

Marcgraviaceae Bercht. & J.Presl

Stefan Dressler

Senckenberg Research Institute; stefan.dressler@senckenberg.de

This treatment is composed of the following taxa: Marcgraviaceae, *Marcgravia*, *Marcgraviastrum*, *Norantea*, *Sarcopera*, *Schwartzia*, *Souroubea*.

HOW TO CITE

Dressler, S. 2020. Marcgraviaceae in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB158>.

DESCRIPTION

Marcgraviaceae

Terrestrial, hemiepiphytic or epiphytic lianas or shrubs, rarely small trees, usually with sprawling branches. Roots sometimes adventitious.

Leaves simple, alternate, estipulate, glabrous, margins entire or minutely crenate. Hypophyllous glands on the lower surface of the leaf blade, raphide cells and variously shaped sclereids frequent.

Inflorescences terminal, racemose, sometimes pseudo-umbels or pseudo-spikes, erect or pendulous. Bracts transformed into variously shaped nectaries. Flowers bisexual, actinomorphic, hypogynous, 2-bracteolate, the bracteoles sepaloid or deltoid, sometimes lacking. Sepals 4-5, unequal, free or nearly so, imbricate, persistent. Petals 3-5, imbricate, free or connate. Stamens 3 to many; filaments free or basally connate, uniserrate; anthers basifixd or nearly so, dithecal, tetrasporangiate, introrse, longitudinally dehiscent. Ovary superior, completely or incompletely 2-20-locular; ovules numerous.

Fruits subglobose, apiculate with a persistent style and stigma, capsular, loculicidally and septifragously dehiscent from the base (sometimes appearing berry-like), pulpy inside. Seeds hemispherical to reniform, few to numerous with a shiny reticulate testa. 7 gen., approx. 130 spp. Tropical America, including the West Indies.

Life Form

Liana/scendent/vine, Shrub, Tree

Substrate

Epiphytic, Hemiepiphytes, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest, Caatinga, Central Brazilian Savanna, Atlantic Rainforest

Vegetation Types

Caatinga (stricto sensu), Amazonian Campinarana, High Altitude Grassland, Highland Rocky Field, Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Terra Firme Forest, Inundated Forest (Várzea), Ombrophylous Forest (Tropical Rain Forest), Coastal Forest (Restinga), Amazonian Savanna, Rock outcrop vegetation

Geographic Distribution

Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)

Northeast (Alagoas, Bahia, Ceará, Maranhão, Paraíba, Pernambuco, Rio Grande do Norte, Sergipe)

Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)

South (Paraná, Rio Grande do Sul, Santa Catarina)

Possible occurrences

Central-west (Mato Grosso do Sul)

Southeast (Espírito Santo, Minas Gerais)

IDENTIFICATION KEY

1. Leaves distichous; apical flowers abortive, only the nectaries developed, fertile flowers without nectaries; sepals 4; petals united into a deciduous cap; sterile and fertile branches with differently shaped leaves..... 1. *Marcgravia*

1.* Leaves spirally arranged; all flowers fertile and provided with nectaries; sepals 5; petals 5, ± free or connate, reflexed at anthesis; sterile and fertile branches with similarly shaped leaves..... 2

2. Inflorescence umbellate or subumbellate..... 2. *Marcgraviastrum*

2.* Inflorescence spicate or racemose..... 3

3. Inflorescence spicate; nectaries inserted on the rachis next to the flowers..... 4. *Sarcopera*

3.* Inflorescence racemose; nectaries variously inserted on the pedicel..... 4

4. Nectaries inserted at the base of the calyx, their limb auriculate; stamens < 10, generally 3 or 5; inflorescence mostly < 25 cm long..... 6. *Souroubea*

4.* Nectaries inserted at various distances from the calyx, but never at its base, their limb never auriculate; stamens numerous (> 8); inflorescence mostly > 25 cm long, sometimes shorter 5.

5. Nectaries inserted at the base or lower third of the pedicel; inflorescence mostly < 20 cm long (only longer in *Schwartzia* *Schwartzia brasiliensis*)..... 5. *Schwartzia*

5.* Nectaries inserted at around the middle of the pedicel; inflorescence mostly > 25 cm long.... 3. *Norantea*

REFERENCE

Teixeira, M.R.; Fiaschi, P. & Amorim, A.M. 2013. Flora da Bahia: Marcgraviaceae. Sitientibus série Ciências Biológicas 13:1-15. (DOI: 10.13102/scb219)

Marcgravia L.

This treatment is composed of the following taxa: *Marcgravia*, *Marcgravia comosa*, *Marcgravia coriacea*, *Marcgravia crassicostata*, *Marcgravia crenata*, *Marcgravia eichleriana*, *Marcgravia flagellaris*, *Marcgravia maguirei*, *Marcgravia neurophylla*, *Marcgravia pedunculosa*, *Marcgravia polyantha*, *Marcgravia punctifolia*, *Marcgravia purpurea*, *Marcgravia sprucei*, *Marcgravia trinitatis*, *Marcgravia williamsii*, *Marcgravia zonopunctata*.

HOW TO CITE

Dressler, S. Marcgraviaceae in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB19591>.

DESCRIPTION

Woody vines, rarely climbing shrubs, with dimorphic branches: sterile, juvenile branches creeping, appressed to the substrate, and attached by roots; fertile ones free, mostly pendulous, often angular and provided with wart-like lenticels. Leaves distichous, those of sterile branches small, sessile, thin, ovate, mostly asymmetrically cordate at the base, those of fertile branches larger, subsessile to petiolate, thicker, often with a drip tip, the lower surface of the leaves with prominent midrib and variously shaped and numbered hypophyllous glands. Inflorescences umbellate or subumbellate, flowers pedicellate, the apical (central) ones abortive with only the bracts (nectaries) well developed. Nectaries hood-, pitcher-, or dipper-shaped, their stalk often lenticellate outside. Bracteoles on the upper half of the pedicel, sometimes lacking. Sepals 4, decussate; petals 4, connate into a deciduous calyptrate cap. Stamens 6--many; filaments mostly filiform, flattened; anthers slender-ovate to triangular. Ovary 3--20-locular; ovules numerous per locule; stigma capitate to umbonate. Fruit a leathery capsule; calyx persistent; seeds tiny, embedded in a juicy pulp; testa reticulate, purple and black.

Southern Mexico, Central America, West Indies, Colombia, Venezuela, Guyana, Suriname, French Guiana, Ecuador, Peru, Bolivia, Brazil; ca. 60 species, 15 in Brazil.

Life Form

Liana/scandent/vine

Substrate

Epiphytic, Hemiepiphytes, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest, Caatinga, Central Brazilian Savanna, Atlantic Rainforest

Vegetation Types

Amazonian Campinarana, High Altitude Grassland, Highland Rocky Field, Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Terra Firme Forest, Inundated Forest (Várzea), Ombrophylous Forest (Tropical Rain Forest), Coastal Forest (Restinga), Amazonian Savanna

Geographic Distribution

Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)

Northeast (Bahia, Maranhão, Pernambuco)

Central-west (Distrito Federal, Goiás, Mato Grosso)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)

South (Paraná, Rio Grande do Sul, Santa Catarina)

Possible occurrences

Central-west (Mato Grosso do Sul)

Southeast (Minas Gerais)

IDENTIFICATION KEY

1. Flowers erect on pedicels. Leaves usually (sub)sessile.(subgen. *Orthothalamium*) 2.
- 1.* Flowers oblique or angled on pedicels. Leaves usually petioled.(subgen. *Marcgravia* syn. subgen. *Plagiothalamium*) 5.
2. Leaves with numerous dark solid glandular spots beneath (punctate) *M. comosa*
- 2.* Leaves without dark glandular spots beneath, but various patterns of poriform glands beneath 3.
3. Inflorescence with only few flowers (up to 15) and 1-2(-3) nectaries. Pedicels glabrous. Leaves leathery (coriaceous) *M. flagellaris*
- 3.* Inflorescence with more than 20 flowers and more than 3 nectaries. Pedicels tomentose, roughish, or lepidote. Leaves papery (chartaceous to subcoriaceous) when dry 4.
4. Leaves small, up to 7 (-8) cm long, up to 3 cm wide, conspicuous row of poriform glands beneath running from base towards to margin or the apex at about the middle between midrib and margin. Pedicels puberulous to tomentose. *M. polyantha*
- 4.* Leaves large, longer than 10 cm, wider than 3 cm, with a row of tiny (Lens!) poriform glands parallel and close to margin. Pedicels roughish to lepidote. *M. crenata*
5. Leaves punctate with numerous dark spots beneath (whole undersurface) 6.
- 5.* Leaves without dark spots beneath (epunctate), but various glands in different patterns (but see *M. zonopunctata*: two bands of dark spots near margins underneath) 8.
6. Inflorescence axis clavate (up to 13 mm long) with no interstice between flower and nectary insertion 7.
- 6.* Inflorescence axis elongated (10—15 mm long) with interstice of about 2--4 mm length (with no scars nor stalks) between flowers and nectaries *M. eichleriana*
7. Leaves large (15—25 cm long), elliptic with +/- long acuminate apex (up to 2 cm). Inflorescence on long peduncles, on leafless shoots (cauliflorous?) *M. punctifolia*
- 7.* Leaves smaller (5–12 cm long), slightly obovate to elliptic with obtuse apex with short acumen (up to 1 cm) only. Inflorescence on leaved shoots *M. maguirei*
8. Leaves with two bands of dark glandular spots along each margin underneath, infl. axis elongated (20-25 mm), forming compact short raceme; nectaries galeate *M. zonopunctata*
- 8.* Leaves without dark glandular spots, infl. axis short (up to 15(20) mm long), inflorescence umbellate, nectaries tubulate 9.
9. Inflorescence axis elongated (10—20 mm long) with interstice of about 3--10 mm length (with no scars nor stalks) between flowers and nectaries 10.
- 9.* Inflorescence axis clavate and short (up to 10 mm long) with no interstice between flower and nectary insertion (very short interstice 2—3 mm in *M. neurophylla*) 11.
10. Leaves underneath with 3—6 large poriform glands in basal half of leaf in oblique row from petiole towards margin at both sides of midrib, sometimes smaller glands continue along margin towards leaf apex. Sepals with dark glandular spots at margin *M. williamsii*
- 10.* Leaves underneath with no or only 1—3 (4) poriform glands basal at each half from petiole to margin. Sepals without dark glandular spots at margin *M. coriacea*
11. Inflorescence axis elongated with a very short interstice of 2—3 mm length (with no scars nor stalks) between flowers and nectaries. Flower cap (calyptra) > 7 mm long. Nectaries long stalked (> 6 mm long), nectaries often bend outwards. Central Brazil *M. neurophylla*
- 11.* Inflorescence axis with no interstice between flowers and nectary stalks. Flower cap (calyptra) up to 7 (--9) mm long. Nectary stalk up to 6 mm long. Amazonia and Guyana shield 12.
12. Nectaries longer than the pedicels. Lower surface of leaves without glands, leaves often drying reddish brown *M. purpurea*
- 12.* Nectaries shorter than or as long as the pedicel. Lower leaf surface with 1 or 2 glands (sometimes lacking), leaves not drying conspicuously reddish brown, rather greenish brown or conspicuously bicolored 13.
13. Nectaries > 1 cm long. Leaf apex cuspidate, leaf base often obtuse to round, leaves drying brownish, both surfaces conspicuously different in color. Inflorescence mostly on normal-leaved branches, peduncle usually short, 8—10 (-16) cm long *M. sprucei*
- 13.* Nectaries < 1 cm long. Leaf apex acuminate, leaf base acute to obtuse. Leaf drying greenish, both surfaces similar in color. Inflorescence often long-pedunculate, sometimes “cauliflorous” *M. pedunculosa*

Marcgravia comosa C.Presl

Has as synonym

heterotypic *Marcgravia salicifolia* Gilg

DESCRIPTION

Leaf: abaxial surface punctate. **Inflorescence:** flower number multiflorous; **interstitial axis between flower and nectary** absent; **nectary** tubular. **Flower:** pedicel flower joint erect.

