

Parachimarrhis Ducke

Piero Giuseppe Delprete

Institut de Recherche pour le Développement; piero.delprete@ird.fr

This treatment is composed of the following taxa: *Parachimarrhis*, *Parachimarrhis breviloba*.

HOW TO CITE

Delprete, P.G. 2020. *Parachimarrhis* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB24518>.

DESCRIPTION

Trees up to 20 m tall, up to 40-50 cm dbh, without buttresses; bark smooth, pale brown; wood brownish-yellow, hard. **Leafy branchlets** 2.5-5 mm thick, terete to compressed, glabrous to puberulent, cinnamoneous; older branches glabrate, terete, brown; lenticels sparse, whitish, linear. **Stipules** free at base, contorted in bud, narrowly triangular, acuminate, appressed puberulent to gray-sericeous outside, glabrous with basal colleters inside, 15-27 x 2-4 mm, readily caducous, deep-green, leaving a white scar encircling the stem above petiole attachments, 0.5-1 mm wide. **Leaves** (10-)13-30 x 4-10 cm, L/W = 2.5:1 to 3:1, elliptic to oblong-obovate, acute-decurrent at base, acute and acuminate at apex, the narrowly-triangular acumen 1.5-2.5 cm long; dark green above, pale green below, foliaceous to thinly-coriaceous; drying olive-green to pale-brown, stiff-chartaceous to coriaceous; glabrous above and below; primary, secondary and tertiary veins glabrous to very sparsely puberulent below; secondary veins 10-18 each side; tertiary veins subparallel; petioles 10-26 mm long, 1-2 mm thick, adaxially concave, glabrous; domatia absent or a few puberulent hair. **Inflorescences** corymbiform panicles, with opposite decussate branches, short-pedunculate, 5.5-11 cm long; basal branches 2-8 cm long, lateral branches 2-5 pairs; rachis basally terete to subterete, decussately compressed distally, without lenticels, rachis and branches densely puberulent; flowers in terminal few-flowered cymules. **Flowers** sessile to short-pedicellate; pedicels up to 1.5 mm long, puberulent; hypanthium obovoid, faintly bilobed, 0.5-0.9 x 0.6-0.7 mm, puberulent. **Calyx** minutely-cupular, short-lobed, 1-1.5 x 1.5-2 mm, glabrous; lobes narrowly-triangular, 0.6-1.7 x 0.3-0.6 mm; several flowers of the same inflorescences with one calyx lobe expanded into small calycophyll. **Calycophylls** 7-13 x 3-5 mm, blades elliptic to ovate, with the adaxial side covered with a thick mat of glandular hairs (0.2-0.4 mm long). **Corolla** tubular-campanulate, shortly lobed, the lobes reflexed at anthesis, 3-4 mm long, glabrous throughout, white to cream-white; tube short cylindrical, 2-3 x 0.5-0.6 mm; lobes 5, 0.5-0.7 x 0.4-0.6 mm, oblong-linear, round at apex. **Stamens** 5, exerted well above the corolla, equal in length, attached 1-1.5 mm from the base of the tube; filaments 4-5 mm long, slender-terete, basally flattened and short-pubescent; anthers narrowly elliptic, 1-1.5 x 0.3-0.4 mm, dorsifixed near the middle. **Pollen** exine irregularly reticulate. **Style** exerted, elongating only after anthers dehiscence, 3-5 mm long, terete, glabrous; style branches clavate, reflexed, 0.5-1 mm long, stigmatic surface minutely papillose. **Capsules** sessile to short-pedicellate, strongly bilobed the two sides globose, rounded at base and at apex, 3-4.5 x 4.5-6 mm, without lenticels, rust-brown, glabrous throughout; disk not exceeding the calyx; disk septicial dehiscence absent. **Seeds** hemi-elliptic in outline, 2.2-4.5 x 1.5-2.5 mm, with lateral wing with entire margin; seed embryo about one half the size of the seed outline.

COMMENTS

Primary and secondary rainforests of lowland, seasonally inundated, Amazonian rainforest of Colombia, Ecuador, Peru and Brazil.

Because of the terminal inflorescences, protandrous flowers with exerted anthers, hemi-elliptic seeds, seed inserted horizontal on the central placenta, testa sculpturing, and the bi-globular capsules, *Parachimarrhis* is related to *Simira*. From *Simira* it differs in having much smaller capsules and seeds, and yellowish wood (most species of *Simira* have wood with a reddish tinge when exposed to air).

Life Form

Tree

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Inundated Forest (Igapó), Inundated Forest (Várzea)

Geographic Distribution

Confirmed occurrences

North (Pará, Rondônia)

REFERENCE

Delprete, P.G. 1999. Rondeletieae (Rubiaceae) - Part I (Rustia, Tresanthera, Condaminea, Picardaea, Pogonopus, Chimarrhis, Dioicodendron, Molopantha, Dolichodelphys, and Parachimarrhis). Flora Neotropica - Monograph 77. The New York Botanical Garden Press, New York. 226p.

