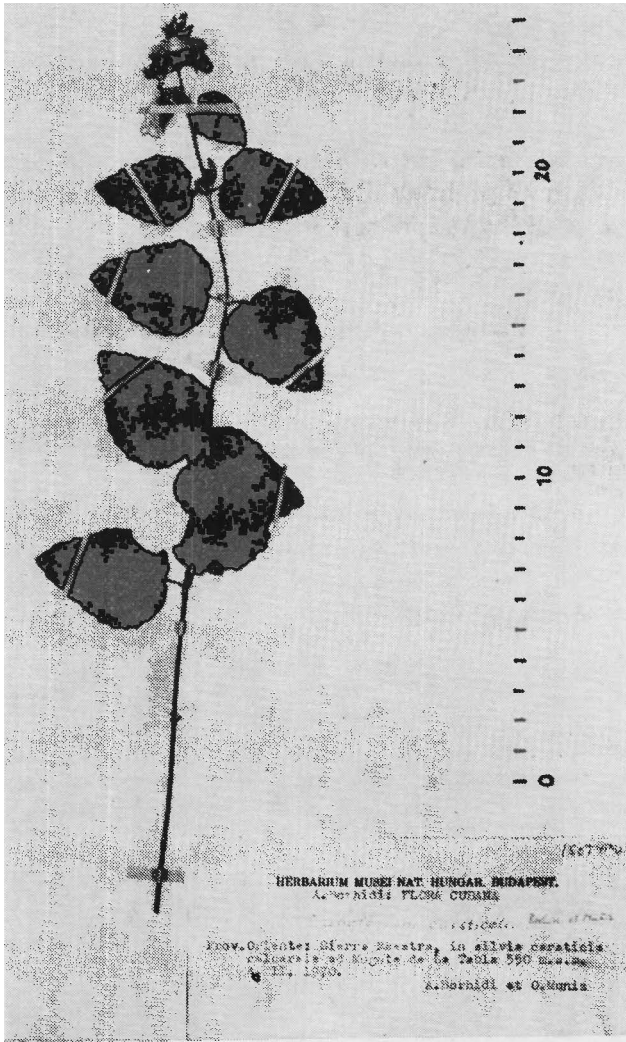


Fig. 12. Isotype specimen (Bp sine numero) of *Eupatorium carsticola* Borhidi et Muñiz

Inflorescentia terminalis, breviter trichotoma, 2–3 cm longa, capitulis sessilibus dense conferta. Capitula elliptico-ovata vel campanulata, 5–6 mm longa, albo vel grisaceo-tomentosa, 4–5 mm diam.; bractee involucrales triseriales, exteriores ovatae, apice acutae, 2.5–3 mm longae, mediales oblongo-ellipticae, apice obtusae, 3–4 mm longae, 1–1.5 mm latae, interiores lineari-ellipticae, 4–5 mm longae, 0.6–1 mm latae, grisaceo-tomentosae. Receptaculum

glabrum. Corolla 3—3.5 mm longa, 5-lobulata, extus glandulosa, lobis subulatis, valde recurvatis, 0.5 mm longis; stylus 8—12 mm longus, corolla valde exsertus. Setae pappi 25—30, 3 mm longae, breviter pilosae, corolla \pm aequilongae. Achaenia 2.5—3 mm longa, 6—7-costata, glandulosa et pilosa.

Obs.: Habitu, forma foliorum et inflorescentiae *E. plucheoidi* Griseb. affinis, quod foliis supra non glanduloso punctatis, bracteis interioribus acuminatis, achaeniis glabris bene differt.

Typus: Prov. Oriente: Sierra Maestra; in silvis carsticis calcareis ad Mogote de La Tabla in alt. 550 m. s. m. prope pag. Baire. — Leg. A. BORHIDI et O. MUÑIZ, 4. II. 1970. SV; isotypus: Bp. (sine numero).

Specimina examinata: Prov. Oriente: Baracoa meridionalis: Montecristo supra Jauco ALAIN et MORTON 5225; ALAIN et M. LOPEZ FIGUEIRAS 7021; Los Llanos ACUÑA 5021; Maisi LEÓN et M. VICTORIN; Maisi: Mesa de la Yagruma LEÓN 18229, 18340.

Vernonia praestans Ekm. ex Urb.

var. *cacuminis* Borhidi et Muñiz var. nova

A typo differt: foliis lineari-lanceolatis vel linearibus, 3—4 cm longis, 0.5—1 cm latis, apice acutis, basi truncatis vel subcordatis, margine valde revolutis; inflorescentia breve, corymbosa, capitulis ad apicem ramorum inflorescentiae confertis.

Typus: Prov. Oriente: Sierra Maestra, in pluviisilvis nebulosis muscosis montanis montis Pico Real (cacumen montis Pico Turquino) supra pag. Ocuja! in alt. 1900 m. s. m. Leg. A. BORHIDI, O. MUÑIZ et S. VAZQUEZ 7. XII. 1969. SV. sine numero; isotypus: Bp.

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