ADDITIONAL DESCRIPTION

Marcgravia crassicostata seems to be a heterotypic synonym of *M. comosa*, but the type of the former is lost, only a photo is extant.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Atlantic Rainforest

Vegetation Types

Ombrophylous Forest (Tropical Rain Forest)

Geographic Distribution

Confirmed occurrences

Southeast (Rio de Janeiro, São Paulo)

HERBARIUM MATERIAL

Fiaschi, P, 912, SPF, (SPF00147907), Rio de Janeiro

Santos Lima, J., 258, RB, Rio de Janeiro

A. Lobão, 293, RB, 348907, (RB00218473), Rio de Janeiro

G. Martinelli, 13486, RB, 299755, (RB00218800), São Paulo

A P Duarte, 4883, RB (RB00218307), Rio de Janeiro

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Marcgravia comosa* C.Presl



Figure 2: *Marcgravia comosa* C.Presl

REFERENCE

Wittm. in Mart., Fl. Bras. 12(1): 224. 1878 (misidentified as *Marcgravia myriostigma*, online: <http://www.biodiversitylibrary.org/page/144515#page/162/>)

Marcgravia coriacea Vahl

Has as synonym

heterotypic *Marcgravia macroscypha* Gilg & Werderm.

heterotypic *Marcgravia picta* Willd.

heterotypic *Marcgravia roraimae* Gilg & Werderm.

heterotypic *Marcgravia stenonectaria* Gilg

DESCRIPTION

Leaf: abaxial surface non punctate. **Inflorescence:** flower number multiflorous; **interstitial axis between flower and nectary** present; **nectary** tubular. **Flower:** pedicel flower joint bent.

ADDITIONAL DESCRIPTION

Leaves usually with basilaminar gland only, rarely up to 3 laminar glands in basal part of lamina.
Sepals without dark glandular spots at margin.

Life Form

Liana/scandent/vine

Substrate

Hemiepiphytes, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest, Caatinga, Central Brazilian Savanna, Atlantic Rainforest

Vegetation Types

Riverine Forest and/or Gallery Forest, Inundated Forest (Várzea), Ombrophylous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

Geographic Distribution

Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará)

Northeast (Bahia, Maranhão, Pernambuco)

Southeast (Espírito Santo)

HERBARIUM MATERIAL

G.S. Siqueira, 1096, RB,  (RB01119077), Espírito Santo

A.M. Amorim, 3646, NY, CEPEC, Bahia

J.G. KUHLMANN, 314, RB, 34238,  (RB00218370), Espírito Santo

Ferreira, MC, 892, MBM (MBM285246), Bahia

FIELD IMAGES / ILLUSTRATIONS

Figure 1: *Marcgravia coriacea* VahlFigure 2: *Marcgravia coriacea* VahlFigure 3: *Marcgravia coriacea* Vahl

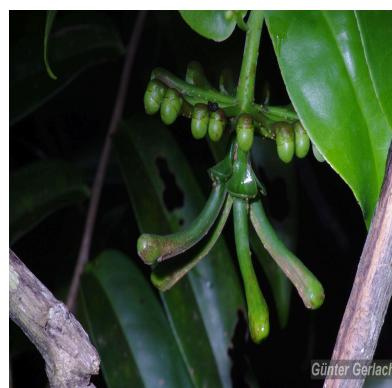
Figure 4: *Marcgravia coriacea* VahlFigure 5: *Marcgravia coriacea* VahlFigure 6: *Marcgravia coriacea* Vahl



Figure 7: *Marcgravia coriacea* Vahl

REFERENCE

- Teixeira, M.R.; Fiaschi, P. & Amorim, A.M. 2013. Flora da Bahia: Marcgraviaceae. Sitientibus série Ciências Biológicas 13: 2. (DOI: 10.13102/scb219)
S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 250. 2001
Wittm. in Mart., Fl. Bras. 12(1): 229, pl. 43, fig. 1. 1878 (online: <http://www.biodiversitylibrary.org/page/144515#page/165/>)

Marcgravia crassicostata Gilg

DESCRIPTION

Leaf: abaxial surface punctate. **Inflorescence:** flower number multiflorous; **interstitial axis between flower and nectary** absent; **nectary** tubular. **Flower:** pedicel flower joint erect.

ADDITIONAL DESCRIPTION

this taxon is supposedly conspecific with *Marcgravia comosa*, but the type is lost.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Vegetation Types

Cerrado (lato sensu)

Geographic Distribution

Possible occurrences

Southeast (Minas Gerais)

HERBARIUM MATERIAL

Sello, F., 1264, F, MO, **Typus**

Marcgravia crenata Poepp. ex Wittm.

Has as synonym

heterotypic *Marcgravia macrophylla* (Wittm.) Gilg

DESCRIPTION

Leaf: abaxial surface non punctate. **Inflorescence:** flower number multiflorous; **interstitial axis between flower and nectary** absent; **nectary** tubular. **Flower:** pedicel flower joint erect.

ADDITIONAL DESCRIPTION

Leaves large, 10 to 22 cm long, blade oblong to elliptic.

Leaves with basilaminar poriform gland and a very fine submarginal row of glands (lens needed!)

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Terra Firme Forest, Inundated Forest (Várzea)

Geographic Distribution

Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Tocantins)

HERBARIUM MATERIAL

D.G. Campbell, 8999, NY,  (NY00164816), Acre

G.T. Prance, 7522, NY, U, INPA, Acre

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Marcgravia crenata* Poepp. ex Wittm.

REFERENCE

Wittm. in Mart., Fl. Bras. 12(1): 223. 1878 (online: <http://www.biodiversitylibrary.org/page/144515#page/162/>)

Marcgravia eichleriana Wittm.

DESCRIPTION

Leaf: abaxial surface punctate. **Inflorescence:** flower number multiflorous; **interstitial axis between flower and nectary** present; **nectary** tubular. **Flower:** pedicel flower joint bent.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Terra Firme Forest

Geographic Distribution

Confirmed occurrences

North (Amazonas)

HERBARIUM MATERIAL

R. Spruce, 3694, TCD, P, K, BR, Amazonas, **Typus**

G.T. Prance, 23820, U, NY, MO, Amazonas

R. Spruce, 3694, K,  (K000528222), Amazonas, **Typus**

W.W. Thomas, 5314, US,  (US01879970), Amazonas

REFERENCE

S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 251. 2001

Wittm. in Mart., Fl. Bras. 12(1): 230, pl. 43, fig. 2. 1878 (online: <http://www.biodiversitylibrary.org/page/144515#page/165/>)

Marcgravia flagellaris (Poepp. ex Wittm.) Poepp. ex Gilg & Werderm.

DESCRIPTION

Leaf: abaxial surface non punctate. **Inflorescence:** flower number pauciflorous; **interstitial axis between flower and nectary** absent; **nectary** tubular. **Flower:** pedicel flower joint erect.

ADDITIONAL DESCRIPTION

Marcgravia trinitatis does only occur on the Lesser Antilles, Brazilian material identified as such is in fact *M. flagellaris*.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Riverine Forest and/or Gallery Forest, Terra Firme Forest, Ombrophylous Forest (Tropical Rain Forest)

Geographic Distribution

Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará)

Central-west (Mato Grosso)

HERBARIUM MATERIAL

M. A. D. de Souza, 231, RB, 391850, (RB00218626), Amazonas
J. E. L. S. Ribeiro, 1452, RB, 391858, , (RB00218615), Amazonas
s.c., s.n., NY, (NY02206271)
J. E. L. S. Ribeiro, 1737, RB, 391842, (RB00218634), Amazonas
M. Silveira, 1514, NY, Acre
G.T. Prance, 58843, US, (US01879967), Pará

REFERENCE

Wittm. in Mart., Fl. Bras. 12(1): 222. 1878 (sub *Marcgravia rectiflora* var. *flagellaris*, online: <http://www.biodiversitylibrary.org/page/144515#page/161/>)

Marcgravia maguirei de Roon

DESCRIPTION

Leaf: abaxial surface punctate. **Inflorescence:** flower number multiflorous; **interstitial axis between flower and nectary** absent; **nectary** tubular. **Flower:** pedicel flower joint bent.

ADDITIONAL DESCRIPTION

Leaves obovate with obtuse apex.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Ombrophylous Forest (Tropical Rain Forest)

Geographic Distribution

Confirmed occurrences

North (Amazonas)

HERBARIUM MATERIAL

G.T. Prance, 29197, US, K, INPA, Amazonas

REFERENCE

S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 251. 2001

Marcgravia neurophylla Gilg

DESCRIPTION

Leaf: abaxial surface non punctate. **Inflorescence:** flower number multiflorous; interstitial axis between flower and nectary present; **nectary** tubular. **Flower:** pedicel flower joint bent.

ADDITIONAL DESCRIPTION

Nectaries longer than pedicels.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Central Brazilian Savanna

Vegetation Types

Highland Rocky Field

Geographic Distribution

Confirmed occurrences

Central-west (Distrito Federal, Goiás)

Southeast (Minas Gerais)

Possible occurrences

Central-west (Mato Grosso do Sul)

HERBARIUM MATERIAL

A.C. Brade, 13695, RB, 29241, (RB00218279), K, (K000528225), RB, Minas Gerais

A.F.M. Glaziou, 13581, BR, C, F, G, K, LE, MPU, P, **Typus**

J.R. Pirani, 1328, SPF, (SPF00044103), Mato Grosso

J.R. Pirani, 1328, NY, (NY00972862), Mato Grosso

Santos, Aécio Amaral, 973, CEN (CEN00065958), Distrito Federal

A.C. Brade, 13695, RB, 29241, (RB00218279), Minas Gerais

Glocimar Pereira-Silva, 16439, CEN (CEN00084147), Goiás

G. Hatschbach, 49669, ESA (ESA080449), Minas Gerais

REFERENCE

see image of destroyed type in B in Field Museum negative collection:

http://emuweb.fieldmuseum.org/botany/berDisplay.php?irn=222387&QueryPage=%2Fbotany%2Fsearch_berlin.php

Marcgravia pedunculosa Triana & Planch.

