

Hemidictyaceae Christenh. & H.Schneid.

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This treatment is composed of the following taxa: Hemidictyaceae, *Hemidictyum*.

HOW TO CITE

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DESCRIPTION

Hemidictyaceae Christenh. & H.Schneid., Phytotaxa 28: 51. 2011.

Characterized by leaves 0.5-1.5(5) m long; petioles with 2 vascular bundles that unite distally in a U-shape, laminae 1-pinnate with a conform terminal segment; and veins near the costae free but anastomosing toward the pinna margins (Prado et al., 2017). The vein tips are connected by a continuous submarginal connecting strand. Resembling *Desmophlebium* but distinguished by thin laminae, opposite pinnae, netted veins, and non-decurrent distal pinnae (Prado et al., 2017). Segregated from *Woodsiaceae* by Christenhusz et al. (2011).

Life Form

Herb

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest, Atlantic Rainforest

Vegetation Types

Inundated Forest (Várzea), Ombrophyllous Forest (Tropical Rain Forest)

Geographic Distribution

Confirmed occurrences

North (Acre)

Northeast (Alagoas, Bahia)

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

South (Paraná, Santa Catarina)

REFERENCE

Mickel, J. T. & Smith, A. R. (2004). The Pteridophytes of Mexico. The New York Botanical Garden, v. 88, pp. 1055.

Moran, R.C. (1995). *Hemidictyum*. In: Davidse et al. (eds) *Flora Mesoamericana*, v. 1, Psilotaceae a Salviniaceae, pp.246.

Prado, J., Hirai, R.Y. & Moran, R.C. Fern and Lycophyte flora of Acre state, Brazil. *Biota Neotropica*, 17(4): 1–59, 2017.

Smith, A. R. (1995). *Hemidictyum*. In: Steyermark, J. A. et al. (eds.) Flora of the Venezuelan Guayana, v. 2, Pteridophytes, Spermatophytes and Acanthaceae-Araceae, pp. 106.

Hemidictyum C.Presl

This treatment is composed of the following taxa: *Hemidictyum*, *Hemidictyum marginatum*.

HOW TO CITE

Della, A.P., Vasques, D.T. Hemidictyaceae in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB92333>.

DESCRIPTION

Hemidictyum C.Presl, Tent. Pterid. 110-111, tab. 3, fig. 24. 1836.

Plants terrestrial. Rhizomes stout, decumbent to suberect, scaly, the scales brownish, subclathrate. Fronds monomorphic, 0.5-1.5(5) m long, erect to arcuate; petioles stout, with 2 crescent-shaped vascular bundles in cross section; laminae 1-pinnate (odd-pinnate); pinnae oblong, opposite to subopposite, entire, sessile, often subcordate and overlapping the rachis, glabrous; veins initially parallel, unforked or once-forked near their base, the branches joined about halfway to the margin, giving rise to numerous, trapeziform or elongate, hexagonal areoles, lacking included veinlets, outermost series transversally joined by a continuous intramarginal vein. Sori narrowly linear, confined to main vein branches between costa and first anastomosis, simple; indusia lateral, linear, very narrow, membranous, opening distally; spores ellipsoid, monolete, the perispore folded, perforate; $x=31$.

COMMENTS

Hemidictyum is a monotypic genus (PPG I, 2016), that occurs in Southern Mexico, Central America, Antilles, Colombia, Venezuela, Trinidad, Guyana, Suriname, French Guiana, Ecuador, Peru, Bolivia and Brazil (Moran, 1995; Smith, 1995). Traditionally, these plants were understood as related to athyroid ferns (like *Athyrium* and *Diplazium*), but recent studies put the genus in a specific family (Hemidictydaceae), sister to Aspleniaceae (PPG I, 2016). According to Mickel and Smith (2004), *Hemidictyum* and *Diplazium* specimens are easily misidentified to each other. However, these plants can be distinguished by the absence of free-veinlets in *Hemidictyum*. *Hemidictyum* occurs in lower montane and montane rain forests, especially along streams, 150-1000 m (Mickel & Smith, 2004).