Parachimarrhis breviloba Ducke

DESCRIPTION

Trees up to 20 m tall, up to 40-50 cm dbh, without buttresses; bark smooth, pale brown; wood brownish-yellow, hard. **Leafy branchlets** 2.5-5 mm thick, terete to compressed, glabrous to puberulent, cinnamomeous; older branches glabrate, terete, brown; lenticels sparse, whitish, linear. **Stipules** free at base, contorted in bud, narrowly triangular, acuminate, appressed puberulent to gray-sericeous outside, glabrous with basal colleters inside, 15-27 x 2-4 mm, readily caducous, deep-green, leaving a white scar encircling the stem above petiole attachments, 0.5-1 mm wide. **Leaves** (10-)13-30 x 4-10 cm, L/W = 2.5:1 to 3:1, elliptic to oblong-obovate, acute-decurrent at base, acute and acuminate at apex, the narrowly-triangular acumen 1.5-2.5 cm long; dark green above, pale green below, foliaceous to thinly-coriaceous; drying olive-green to pale-brown, stiff-chartaceous to coriaceous; glabrous above and below; primary, secondary and tertiary veins glabrous to very sparsely puberulent below; secondary veins 10-18 each side; tertiary veins subparallel; petioles 10-26 mm long, 1-2 mm thick, adaxially concave, glabrous; domatia absent or a few puberulent hair. **Inflorescences** corymbiform panicles, with opposite decussate branches, short-pedunculate, 5.5-11 cm long; basal branches 2-8 cm long, lateral branches 2-5 pairs; rachis basally terete to subterete, decussately compressed distally, without lenticels, rachis and branches densely puberulent; flowers in terminal few-flowered cymules. **Flowers** sessile to short-pedicellate; pedicels up to 1.5 mm long, puberulent; hypanthium obovoid, faintly bilobed, 0.5-0.9 x 0.6-0.7 mm, puberulent. **Calyx** minutely-cupular, short-lobed, 1-1.5 x 1.5-2 mm, glabrous; lobes narrowly-triangular, 0.6-1.7 x 0.3-0.6 mm; several flowers of the same inflorescences with one calyx lobe expanded into small calycophyll. **Calycophylls** 7-13 x 3-5 mm, blades elliptic to ovate, with the adaxial side covered with a thick mat of glandular hairs (0.2-0.4 mm long). **Corolla** tubular-campanulate, shortly lobed, the lobes reflexed at anthesis, 3-4 mm long, glabrous throughout, white to cream-white; tube short cylindrical, 2-3 x 0.5-0.6 mm; lobes 5, 0.5-0.7 x 0.4-0.6 mm, oblong-linear, round at apex. **Stamens** 5, exerted well above the corolla, equal in length, attached 1-1.5 mm from the base of the tube; filaments 4-5 mm long, slender-terete, basally flattened and short-pubescent; anthers narrowly elliptic, 1-1.5 x 0.3-0.4 mm, dorsifixed near the middle. **Pollen** exine irregularly reticulate. **Style** exerted, elongating only after anthers dehiscence, 3-5 mm long, terete, glabrous; style branches clavate, reflexed, 0.5-1 mm long, stigmatic surface minutely papillose. **Capsules** sessile to short-pedicellate, strongly bilobed the two sides globose, rounded at base and at apex, 3-4.5 x 4.5-6 mm, without lenticels, rust-brown, glabrous throughout; disk not exceeding the calyx; disk septicial dehiscence absent. **Seeds** hemi-elliptic in outline, 2.2-4.5 x 1.5-2.5 mm, with lateral wing with entire margin; seed embryo about one half the size of the seed outline.

COMMENTS

Molopanthera breviloba is easily distinguishable by its small (3-4.5 x 4.5-6 mm), bilobed capsules, and minute (2.2-4.5 x 1.5-2.5 mm) seed, laterally attached and hemi-elliptic in outline. It is also typical in having flowers with small (7-13 x 3-5 mm) calycophylls covered with a thick mat of glandular hairs. The function of this matt of hairs is unknown.

Life Form

Tree

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Inundated Forest (Igapó), Inundated Forest (Várzea)


Geographic Distribution


Confirmed occurrences

North (Pará, Rondônia)

HERBARIUM MATERIAL

A. Ducke, s/n, RB, 15687,  (RB00543655), Pará, **Typus**

A. Ducke, s/n, RB, 15400,  (RB00543654), **Typus**

A. Ducke, 15687, K,  (K000470121), Pará, **Typus**

REFERENCE

Delprete, P.G. 1999. Rondeletieae (Rubiaceae) - Part I (Rustia, Tresanthera, Condaminea, Picardaea, Pogonopus, Chimarrhis, Dioicodendron, Molopanthera, Dolichodelphys, and Parachimarrhis). *Flora Neotropica - Monograph 77*. The New York Botanical Garden Press, New York. 226p.