Has as synonym

heterotypic *Marcgravia parviflora* Rich. ex Wittm.
heterotypic *Marcgravia subcaudata* Gilg & Werderm.

DESCRIPTION

Leaf: abaxial surface non punctate. **Inflorescence:** flower number multiflorous; **interstitial axis between flower and nectary** absent; **nectary** tubular. **Flower:** pedicel flower joint bent.

ADDITIONAL DESCRIPTION

Nectaries much shorter than pedicels, < 1 cm long.
Inflorescence +/- long pedunculate, sometimes cauliflorous.
Leaf apex acuminate. Leaf base acute to obtuse.
Amazonian rainforests.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Terra Firme Forest

Geographic Distribution

Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará)

Central-west (Mato Grosso)

HERBARIUM MATERIAL

B.M. Torke, 1534, RB,  (RB01101623), Pará
P.J.M. Maas, 9079, NY,  (NY00869647), Acre
Poncy, F. Crozier, 1171, P (P00187018)

REFERENCE

S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 251. 2001
Wittm. in Mart., Fl. Bras. 12(1): 227-228. 1878 (under *M. parviflora* var. *pedunculosa*, online: <http://www.biodiversitylibrary.org/page/144515#page/164/>)

Marcgravia polyantha Delpino

Has as synonym

heterotypic *Marcgravia dasyantha* Gilg

DESCRIPTION

Leaf: abaxial surface non punctate. **Inflorescence:** flower number multiflorous; **interstitial axis between flower and nectary** absent; **nectary** tubular. **Flower:** pedicel flower joint erect.

ADDITIONAL DESCRIPTION

Leaves small, up to 7 cm long, lanceolate to elliptic.

Leaves with a row of poriform glands ca. halfway between midrib and margin.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Central Brazilian Savanna, Atlantic Rainforest

Vegetation Types

High Altitude Grassland, Ombrophylous Forest (Tropical Rain Forest)

Geographic Distribution

Confirmed occurrences

Northeast (Bahia)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)

South (Paraná, Rio Grande do Sul, Santa Catarina)

HERBARIUM MATERIAL

Fiaschi, P, 1772, SPF, (SPF00162745), Bahia

T.S. DOS SANTOS, 866, RB, 257797, (RB00218529), Bahia

P. Fiaschi, 1772, CEPEC, (CEPEC00097580), Bahia

A.M. Amorim, 4552, CEPEC, (CEPEC00106924), Bahia

P.L.R. Moraes, 512, RB, HRCB, São Paulo

REFERENCE

- Antar, G.M. & Sano, P.T. 2016. Flora da Serra do Cipó, Minas Gerais: Marcgraviaceae. Bol. Bot. Univ. São Paulo 34: 22.
- Teixeira, M.R.; Fiaschi, P. & Amorim, A.M. 2013. Flora da Bahia: Marcgraviaceae. Sitientibus série Ciências Biológicas 13: 3. (DOI: 10.13102/scb219)
- Wittm. in Mart., Fl. Bras. 12(1): 224. 1878 (online: <http://www.biodiversitylibrary.org/page/144515#page/162/>)
- Delpino, Atti Soc. Ital. Sc. Milan. 12: 182, 210. 1869

Marcgravia punctifolia S. Dressler

DESCRIPTION

Leaf: abaxial surface punctate. **Inflorescence:** flower number multiflorous; **interstitial axis between flower and nectary** absent; **nectary** tubular. **Flower:** pedicel flower joint bent.

ADDITIONAL DESCRIPTION

Leaves ovate-elliptic with acuminate tip.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Ombrophylous Forest (Tropical Rain Forest)

Geographic Distribution

Confirmed occurrences

North (Amazonas, Roraima)

HERBARIUM MATERIAL

G.T. Prance, 10188, U, Roraima, **Typus**

Nascimento, O.C, 55, IAN, Amazonas

FIELD IMAGES / ILLUSTRATIONS

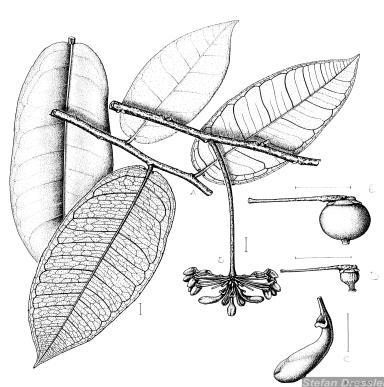


Figure 1: *Marcgravia punctifolia* S. Dressler

REFERENCE

S. Dressler 1998 (protologue) <https://www.biodiversitylibrary.org/item/14668#page/136/mode/1up>
S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 251. 2001

Marcgravia purpurea I.W.Bailey

DESCRIPTION

Leaf: abaxial surface non punctate. **Inflorescence:** flower number multiflorous; interstitial axis between flower and nectary absent; **nectary** tubular. **Flower:** pedicel flower joint bent.

ADDITIONAL DESCRIPTION

Nectaries as long as or slightly longer than pedicels, > 1.5 cm long.

Leaf apex acuminate. Leaf base obtuse.

Amazonian rainforests.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna

Vegetation Types

Amazonian Campinarana, Riverine Forest and/or Gallery Forest, Terra Firme Forest

Geographic Distribution

Confirmed occurrences

North (Amazonas, Pará)

Central-west (Mato Grosso)

HERBARIUM MATERIAL

Philcox, D., 4673, UB, NY,  (NY00972861), Mato Grosso

C. Farney, 2035, MO, INPA, Pará

REFERENCE

S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 251. 2001

Marcgravia sprucei (Wittm.) Gilg

DESCRIPTION

Leaf: abaxial surface non punctate. **Inflorescence:** flower number multiflorous; **interstitial axis between flower and nectary** absent; **nectary** tubular. **Flower:** pedicel flower joint bent.

ADDITIONAL DESCRIPTION

Nectaries shorter than pedicels, > 1 cm long.
Leaf apex cuspidate. Leaf base obtuse to round.
Peduncle usually short, 8-10(16) cm long.
Amazonian rainforests.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Amazonian Campinarana, Terra Firme Forest, Amazonian Savanna

Geographic Distribution

Confirmed occurrences

North (Acre, Amazonas)

HERBARIUM MATERIAL

R. Spruce, 2710, P, OXF, LD, LE, BM, BR, C, E, F, G, K, NY, W, TCD, Amazonas, **Typus**

P.J.M. Maas, 12657, NY,  (NY00869648), Acre

REFERENCE

S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 252. 2001

Wittm. in Mart., Fl. Bras. 12(1): 228. 1878 (as *Marcgravia parviflora* var. *sprucei*, online: <http://www.biodiversitylibrary.org/page/144515#page/164/>)

Marcgravia trinitatis C.Presl

Has as synonym

heterotypic *Marcgravia rectiflora* Triana & Planch.

DESCRIPTION

Leaf: abaxial surface non punctate. **Inflorescence:** flower number pauciflorous; **interstitial axis between flower and nectary** absent; **nectary** tubular. **Flower:** pedicel flower joint erect.

ADDITIONAL DESCRIPTION

This species occurs on the Lesser Antilles and material from Brazil is misidentified.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Riverine Forest and/or Gallery Forest, Terra Firme Forest

Geographic Distribution

Confirmed occurrences

North (Amazonas, Pará)

Central-west (Mato Grosso)

HERBARIUM MATERIAL

G.T. Prance, 1940, MO, Pará

Marcgravia williamsii J.F. Macbr.

DESCRIPTION

Leaf: abaxial surface non punctate. **Inflorescence:** flower number multiflorous; interstitial axis between flower and nectary present; **nectary** tubular. **Flower:** pedicel flower joint bent.

ADDITIONAL DESCRIPTION

Leaves with row of poriform glands from base towards margin and then running along the margin towards apex. Sepals with dark glandular spots.

Life Form

Liana/scendent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Terra Firme Forest, Inundated Forest (Várzea)

Geographic Distribution

Confirmed occurrences

North (Acre)

HERBARIUM MATERIAL

G.T. Prance, 12468, U, NY, MEXU, HBG, Acre
G.T. Prance, 12468, NY,  (NY00709345), Acre

Marcgravia zonopunctata S. Dressler

DESCRIPTION

Leaf: abaxial surface non punctate. **Inflorescence:** flower number multiflorous; interstitial axis between flower and nectary present; **nectary** galeate. **Flower:** pedicel flower joint bent.

ADDITIONAL DESCRIPTION

Leaves with a band of solid dark punctate glands on either half of lamina underneath. Flowers along the elongated rachis, hence inflorescence rather racemose.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Terra Firme Forest

Geographic Distribution

Confirmed occurrences

North (Amazonas)

HERBARIUM MATERIAL

Schultes, R.E.; Lopez, F., 9034, US, IAN, GH, **Typus**

Murca Pires, J., 903, IAN

Murca Pires, J., 936, IAN

Murca Pires, J., 1899, IAN

REFERENCE

Dressler, Willdenowia 30(2): 369ff. 2000, online under: <http://www.bioone.org/doi/pdf/10.3372/wi.30.30214>

Marcgraviastrum (Wittm. ex Szyszyl.) de Roon & S.Dressler

This treatment is composed of the following taxa: *Marcgraviastrum*, *Marcgraviastrum cuneifolium*, *Marcgraviastrum delphinianum*, *Marcgraviastrum mixtum*, *Marcgraviastrum pendulum*.

HOW TO CITE

Dressler, S. Marcgraviaceae in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB103330>.

DESCRIPTION

Sprawling terrestrial or (hemi-)epiphytic shrubs or lianas. Leaves spirally arranged, sessile or petiolate, coriaceous, producing a nonciliate or long-ciliate fracture when broken perpendicular to the midvein, with 2 basal glands, and either (1)2--6 or 12--18(--22) glands per side in 1(2) fairly uniform row(s), or numerous glands (25--160) scattered in a zone inside the loops of the secondary veins, the leaf apex mucronate or retuse to emarginate (due to loss of mucro); margins entire, sometimes revolute. Inflorescences umbelliformly contracted racemes with (2--)5--14(--22) flowers. Flowers usually erect on straight, slender, or stout pedicels, subtended by sessile, rarely stalked, pendulous, saccate, tubular, or pouch-shaped nectariferous bracts attached to the lower 1/4--1/3 of the pedicel. Bracteoles sepaloid, appressed to the calyx, rarely 2--3 mm distant from the calyx. Sepals 5, quincuncial, coriaceous. Petals 5, free to variously connate, imbricate in bud, strongly reflexed at anthesis. Stamens 12--75; filaments mostly free with the outer whorl basally adnate to corolla, linear, flattened or somewhat triangular; anthers (sub)sagittate. Ovary 5--9-locular; ovules numerous per locule; stigma smooth or slightly capitate. Fruit a leathery capsule, berry-like (when immature), globose. Seeds reniform to hemispheric; testa reticulate, red-black or shiny black.