Life Form

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Substrate

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REFERENCE

- Mickel, J. T. & Smith, A. R. (2004). The Pteridophytes of Mexico. The New York Botanical Garden, v. 88, pp. 1055.
- Moran, R.C. (1995). *Hemidictyum*. In: Davidse et al. (eds) Flora Mesoamericana, v. 1, Psilotaceae a Salviniaceae, pp.246.
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Hemidictyum marginatum (L.) C.Presl

Has as synonym

basionym *Asplenium marginatum* L.

DESCRIPTION

Hemidictyum marginatum (L.)Presl, Tent. Pterid. 111, tab. 3, fig. 24. 1836.

Basionym: *Asplenium marginatum* L., Sp. Pl. 2: 1082. 1753. Lectotype (designed by Proctor, 1985): Petiver, Pter. Amer. t. 12, f. 2 (1712).

Plants terrestrial. Rhizomes erect, dark brown, scaly, the scales 5.0-13.0 × 0.4-3.0 mm, lanceolate, brownish, subclathrate. Fronds monomorphic, 0.5-1.5(5) m × 39.0-150.0 cm (measured from parts of vouchers), erect to arcuate, clumped; petioles 30.7-75 × 0.3-2.0 cm, bicolorous, proximally castaneous, distally stramineous, semi-cylindrical, adaxially grooved, proximally with scales similar to those on the rhizomes, distally glabrous; laminae pinnate, with 10-20 pairs of pinnae, apex conforme; rachises stramineous, semi-cylindrical, adaxially grooved, glabrous; pinnae narrowly elliptic, narrowly oblong, lanceolate, membranaceous, 18.0-50.0 × 4.3-9.0 cm, subopposite, sessile, abruptly acuminate, bases cordate-clasping overlapping the rachis, margin repand, glabrous; veins near the costa parallel (1.0-3.5 cm or 2/3 of pinnae), sometimes forked, in 1/3 next the margin of the pinnae (1.0-2.0 cm) forming a reticulate network, with areoles usually elongate, pentagonal or hexagonal, without included veinlets, network closed at margin by a continuous intra marginal vein. Sori linear on veins, paraphyses absent; indusia linear, membranous, lateral, opening to basiscopic side, 5.0-25.0 × 0.2-0.8 mm; annuli oblique, interrupted by pedicel; pedicel with 0.1-0.4 mm in long; spores ellipsoid, monolete, brown, without chloroplasts.

COMMENTS

In Brazil, *H. marginatum* occurs in SC, PR, SP, RJ, ES, MG, BA, AL, and AC, from 13-800 m of altitude, in várzea forest.

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HERBARIUM MATERIAL

J.P.P. Carauta, 1872, RB, Rio de Janeiro

Funez, LA, 5156, FURB (FURB51003), Santa Catarina

Gaudichaud, 237, PC (P01578387), Rio de Janeiro

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Hemidictyum marginatum* (L.) C.Presl



Figure 2: *Hemidictyum marginatum* (L.) C.Presl

REFERENCE

- Mickel, J. T. & Smith, A. R. (2204). The Pteridophytes of Mexico. The New York Botanical Garden, v. 88, pp. 1055.
- Moran, R.C. (1995). *Hemidictyum*. In: Davidse et al. (eds) Flora Mesoamericana, v. 1, Psilotaceae a Salviniaceae, pp.246.
- Prado, J., Hirai, R.Y. & Moran, R.C. Fern and Lycophyte flora of Acre state, Brazil. Biota Neotropica, 17(4): 1–59, 2017.
- Smith, A. R. (1995). *Hemidictyum*. In: Steyermark, J. A. et al. (eds.) Flora of the Venezuelan Guayana, v. 2, Pteridophytes, Spermatophytes and Acanthaceae-Araceae, pp. 106.