Nicaragua, Costa Rica, Panama, Colombia, Venezuela, Guyana, Suriname, French Guyana, Ecuador, Peru, Bolivia, Brazil; 14 species, 4 species in Brazil.

Life Form

Liana/scendent/vine, Shrub, Tree

Substrate

Epiphytic, Hemiepiphytes, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest, Atlantic Rainforest

Vegetation Types

Highland Rocky Field, Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Ombrophylous Forest (Tropical Rain Forest), Amazonian Savanna, Rock outcrop vegetation

Geographic Distribution

Confirmed occurrences

North (Amazonas, Roraima)

Northeast (Bahia)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro)

IDENTIFICATION KEY

1. Pedicels shorter than 3 cm. Flowers oblique or erect on pedicel. Leaves producing a non ciliate fracture when broken perpendicular to midvein, basally cuneate or attenuate-acute2.

REFERENCE

- Giraldo-Cañas, D. 2002. Los géneros *Marcgraviastrum* y *Norantea* (Marcgraviaceae) en Brasil. Rev. Acad. Colomb. Cienc. 26(101): 469-476.

Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. Caldasia 27(2): 173-194. (<http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)

Marcgraviastrum cuneifolium (Gardner) Bedell

Has as synonym

basionym *Marcgravia cuneifolia* Gardner
homotype *Norantea cuneifolia* (Gardner) Delpino

DESCRIPTION

Leaf: apex rounded; **base** cuneate; **fracture** non ciliate; **texture** coriaceous. **Flower:** pedicel length 2 to 3 cm; **flower pedicel joint** oblique; **stamen** less than 20.

Life Form

Liana/scendent/vine, Shrub, Tree

Substrate

Epiphytic, Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Atlantic Rainforest

Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Ombrophylous Forest (Tropical Rain Forest), Rock outcrop vegetation

Geographic Distribution

Confirmed occurrences

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro)

HERBARIUM MATERIAL

G. Martinelli, 18183, RB, (RB01045051), Minas Gerais
H. C. de Lima, 3588, COL, RB, MO, SP, MBM, F, BHCB (24494), Rio de Janeiro
R. R. Vervloet, 526, CEPEC, (CEPEC00102617), Espírito Santo
V. C. Souza, 25547, CEPEC, (CEPEC00118472), Minas Gerais
G. Martinelli, 13430, RB, 293862, (RB00786511), Rio de Janeiro

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Marcgraviastrum cuneifolium* (Gardner) Bedell



Figure 2: *Marcgraviastrum cuneifolium* (Gardner) Bedell



Figure 3: *Marcgraviastrum cuneifolium* (Gardner) Bedell



Figure 4: *Marcgraviastrum cuneifolium* (Gardner) Bedell



Figure 5: *Marcgraviastrum cuneifolium* (Gardner) Bedell

REFERENCE

- Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. *Caldasia* 27(2): 176. (online: <http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)
Wittm. in Mart., Fl. Bras. 12(1). 237. 1878 (sub *Norantea cuneifolium*) (online: <http://www.biodiversitylibrary.org/page/144515#page/169/>)

Marcgraviastrum delphinianum (Wittm.) Gir.-Cañas

Has as synonym

basionym *Norantea delphiniana* Wittm.

DESCRIPTION

Leaf: apex obtuse/acute; **base** acute; **fracture** non ciliate; **texture** subcoriaceous/chartaceous. **Flower:** **pedicel length** 1 to 3 cm; **flower pedicel joint** oblique; **stamen** less than 20.

Life Form

Liana/scandent/vine, Shrub

Substrate

Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Atlantic Rainforest

Vegetation Types

Riverine Forest and/or Gallery Forest, Ombrophylous Forest (Tropical Rain Forest)

Geographic Distribution

Confirmed occurrences

Northeast (Bahia)

Southeast (Espírito Santo, Minas Gerais)

HERBARIUM MATERIAL

Pereira, E., 2308, RB, Espírito Santo

Ramos, AE, 1138, HEPH, (HEPH00014462), Bahia

Funch, L.S., 830, HUEFS (HUEFS097593), Bahia

E. PEREIRA, 2308, RB, 96127, (RB00218786), Espírito Santo

REFERENCE

Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. Caldasia 27(2): 177. (online: <http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)

Wittm. in Mart., Fl. Bras. 12(1). 236. 1878 (sub *Norantea delphiniana*, online: <http://www.biodiversitylibrary.org/page/144515#page/168/>)

Marcgraviastrum mixtum (Triana & Planch.) Bedell

Has as synonym

basionym *Norantea mixta* Triana & Planch.
heterotypic *Norantea peduncularis* Poepp. ex Wittm.

DESCRIPTION

Leaf: apex obtuse/acute; **base** acute/obtuse; **fracture** long ciliate; **texture** coriaceous. **Flower:** pedicel length 4 to 6 cm; **flower pedicel joint** straight; **stamen** 40 to 55.

Life Form

Liana/scandent/vine

Substrate

Hemiepiphytes, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Riverine Forest and/or Gallery Forest, Ombrophylous Forest (Tropical Rain Forest), Amazonian Savanna

Geographic Distribution

Confirmed occurrences

North (Amazonas, Roraima)

HERBARIUM MATERIAL

Pipoly, J.J., 6621, NY, (NY01039994), MO, US, Amazonas

Tavares, A.S., 372, NY, (NY02332370)

SIDNEY McDANIEL, 22381, RB, 316688, (RB00218315)

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Marcgraviastrum mixtum* (Triana & Planch.) BedellFigure 2: *Marcgraviastrum mixtum* (Triana & Planch.) BedellFigure 3: *Marcgraviastrum mixtum* (Triana & Planch.) BedellFigure 4: *Marcgraviastrum mixtum* (Triana & Planch.) Bedell



Figure 5: *Marcgraviastrum mixtum* (Triana & Planch.) Bedell

REFERENCE

- Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. *Caldasia* 27(2): 178. (online: <http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)
S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 254. 2001
Wittm. in Mart., Fl. Bras. 12(1): 236. 1878 (as *Norantea mixta*; online: www.biodiversitylibrary.org/page/144515#page/168)

Marcgraviastrum pendulum (Lanj. & Heerdt) Bedell

DESCRIPTION

Leaf: apex obtuse/acute; **base** obtuse; **fracture** long ciliate; **texture** coriaceous. **Flower:** pedicel length 4 to 6 cm; flower pedicel joint straight; **stamen** 60 to 65.

Life Form

Liana/scandent/vine

Substrate

Hemiepiphytes, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Highland Rocky Field, Rock outcrop vegetation

Geographic Distribution

Confirmed occurrences

North (Amazonas)

HERBARIUM MATERIAL

C. Granville, 1210, P, CAY

REFERENCE

S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 254. 2001

Roon, A.C. de & Dressler, S.: New Taxa of *Sarcopera* and *Marcgraviastrum* (Marcgraviaceae) from the Guayana Shield. Novon 9: 252. 1999. (online: <http://www.biodiversitylibrary.org/page/640982#page/252>)

Norantea Aubl.

This treatment is composed of the following taxa: *Norantea*, *Norantea goyazensis*, *Norantea guianensis*.

HOW TO CITE

Dressler, S. Marcgraviaceae in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB19593>.

Has as synonym

homotype *Ascium* Vahl

DESCRIPTION

(Hemi-)epiphytic or terrestrial woody lianas or sprawling shrubs or trees. Leaves spirally arranged, the blade coriaceous, with 2 basal glands, petiolate, producing a nonciliate fracture when broken perpendicular to midvein, the margins entire, slightly revolute, the apex mucronate. Inflorescences dense multiflorous racemes with 120--350 flowers. Flowers pedicellate, subtended by a purple or bright orange-red, tubular-saccate pendulous nectariferous bract on a slender petiole adnate to the upper half of the pedicel. Bracteoles located below the calyx. Sepals 5, quincuncial, coriaceous. Petals 5, free to slightly basally connate, imbricate in bud, reflexed at anthesis. Stamens 20–35; filaments basally adnate to corolla, linear in outline, triangular in cross section; anthers linear to subsagittate. Ovary 5-locular; ovules 10–20 per locule; stigma smooth or slightly 5-lobed. Fruit a berry-like leathery capsule, globose. Seeds small; testa reticulate, black.

Costa Rica (obviously cultivated), Lesser Antilles, northern South America to southern Brazil; 2 species, both in Brazil.

Life Form

Liana/scendent/vine, Shrub, Tree

Substrate

Hemiepiphytes, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest, Caatinga, Central Brazilian Savanna

Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Terra Firme Forest, Ombrophylous Forest (Tropical Rain Forest), Rock outcrop vegetation

Geographic Distribution

Confirmed occurrences

North (Amazonas, Pará, Rondônia, Roraima, Tocantins)

Northeast (Maranhão)

Central-west (Goiás, Mato Grosso do Sul, Mato Grosso)

Southeast (Minas Gerais)

South (Paraná)

Possible occurrences

Southeast (Espírito Santo)

IDENTIFICATION KEY

1. Small trees or scandent shrubs; Leaves obovate with round or obtuse base and round or emarginate apex; nectaries deep maroon to purplish black.....*N. goyazensis*
- 1.* Lianas or (hemi) epiphytic shrubs with scandent branches: Leaves with cuneate base and round to acute apex; nectaries bright orange, red to pink.....*N. guianensis* (2.)

2. Nectaries bright orange to scarlet red, orifice wide, protruding, with an apiculate lip; petiole shorter; Caribbean basin drainage system.....*N. guianensis* ssp. *guianensis*
- 2.* Nectaries reddish to pink, orifice elongate or ovate, lacking an apiculate lip, sometimes roughish i.s. due to sclereids; petiole longer; Amazonian drainage system.....*N. guianensis* ssp. *japurensis*

REFERENCE

- Teixeira, M.R.; Fiaschi, P. & Amorim, A.M. 2013. Flora da Bahia: Marcgraviaceae. Sitientibus série Ciências Biológicas 13: 5. (DOI: 10.13102/scb219)
- Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. Caldasia 27(2): 173-194. (<http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)
- Giraldo-Cañas, D. 2002. Los géneros *Marcgraviastrum* y *Norantea* (Marcgraviaceae) en Brasil. Rev. Acad. Colomb. Cienc. 26(101): 469-476.

Norantea goyazensis Cambess.

Has as synonym

homotype *Norantea guianensis* var. *goyazensis* (Cambess.) G.L.Ferreira

DESCRIPTION

Leaf: apex rounded/emarginate; **base** acute/rounded/obtuse; **shape** obovate. **Inflorescence:** flower number multiflorous; **nectary** reddish brown/purplish black.

Life Form

Liana/scendent/vine, Shrub, Tree

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Central Brazilian Savanna

Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Rock outcrop vegetation

Geographic Distribution

Confirmed occurrences

North (Amazonas, Pará, Tocantins)

Central-west (Goiás, Mato Grosso do Sul, Mato Grosso)

South (Paraná)

Possible occurrences

Southeast (Espírito Santo)

HERBARIUM MATERIAL

J.A. Rizzo, 4356, UFG

P. Fiaschi, 2993, CEPEC,  (CEPEC00118724), Mato Grosso

FIELD IMAGES / ILLUSTRATIONS



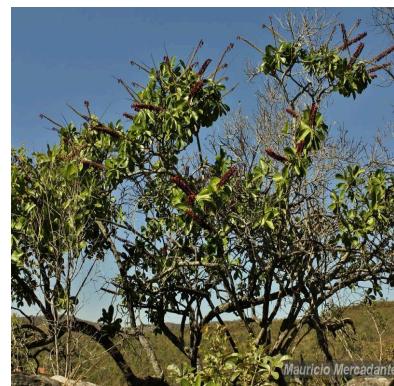
Figure 1: *Norantea goyazensis* Cambess.Figure 2: *Norantea goyazensis* Cambess.Figure 3: *Norantea goyazensis* Cambess.Figure 4: *Norantea goyazensis* Cambess.



Figure 5: *Norantea goyazensis* Cambess.

REFERENCE

Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. *Caldasia* 27(2): 179-181. (united with *N. guianensis*, online: <http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)
Wittm. in Mart., Fl. Bras. 12(1). 244. 1878 (online: <http://www.biodiversitylibrary.org/page/144515#page/172/>)

Norantea guianensis Aubl.

This treatment is composed of the following taxa: *Norantea guianensis*, *Norantea guianensis* subsp. *guianensis*, *Norantea guianensis* subsp. *japurensis*.

DESCRIPTION

Leaf: apex acute/obtuse; **base** cuneate/acute; **shape** elliptic/ovovate. **Inflorescence:** flower number multiflorous; **nectary** orange/reddish.

COMMENTS

Life Form

Liana/scandent/vine

Substrate

Hemiepiphytes, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest, Caatinga, Central Brazilian Savanna

Vegetation Types

Terra Firme Forest, Ombrophylous Forest (Tropical Rain Forest), Rock outcrop vegetation

Geographic Distribution

Confirmed occurrences

North (Amazonas, Pará, Rondônia, Roraima, Tocantins)

Northeast (Maranhão)

Central-west (Goiás, Mato Grosso)

Southeast (Minas Gerais)

South (Paraná)

IDENTIFICATION KEY

1. Nectaries bright orange to scarlet red, orifice wide, protruding, with an apiculate lip; petiole shorter; Caribbean basin drainage system.....*N. guianensis* ssp. *guianensis*
- 1.* Nectaries reddish to pink, orifice elongate or ovate, lacking an apiculate lip, sometimes roughish i.s. due to sclereids; petiole longer; Amazonian drainage system....*N. guianensis* ssp. *japurensis*

HERBARIUM MATERIAL

G.T. Prance, 9422, MO, INPA

REFERENCE

- Teixeira, M.R.; Fiaschi, P. & Amorim, A.M. 2013. Flora da Bahia: Marcgraviaceae. Sitientibus série Ciências Biológicas 13: 5. (DOI: 10.13102/scb219)
- Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. Caldasia 27(2): 179-181. (online: <http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)
- S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 255. 2001

Wittm. in Mart., Fl. Bras. 12(1): 241, pl. 47, fig. 3, pl. 48, fig 1. 1878 (pl. 48 fig 1 shows *Norantea guianensis* but misidentified as *N. goyazensis*) online: www.biodiversitylibrary.org/page/144515#page/171

Norantea guianensis Aubl. subsp. *guianensis*

Has as synonym

homotype *Norantea guianensis* Aubl. var. *guianensis*

DESCRIPTION

This subspecies is characterised by the orange to yellowish red nectaries with an round orifice with an apiculate lip.

Life Form

Liana/scandent/vine

Substrate

Hemiepiphytes, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Terra Firme Forest

Geographic Distribution

Confirmed occurrences

North (Amazonas, Pará, Roraima)

HERBARIUM MATERIAL

S.A. Mori, 17345, NY,  (NY02206297), Amapá

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Norantea guianensis* subsp. *guianensis* Aubl.



Figure 2: *Norantea guianensis* subsp. *guianensis* Aubl.

REFERENCE

S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 256. 2001

Norantea guianensis subsp. *japurensis* (Mart.) Bedell

Has as synonym

basionym *Norantea japurensis* Mart.

homotype *Norantea guianensis* var. *japurensis* (Mart.) G.L.Ferreira

heterotypic *Norantea guianensis* var. *gracilis* Wittm.

DESCRIPTION

This subspecies is characterised by the reddish to pink nectaries with an elongate to ovate orifice lacking an apiculate lip. The nectaries are sometimes roughish when dried due to sclereids in tissue.

Life Form

Liana/scandent/vine

Substrate

Hemiepiphytes, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Terra Firme Forest, Ombrophylous Forest (Tropical Rain Forest), Rock outcrop vegetation

Geographic Distribution

Confirmed occurrences

North (Amazonas, Pará, Rondônia, Tocantins)

Central-west (Goiás)

Southeast (Minas Gerais)

South (Paraná)

HERBARIUM MATERIAL

BRAUN, B. K., PSACF_EX04658, RB, (RB00969557), Pará

Coelho, 307, ESA, 515725, (RB00656228), Amazonas

N.C. Bigio, 1240, RON, (RB01134336), Rondônia

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Norantea guianensis* subsp. *japurensis* (Mart.) Bedell



Figure 2: *Norantea guianensis* subsp. *japurensis* (Mart.) Bedell



Figure 3: *Norantea guianensis* subsp. *japurensis* (Mart.) Bedell

REFERENCE

S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 256. 2001

Wittm. in Mart., Fl. Bras. 12(1). 243. 1878 (sub *Norantea japurensis*, online: <http://www.biodiversitylibrary.org/page/144515#page/172/>)
Mart., Nov. Gen. et Sp. 3: 180. t. 296iii. 179. t. 295. 1832 (online:<http://www.biodiversitylibrary.org/page/742213#page/184/>), plate 295 online: <http://www.biodiversitylibrary.org/item/9617#page/96/>

Sarcopera Bedell

This treatment is composed of the following taxa: *Sarcopera*, *Sarcopera aurantiaca*, *Sarcopera flammifera*, *Sarcopera tepuiensis*.

HOW TO CITE

Dressler, S. Marcgraviaceae in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB103326>.

DESCRIPTION

Sprawling hemiepiphytic or terrestrial shrubs or lianas, rarely small trees. Leaves spirally arranged, sessile to petiolate; blade occasionally asymmetrical, chartaceous to coriaceous, with 2 basal glands and either (1)2--7 glands per side in a row, or 15--28 glands per side in 2 fairly uniform rows, these rarely lacking, the leaf apex mucronate or retuse (due to loss of mucro); margins entire, sometimes revolute. Inflorescences spicate; rachis (6--)15--45(--100) cm long with (35--)100--250(--450) flowers. Flowers sessile or rarely shortly pedicellate, at least the flowers of the upper 3/4 or either the upper 1/2 of the rachis subtended by a petiolate, cyathiform, ladle- or pouch-shaped, nectariferous bract, these in various shades of brilliant red. Bracteoles deltoid and 1--3 mm distant from the calyx, or sepaloid and appressed to the calyx. Sepals 5, quincuncial, coriaceous. Petals 5, free or slightly basally connate, imbricate in bud, strongly reflexed at anthesis. Stamens (6--)8--12(--25); filaments free or variously connate or adnate to corolla, broad, flattened; anthers subsagittate to cordiform. Ovary completely 2- or 3(--5)-locular; ovules 4--8(--12) per locule; style lacking; stigma smooth, sessile. Fruit a berry-like capsule, globose. Seeds small; testa reticulate, red-black or black, shiny, embedded in brightly colored pulpy mesocarp.

Nicaragua through the Andean Cordillera to northern Bolivia, Guiana highlands; ca. 10 species, 3 in Brazil.

Life Form

Liana/scendent/vine, Shrub

Substrate

Epiphytic, Hemiepiphytes, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Highland Rocky Field, Riverine Forest and/or Gallery Forest, Ombrophylous Forest (Tropical Rain Forest), Amazonian Savanna, Rock outcrop vegetation

Geographic Distribution

Confirmed occurrences

North (Amazonas, Roraima)

IDENTIFICATION KEY

1. Leaves asymmetrical elliptic/obovate, less than 3 cm wide, apex acute to acuminate; inflorescence axis less than 25 cm long..... *S. aurantiaca*
- 1.* Leaves symmetric, obovate, oblong-obovate or oblanceolate, usually wider than 3 cm, apex obtuse to rounded; inflorescence axis usually longer than 22 cm..... 2.
2. Stamens 8--12; leaf mostly < 9 cm long; blade mostly with 1(2) conspicuous hypophyllous glands per side, these of a different colour than blade (when dry).... *S. flammifera*
- 2.* Stamens 17--26; leaf usually > 9 cm long; blade with glands inconspicuous or of same colour as blade (when dry)..... *S. tepuiensis* ssp. *coccinea*

REFERENCE

Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. *Caldasia* 27(2): 173-194. (<http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)

Sarcopera aurantiaca (Spruce ex Gilg) de Roon & S.Dressler

Has as synonym

basionym *Norantea aurantiaca* Spruce ex Gilg & Werderm.

DESCRIPTION

Leaf: leaf apex acuminate acute; leaf shape asymmetric elliptic obovate; width shorter than 3 cm. **Inflorescence:** rachis axis shorter than 25 cm. **Flower:** stamen approximate 8.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Ombrophylous Forest (Tropical Rain Forest)

Geographic Distribution

Confirmed occurrences

North (Amazonas)

HERBARIUM MATERIAL

R. Spruce, 2719, NY,  (NY00353680), **Typus**

R. Spruce, 2719, MG (MG019607), Amazonas, **Typus**

R. Spruce, 2719, P (P00780815), OXF (OXF00055492), KW, NY,  (NY00353680), K (K000528192), LE, BM (BM000016596), P (P00780814), TCD (TCD0000956), GOET, G, BR (BR0000005183654), GH (GH00019820), W, OXF, E (E00027784), MG (MG019607), Amazonas, **Typus**

REFERENCE

Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. *Caldasia* 27(2): 182-183. (online: <http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)

Roon, A.C. de & Dressler, S.: New Taxa of *Sarcopera* and *Marcgraviastrum* (Marcgraviaceae) from the Guayana Shield. *Novon* 9: 248. 1999. (online: <http://www.biodiversitylibrary.org/page/640982#page/248>)

Sarcopera flammifera de Roon & Bedell

DESCRIPTION

Leaf: leaf apex obtuse rounded; **leaf shape** obovate; **width** longer than 3 cm. **Inflorescence:** rachis axis longer than 25 cm.
Flower: stamen 8 to 12 approximate.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Highland Rocky Field, Amazonian Savanna, Rock outcrop vegetation

Geographic Distribution

Confirmed occurrences

North (Amazonas, Roraima)

HERBARIUM MATERIAL

B. Maguire, 40104, MG (153369), GH (19824), U (3937), NY,  (NY00039242), Roraima, **Typus**
G.T. Prance, 4417, U (66833), MEXU (725931), AAU, K, US, NY, INPA, Roraima

REFERENCE

- Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. *Caldasia* 27(2): 183. (online: <http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)
S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 257. 2001
Roon, A.C. de & Dressler, S.: New Taxa of *Sarcopera* and *Marcgraviastrum* (Marcgraviaceae) from the Guayana Shield. *Novon* 9: 249-251. 1999. (incl. figure; online: <http://www.biodiversitylibrary.org/page/640982#page/249>)

Sarcopera tepuiensis (de Roon) Bedell

This treatment is composed of the following taxa: *Sarcopera tepuiensis*, *Sarcopera tepuiensis* subsp. *coccinea*.

DESCRIPTION

Leaf: leaf apex obtuse rounded; leaf shape oblong obovate oblanceolate; width longer than 3 cm. **Inflorescence:** rachis axis longer than 25 cm. **Flower:** stamen more than 15.

Life Form

Liana/scandent/vine

Substrate

Epiphytic, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Highland Rocky Field, Riverine Forest and/or Gallery Forest, Amazonian Savanna

Geographic Distribution

Confirmed occurrences

North (Amazonas, Roraima)

HERBARIUM MATERIAL

G.T. Prance, 29030, NY (NY01039988), K, INPA, RB

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Sarcopera tepuiensis* (de Roon) Bedell



Figure 2: *Sarcopera tepuiensis* (de Roon) Bedell

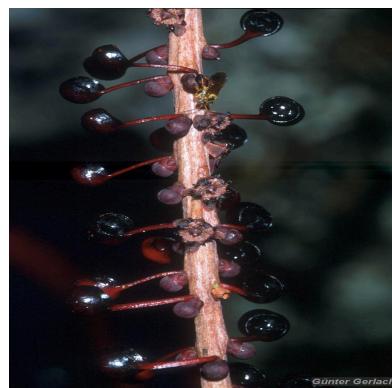


Figure 3: *Sarcopera tepuiensis* (de Roon) Bedell



Figure 4: *Sarcopera tepuiensis* (de Roon) Bedell



Figure 5: *Sarcopera tepuiensis* (de Roon) Bedell



Figure 6: *Sarcopera tepuiensis* (de Roon) Bedell

REFERENCE

- Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. Caldasia 27(2): 183. (online: <http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)
S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 257. 2001
Roon, A.C. de & Dressler, S.: New Taxa of *Sarcopera* and *Marcgraviastrum* (Marcgraviaceae) from the Guayana Shield. Novon 9: 251-252. 1999. (online: <http://www.biodiversitylibrary.org/page/640982#page/251>)

Sarcopera tepuiensis subsp. *coccinea* de Roon & S.Dressler

DESCRIPTION

So far only this subspecies is known from Brazil (Serra Araca), also in adjacent Venezuela (Estado Amazonas). Leaves mostly long-narrow-obovate or oblanceolate, 8--22 × 3.5--7.5 cm, the apex obtuse to rounded; filaments usually connate 1/4--3/4 of their length. Montane rain- and cloudforests, 1000--1400 m.

Key for the subspecies of *Sarcopera tepuiensis*

1. Leaves oblanceolate to narrow obovate, the blade with 5--9 small hypophyllous glands per side in a row ca. 2--5 mm from margin, the leaf base cuneate; usually Amazonas state of Venezuela and Brazil..... subsp. *coccinea*
1. Leaves obovate, the blade with 1(2) large hypophyllous glands per side, ca. 1 cm from margin, occasionally 2--6 additional small ones, the leaf base acute; usually Bolívar state of Venezuela..... subsp. *tepuiensis*

Life Form

Liana/scandent/vine

Substrate

Epiphytic, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Highland Rocky Field, Riverine Forest and/or Gallery Forest, Amazonian Savanna

Geographic Distribution

Confirmed occurrences

North (Amazonas, Roraima)

HERBARIUM MATERIAL

G.T. Prance, 29030, RB, NY,  (NY01039988), INPA, K, Amazonas, **Typus**

REFERENCE

see protologue under: <http://www.biodiversitylibrary.org/page/640982#page/251/mode/1up>
S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 258. 2001

Schwartzia Vell.

This treatment is composed of the following taxa: *Schwartzia*, *Schwartzia adamantium*, *Schwartzia brasiliensis*, *Schwartzia geniculatiflora*, *Schwartzia jucuensis*.

HOW TO CITE

Dressler, S. Marcgraviaceae in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB103321>.

DESCRIPTION

Sprawling terrestrial or (hemi-)epiphytic shrubs or lianas, occasional small trees.

Leaves spirally arranged, sessile or petiolate, coriaceous, producing a nonciliate or long-ciliate fracture when broken perpendicular to the midvein, with 2 basal glands, and either 1--8 glands per side in a fairly uniform row, or numerous glands (60–80) scattered in a zone inside the loops of the secondary veins, the leaf apex mucronate or retuse to emarginate (due to loss of mucro); margins entire, sometimes revolute.

Inflorescences racemose with 8–60(–300) flowers.

Flowers usually erect on straight, rarely geniculate, slender or stout pedicels, subtended by sessile or stalked, pendulous, saccate, tubular, or pouch-shaped nectariferous bracts attached to the lower 1/3 of the pedicel. Bracteoles sepaloid or deltoid, appressed to the calyx, or somewhat distant. Sepals 5, quincuncial, coriaceous. Petals 5, free to variously connate, imbricate in bud, strongly reflexed at anthesis. Stamens (5)12–85; filaments mostly free or the outer whorl basally adnate to corolla, linear, flattened or somewhat triangular; anthers (sub)sagittate, thecae elongate. Ovary 3–5-locular; ovules few to numerous per locule; stigma smooth or slightly capitate or radiate.

Fruit leathery capsule, berry-like (when immature), globose. Seeds reniform to hemispheric; testa reticulate, red-black or shiny black.

mostly Andean from Costa Rica to Bolivia, Lesser Antilles and E Brazil; 18 species, 4 species in Brazil.

Life Form

Liana/scandent/vine, Shrub, Tree

Substrate

Hemiepiphytes, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Central Brazilian Savanna, Atlantic Rainforest

Vegetation Types

Caatinga (stricto sensu), Highland Rocky Field, Riverine Forest and/or Gallery Forest, Ombrophylous Forest (Tropical Rain Forest), Coastal Forest (Restinga), Rock outcrop vegetation

Geographic Distribution

Confirmed occurrences

North (Tocantins)

Northeast (Alagoas, Bahia, Ceará, Paraíba, Pernambuco, Rio Grande do Norte, Sergipe)

Central-west (Distrito Federal, Goiás)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)

South (Paraná, Santa Catarina)

IDENTIFICATION KEY

1. Leaves sessile; small trees or shrubs with long creeping (and rooting) branches.....*Schw. adamantia*

- 1.* Leaves petiolate; lianas, trees or shrubs with scandent branches.....2.
2. Inflorescence axis far longer than 10 cm, multiflorous (> 20 flowers/infl.), pedicels 2-4 cm long.....*Schw. brasiliensis*
- 2.* Inflorescence axis shorter than 10 cm, pauciflorous (< 20 flowers/infl.), pedicel either up to 2 cm or > 4 cm long....3.
3. Flowers straight on pedicel, pedicel longer than 4 cm; leaves basally cuneate; nectary tubulate.....*Schw. jucuensis*
- 3.* Flowers angled on pedicel, pedicel shorter than 4 cm; leaves basally obtuse; nectary galeate.....*Schw. geniculatiflora*

REFERENCE

Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. *Caldasia* 27(2): 173-194. (<http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)

Schwartzia adamantium (Cambess.) Bedell ex Gir.-Cañas

Has as synonym

basionym *Norantea adamantium* Cambess.

DESCRIPTION

Leaf: apex rounded/emarginate; **basally** cordate/obtuse; **petiolar** sessile. **Inflorescence:** **raceme** multiflorous; **rachis inflorescence axis** longer than 10 cm. **Flower:** **flower pedicel joint** straight; **pedicel** longer than 4 cm; **nectary** tubular/saccate.

Life Form

Shrub, Tree

Substrate

Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Central Brazilian Savanna

Vegetation Types

Highland Rocky Field, Riverine Forest and/or Gallery Forest, Rock outcrop vegetation

Geographic Distribution

Confirmed occurrences

North (Tocantins)

Northeast (Bahia)

Central-west (Distrito Federal, Goiás)

Southeast (Minas Gerais)

HERBARIUM MATERIAL

A. Saint-Hilaire, B1-2016, P (P00724116), **Typus**

Fontelas, J.C., 11, HUFU, (HUFU00052936), Minas Gerais

D.A. Folli, 7428, RB, (RB01217088), Espírito Santo

V.C. Souza, 26007, US, MO, NY, IBGE, Bahia

G. Hatschbach, 73746, W, (W20050002738), Minas Gerais

A. Quinet, 2082, RB, 505019, (RB00603907), Goiás

R.F.Monteiro, 627, RB, 562550, (RB00743431), Bahia

Esteves, G.L., CFCR15513, NY, (NY00972860), Minas Gerais

E.P. Heringer, 17432, IBGE, NY, US, MO, Minas Gerais

R.C. Forzza, 2627, CEPEC, (CEPEC00118931), Tocantins

R.C. Forzza, 2627, CEPEC, (CEPEC00118931), Tocantins

A. Saint-Hilaire, 528, P (P00724115), **Typus**

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Schwartzia adamantium* (Cambess.) Bedell ex Gir.-Cañas



Figure 2: *Schwartzia adamantium* (Cambess.) Bedell ex Gir.-Cañas



Figure 3: *Schwartzia adamantium* (Cambess.) Bedell ex Gir.-Cañas



Figure 4: *Schwartzia adamantium* (Cambess.) Bedell ex Gir.-Cañas



Figure 5: *Schwartzia adamantium* (Cambess.) Bedell ex Gir.-Cañas



Figure 6: *Schwartzia adamantium* (Cambess.) Bedell ex Gir.-Cañas



Figure 7: *Schwartzia adamantium* (Cambess.) Bedell ex Gir.-Cañas

REFERENCE

- Antar, G.M. & Sano, P.T. 2016. Flora da Serra do Cipó, Minas Gerais: Marcgraviaceae. Bol. Bot. Univ. São Paulo 34: 24.
- Teixeira, M.R.; Fiaschi, P. & Amorim, A.M. 2013. Flora da Bahia: Marcgraviaceae. Sitientibus série Ciências Biológicas 13: 9. (DOI: 10.13102/scb219)
- Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. Caldasia 27(2): 187. (online: <http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)
- Giraldo-Cañas, D. 2004. Las especies del género Schwartzia (complejo Norantea, Marcgraviaceae) en Brasil. Darwiniana 42: 171. (online: <http://www.scielo.org.ar/pdf/darwin/v42n1-4/v42n1-4a08.pdf>)
- Sano, P.T. & Pirani, J.R. 2004. Flora de Grão Mogol, Minas Gerais: Marcgraviaceae. Bol. Bot. Univ. São Paulo 22: 303-304.
- Wittm. in Mart., Fl. Bras. 12(1). 238. 1878 (sub *Norantea adamantium*, online: <http://www.biodiversitylibrary.org/page/144515#page/169>)

Schwartzia brasiliensis (Choisy) Bedell ex Gir.-Cañas

Has as synonym

homotype *Norantea brasiliensis* Choisy

DESCRIPTION

Leaf: apex rounded/emarginate; **basally** cuneate; **petiolar** shorter than 2.0 cm. **Inflorescence:** **raceme** multiflorous; **rachis inflorescence axis** longer than 10 cm. **Flower:** **flower pedicel joint** straight; **pedicel** shorter than 4 cm; **nectary** saccate/galeate.

Life Form

Liana/scandent/vine

Substrate

Hemiepiphytes, Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Central Brazilian Savanna, Atlantic Rainforest

Vegetation Types

Caatinga (stricto sensu), Riverine Forest and/or Gallery Forest, Ombrophylous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

Geographic Distribution

Confirmed occurrences

Northeast (Alagoas, Bahia, Ceará, Paraíba, Pernambuco, Rio Grande do Norte, Sergipe)

Central-west (Goiás)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)

South (Paraná, Santa Catarina)

HERBARIUM MATERIAL

H.N. Braga, 893, RB,  (RB00218924), Rio de Janeiro

E.O. Moura, 459, RB,  (RB01195186), Rio Grande do Norte

A.A. Roque, 1106, UFRN,  (RB01001146), Rio Grande do Norte

D.A. Folli, 2169, CVRD,  (CVRD004793), Espírito Santo

J.L. Costa-Lima, 445, UFRN,  (RB01001152), Rio Grande do Norte

V.C. Souza, 501, ESA, RB, São Paulo

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Schwartzia brasiliensis* (Choisy) Bedell ex Gir.-Cañas



Figure 2: *Schwartzia brasiliensis* (Choisy) Bedell ex Gir.-Cañas



Figure 3: *Schwartzia brasiliensis* (Choisy) Bedell ex Gir.-Cañas



Figure 4: *Schwartzia brasiliensis* (Choisy) Bedell ex Gir.-Cañas



Figure 5: *Schwartzia brasiliensis* (Choisy) Bedell ex Gir.-Cañas



Figure 6: *Schwartzia brasiliensis* (Choisy) Bedell ex Gir.-Cañas



Figure 7: *Schwartzia brasiliensis* (Choisy) Bedell ex Gir.-Cañas

REFERENCE

- Teixeira, M.R.; Fiaschi, P. & Amorim, A.M. 2013. Flora da Bahia: Marcgraviaceae. Sitientibus série Ciências Biológicas 13: 9. (DOI: 10.13102/scb219)
- Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. Caldasia 27(2): 189ff. (online: <http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)
- Giraldo-Cañas, D. 2004. Las especies del género *Schwartzia* (complejo Norantea, Marcgraviaceae) en Brasil. Darwiniana 42: 172-173. (online: <http://www.scielo.org.ar/pdf/darwin/v42n1-4/v42n1-4a08.pdf>)
- Wittm. in Mart., Fl. Bras. 12(1). 245. 1878 (as *Norantea brasiliensis*, online: <http://www.biodiversitylibrary.org/page/144515#page/173>)

Schwartzia geniculatiflora Gir.-Cañas & Fiaschi

DESCRIPTION

Leaf: apex acute/obtuse; **basally** obtuse/acute; **petiolar** shorter than 2.0 cm. **Inflorescence:** **raceme** pauciflorous; **rachis inflorescence axis** shorter than 10 cm. **Flower:** **flower pedicel joint** angular; **pedicel** shorter than 2 cm; **nectary** galeate.

Life Form

Liana/scendent/vine

Substrate

Hemiepiphytes

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Atlantic Rainforest

Vegetation Types

Ombrophylous Forest (Tropical Rain Forest)

Geographic Distribution

Confirmed occurrences

Northeast (Bahia)

HERBARIUM MATERIAL

W.W. Thomas, 11029, MBM,  (MBM0315261), NY, COL (COL000206789), CEPEC, Bahia, **Typus**

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Schwartzia geniculatiflora* Gir.-Cañas & Fiaschi



Figure 2: *Schwartzia geniculatiflora* Gir.-Cañas & Fiaschi

REFERENCE

- Teixeira, M.R.; Fiaschi, P. & Amorim, A.M. 2013. Flora da Bahia: Marcgraviaceae. Sitientibus série Ciências Biológicas 13: 11. (DOI: 10.13102/scb219)
- Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. Caldasia 27(2): 185, fig. 1. (online: <http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)

Schwartzia jucuensis Gir.-Cañas

DESCRIPTION

Leaf: apex acute/obtuse; **basally** cuneate; **petiolar** shorter than 2.0 cm. **Inflorescence:** raceme pauciflorous; **rachis inflorescence axis** shorter than 10 cm. **Flower:** flower pedicel joint straight; **pedicel** longer than 4 cm; **nectary** tubular.

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Atlantic Rainforest

Vegetation Types

Riverine Forest and/or Gallery Forest, Ombrophylous Forest (Tropical Rain Forest)

Geographic Distribution

Confirmed occurrences

Northeast (Bahia)

Southeast (Espírito Santo, Rio de Janeiro)

HERBARIUM MATERIAL

P. Fiaschi, 1850, CEPEC, (RB00748149), Bahia

G. Martinelli, 1977, RB, 183632, (RB00218524), Espírito Santo

P. Fiaschi, 1850, CEPEC, (RB00748149), Bahia

P. Fiaschi, 1909, CEPEC, 563974, (RB00748144), Bahia

G. Hatschbach, 59728, MBM, (MBM0184966), US, CEPEC, Espírito Santo, **Typus**

D.A. Folli, 2332, RB, (RB00218468), Espírito Santo

REFERENCE

Teixeira, M.R.; Fiaschi, P. & Amorim, A.M. 2013. Flora da Bahia: Marcgraviaceae. Sitientibus série Ciências Biológicas 13: 11.

(DOI: 10.13102/scb219)

Giraldo-Cañas, D. & Fiaschi, P. 2005. Las Marcgraviaceae (Ericales) de Brasil: Las especies del complejo Norantea. Caldasia 27(2): 191-192, fig. 2. (online: <http://www.revistas.unal.edu.co/index.php/cal/article/view/39297/41181>)

Giraldo-Cañas, D. 2004. Las especies del género Schwartzia (complejo Norantea, Marcgraviaceae) en Brasil. Darwiniana 42: 173-174, fig.1. (online: <http://www.scielo.org.ar/pdf/darwin/v42n1-4/v42n1-4a08.pdf>)

Souroubea Aubl.

This treatment is composed of the following taxa: *Souroubea*, *Souroubea corallina*, *Souroubea crassipetala*, *Souroubea dasystachya*, *Souroubea guianensis*, *Souroubea platyadenia*.

HOW TO CITE

Dressler, S. Marcgraviaceae in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB19597>.

DESCRIPTION

Climbing shrubs or lianas, often (hemi-)epiphytic.

Leaves shortly petiolate, with hypophyllous glands of various densities, sizes, and arrangements, often in rows parallel to the margin.

Inflorescences racemose. Nectaries on the top of the pedicel beneath the flower, sessile or sometimes shortly stipitate, usually hollow, mostly spur-like and auriculate, or tubular, very rarely solid and flat or slightly spoon-shaped.

Flowers 5-merous (rarely 3-, 4-, or 6-merous), often fragrant. Bracteoles sepaloid, appressed to calyx. Sepals 5, quincuncial, coriaceous with membranaceous margin. Petals free or connate to 2/3 of their length, the lobes strongly reflexed at anthesis. Stamens 3 or 5, rarely 4 or 6-8; filaments often adnate to corolla; anthers mostly ovoid. Ovary (3--)5-locular; ovules ca. 20 per locule; stigma (sub)sessile with (3--)5 radiating lobes.

Fruit capsular, (depressed-)globose, with leathery pericarp. Seeds few.

Mexico, Central America, Colombia, Ecuador, Peru, Bolivia, Venezuela, Guyana, Suriname, French Guiana, Brazil; 19 species, 5 in Brazil.

Life Form

Liana/scandent/vine

Substrate

Hemiepiphytes, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest, Atlantic Rainforest

Vegetation Types

Riverine Forest and/or Gallery Forest, Terra Firme Forest, Inundated Forest (Várzea), Ombrophylous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

Geographic Distribution

Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima)

Northeast (Alagoas, Bahia, Pernambuco)

Southeast (Rio de Janeiro)

IDENTIFICATION KEY

1. Pedicels up to 1 cm (rarely 1.2 cm). Nectaries beneath the flowers either flat and slightly spoon-shaped (*S. platyadenia*) or spur-shaped with auricles shorter than the spur (*S. dasystachya*)2.
- 1.* Pedicels usually longer than 1 cm. Nectaries beneath the flowers spur-shaped with auricles as long as the spur3.
2. Leaves coriaceous i.s. Nectaries beneath the flowers slightly spoon-shaped or flat and solid. Petals free. Corolla 3-4 mm long. Est. Rio*S. platyadenia*
- 2.* Leaves chartaceous or parchmentaceous i.s. Nectaries beneath the flowers auriculate spurs with auricles shorter than the spur. Petals connate. Corolla 5-6 mm long. Est. Roraima*S. dasystachya*

- 3. Petals free *S. guianensis*
- 3.* Petals connate 4.
- 4. Leaves thinly coriaceous i.s., apically acute to shortly acuminate. Pedicels short, 10-20(-25) mm long. Corolla small, 6-8 mm long. *S. corallina*
- 4.* Leaves thickly coriaceous i.s. apically obtuse, rarely acute. Pedicels long, 25-40 mm long. Corolla large, 10-14 mm long, thickly coriaceous. *S. crassipetala*

REFERENCE

Roon, A.C. de 1975. Contributions towards a monograph of the Marcgraviaceae. Revision of the genus *Souroubea*. pp. 151-187.

Souroubea corallina (Mart.) de Roon

DESCRIPTION

Leaf: texture thin coriaceous. **Inflorescence:** nectary hollow; **auriculate spur** spur equal auricle. **Flower:** pedicel 10 to 25 mm; petal connate; **corolla** 6 to 8 long (mm).

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Riverine Forest and/or Gallery Forest

Geographic Distribution

Confirmed occurrences

North (Acre, Amazonas)

HERBARIUM MATERIAL

C. Ferreira, 10348, NY, MO, Acre

P.J.M. Maas, 9245, NY,  (NY00869650), Acre

REFERENCE

Wittm. in Mart., Fl. Bras. 12(1): 252. 1878 (as *Souroubea guianensis* var. *corallina*, online: <http://www.biodiversitylibrary.org/page/144515#page/176/>)

Mart., Nov. Gen. et Sp. 3: 177. t. 294. 1832 (as *Ruyschia corallina*, online: <http://www.biodiversitylibrary.org/item/9621#page/182/>), plate 294 online: <http://www.biodiversitylibrary.org/item/9617#page/95/>

Souroubea crassipetala de Roon

DESCRIPTION

Leaf: texture coriaceous. **Inflorescence:** nectary hollow; **auriculate spur** spur equal auricle/spur longer than auricle. **Flower:** pedicel 25 to 40 mm; **petal** connate; **corolla** 10 to 14 long (mm).

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Terra Firme Forest

Geographic Distribution

Confirmed occurrences

North (Acre, Amazonas)

HERBARIUM MATERIAL

C. Ferreira, 5222, NY,  (NY00709350), Acre

A. Ducke, 1100, NY, MG, US, RB, MO, U, Amazonas, **Typus**

Souroubea dasystachya Gilg & Werderm.

DESCRIPTION

Leaf: texture chartaceous. **Inflorescence:** nectary hollow; **auriculate spur** spur longer than auricle. **Flower:** pedicel 5 to 12 mm; petal connate; **corolla** 5 to 6 long (mm).

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Terra Firme Forest, Inundated Forest (Várzea)

Geographic Distribution

Confirmed occurrences

North (Roraima)

HERBARIUM MATERIAL

E. Ule (Ule, Ernst Heinrich Georg), 8422, B, G, K, L, MG, Roraima, **Typus**
G.T. Prance, 20009, MO, INPA, Roraima

REFERENCE

Engl. Jahrb. 52: Beibl. 115 44 (1914) nomen. 52. Beibl.

see image of destroyed type in B in Field Museum negative collection: http://emuweb.fieldmuseum.org/botany/berDisplay.php?irn=237286&QueryPage=%2Fbotany%2Fsearch_berlin.php

S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 258. 2001

Souroubea guianensis Aubl.

This treatment is composed of the following taxa: *Souroubea guianensis*, *Souroubea guianensis* subsp. *amazonica*, *Souroubea guianensis* subsp. *cylindrica*, *Souroubea guianensis* subsp. *guianensis*.

Has as synonym

homotype *Ruyschia guianensis* (Aubl.) Sw.

DESCRIPTION

Leaf: texture coriaceous. **Inflorescence:** nectary hollow; **auriculate spur** spur equal auricle. **Flower:** pedicel 15 to 40 mm; petal free; **corolla** 8 to 10 long (mm).

Life Form

Liana/scandent/vine

Substrate

Hemiepiphytes, Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest, Atlantic Rainforest

Vegetation Types

Riverine Forest and/or Gallery Forest, Terra Firme Forest, Inundated Forest (Várzea), Ombrophylous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

Geographic Distribution

Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima)

Northeast (Alagoas, Bahia, Pernambuco)

IDENTIFICATION KEY

1. Rachis (inflorescence axis) lepidote. Peduncle lepidote, grayish. Leaf tissue with rhizosclereids and librosclereids, ophiurosclereids very rare. Amazon basin (Acre, Amazonas, Pará, Rondonia), coastal area (Bahia, Pernambuco). ssp. *amazonica*
1.* Rachis tomentellous or glabrous, sometimes with fissured periderm, but never lepidote. Peduncle smooth or lepidote. 2.
2. Rachis tomentellous to glabrous, mostly with fissured periderm. Peduncle mostly lepidote, rarely smooth, mostly grayish. Leaf tissue with rhizosclereids and librosclereids, ophiurosclereids occasional. Guianas to Amapá (Brazil). ssp. *guianensis*
2.* Rachis tomentellous, neither lepidote nor with fissured periderm. Peduncle smooth, dark reddish brown to blackish. Leaf tissue with rhizosclereids and ophiurosclereids, librosclereids lacking. W Guyana, SE Venezuela, SE Colombia, NW Amazonas and Roraima state of Brazil. ssp. *cylindrica*

HERBARIUM MATERIAL

G.T. Prance, 13700, INPA, MO

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Souroubea guianensis* Aubl.

REFERENCE

- Teixeira, M.R.; Fiaschi, P. & Amorim, A.M. 2013. Flora da Bahia: Marcgraviaceae. Sitientibus série Ciências Biológicas 13: 11. (DOI: 10.13102/scb219)
- S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 259. 2001
- Machado, I.C. & Lopes, A.V. 2000. *Souroubea guianensis* Aubl.: Quest for its legitimate pollinator and the first record of tapetal oil in the Marcgraviaceae. *Ann. Bot.* 85: 705-711.
- Wittm. in Mart., Fl. Bras. 12(1): 251. 1878 (online: <http://www.biodiversitylibrary.org/page/144515#page/176/mode/1up>)

Souroubea guianensis Aubl. subsp. *guianensis*

DESCRIPTION

The rachis of the inflorescence is tomentellous to glabrous, mostly with fissured periderm. The peduncle is mostly lepidote, rarely smooth, mostly grayish. Leaf tissue contains rhizosclereids and librosclereids, only occasionally ophiurosclereids. This subspecies occurs in the Guianas into Amapá (Brazil).

Life Form

Liana/scandent/vine

Substrate

Hemiepiphytes

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Riverine Forest and/or Gallery Forest, Terra Firme Forest, Inundated Forest (Várzea)

Geographic Distribution

Confirmed occurrences

North (Amazonas, Amapá, Pará)

HERBARIUM MATERIAL

G.T. Prance, 13700, INPA, MO, Amazonas

Souroubea guianensis subsp. *amazonica* (Mart.) de Roon

DESCRIPTION

The rachis (inflorescence axis) and the peduncle are lepidote.

Leaf tissue contains rhizosclereids and librosclereids, ophiurosclereids are very rare.

This subspecies occurs in the Amazon basin (Acre, Amazonas, Pará, Rondonia) and coastal rainforests (Bahia, Pernambuco).

Life Form

Liana/scandent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Amazon Rainforest, Atlantic Rainforest

Vegetation Types

Inundated Forest (Várzea), Ombrophylous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

Geographic Distribution

Confirmed occurrences

North (Acre, Amazonas, Pará, Rondônia)

Northeast (Bahia, Pernambuco)

HERBARIUM MATERIAL

B.A. Krukoff, 1425, NY,  (NY00972864), Rondônia

L.P. Queiroz, 16178, RB,  (RB01182461), Bahia

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Souroubea guianensis* subsp. *amazonica* (Mart.) de Roon



Figure 2: *Souroubea guianensis* subsp. *amazonica* (Mart.) de Roon

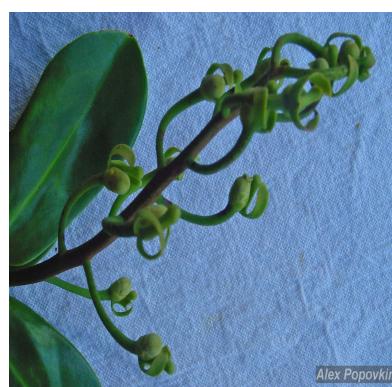


Figure 3: *Souroubea guianensis* subsp. *amazonica* (Mart.) de Roon



Figure 4: *Souroubea guianensis* subsp. *amazonica* (Mart.) de Roon



Figure 5: *Souroubea guianensis* subsp. *amazonica* (Mart.) de Roon



Figure 6: *Souroubea guianensis* subsp. *amazonica* (Mart.) de Roon



Figure 7: *Souroubea guianensis* subsp. *amazonica* (Mart.) de Roon

REFERENCE

Wittm. in Mart., Fl. Bras. 12(1): 252. 1878 (as *Souroubea guianensis* var. *amazonica*, online: <http://www.biodiversitylibrary.org/page/144515#page/176/>)
Mart., Nov. Gen. et Sp. 3: 176. t. 292. 1832 (as *Ruyschia amazonica*, online: <http://www.biodiversitylibrary.org/item/9621#page/181/>),
plate 294 online: <http://www.biodiversitylibrary.org/item/9617#page/93/>

Souroubea guianensis subsp. *cylindrica* (Wittm.) de Roon

DESCRIPTION

The rachis is tomentellous, neither lepidote nor with fissured periderm.

The peduncle is smooth and dark reddish brown to blackish in colour when dry.

Leaf tissue contains rhizosclereids and ophiurosclereids, librosclereids are lacking.

This subspecies occurs in W Guyana, SE Venezuela, SE Colombia, NW Amazonas and Amazonas and Roraima states of Brazil.

Life Form

Liana/scendent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Terra Firme Forest

Geographic Distribution

Confirmed occurrences

North (Amazonas, Roraima)

HERBARIUM MATERIAL

N.T. Silva, 60766, MO, Amazonas

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Souroubea guianensis* subsp. *cylindrica* (Wittm.) de Roon



Figure 2: *Souroubea guianensis* subsp. *cylindrica* (Wittm.) de Roon



Figure 3: *Souroubea guianensis* subsp. *cylindrica* (Wittm.) de Roon



Figure 4: *Souroubea guianensis* subsp. *cylindrica* (Wittm.) de Roon



Figure 5: *Souroubea guianensis* subsp. *cylindrica* (Wittm.) de Roon



Figure 6: *Souroubea guianensis* subsp. *cylindrica* (Wittm.) de Roon

REFERENCE

S. Dressler in Steyermark & al., Fl. Venezuelan Guayana 6: 260. 2001
Wittm. in Mart., Fl. Bras. 12(1): 253. 1878 (as *Souroubea guianensis* var. *cylindrica*, online: <http://www.biodiversitylibrary.org/page/144515#page/177/mode/1up>)

Souroubea platyadenia (Gilg) de Roon

Has as synonym

basionym *Ruyschia platyadenia* Gilg

DESCRIPTION

Leaf: texture thin coriaceous/coriaceous. **Inflorescence:** nectary flat concave; **auriculate spur** not present. **Flower:** pedicel 6 to 10 mm; petal free; **corolla** 3 to 4 long (mm).

Life Form

Liana/scendent/vine

Substrate

Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Atlantic Rainforest

Vegetation Types

Ombrophylous Forest (Tropical Rain Forest)

Geographic Distribution

Confirmed occurrences

Southeast (Rio de Janeiro)

HERBARIUM MATERIAL

A.F.M. Glaziou, 16365, G, BM, F, K, C, P, Rio de Janeiro, **Typus**