

Liabeae (*Cass. ex Dumort.*) Rydb.

Diego Germán Gutiérrez

Museo Argentino de Ciencias Naturales; digutier@macn.gov.ar

Este tratamento é composto pelos seguintes táxons: *Liabeae*, *Liabum*.

COMO CITAR

Gutiérrez, D.G. 2020. *Liabeae* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Disponível em: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB101558>.

DESCRIÇÃO

Ervas ou arbustos perenes, algumas vezes escandentes ou pequenas árvores; látex geralmente presente. Folhas geralmente opostas, às vezes em rosetas, pecioladas, raramente sésseis, base foliar com pseudoestípula ou disco nodal, venação trinervada, pinada ou palmada, alvo-tomentosas na face abaxial. Capitulescência simples ou subcimosa, às vezes formando uma panícula tirsoide; capítulos radiados, heterógamos; invólucro geralmente subimbricado, com brácteas em muitas séries graduadas; receptáculo alveolado, raramente paleáceo. Flores do raio geralmente presentes, pistiladas, corola amarela, ocasionalmente avermelhada a púrpura ou alva, estilete com ramos alongados. Flores do disco bissexuais, corola tubulosa, usualmente amarela, raramente vermelha, púrpura ou alva; anteras com apêndice do conectivo mais longo que largo, base da antera calcificada, algumas vezes caudada, fimbriada ou sagitada; estilete com base glabra e ápice piloso. Cipselas geralmente prismáticas, (2-4)5-10-costadas, geralmente com tricomas tectores e glandulares; pápus duplo, série mais externa menor, de escamas, e a mais interna de cerdas maiores, algumas vezes com cerdas plumosas ou pápus ausente.

Forma de Vida

Arbusto, Erva, Subarbusto

Substrato

Terrícola

DISTRIBUIÇÃO

Naturalizada, não é endêmica do Brasil

Domínios Fitogeográficos

Amazônia

Tipos de Vegetação

Floresta de Terra Firme

Distribuição Geográfica

Ocorrências confirmadas

Norte (Acre)

Liabum Adans.

Este tratamento é composto pelos seguintes táxons: *Liabum*, *Liabum acuminatum*, *Liabum amplexicaule*.

COMO CITAR

Gutiérrez, D.G. 2020. *Liabum* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Disponível em: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB22223>.

Tem como sinônimo

heterotípico *Andromachia* Bonpl.

DESCRIÇÃO

Subshrubs, shrubs, or perennial caulescent (rarely acaulescent) herbs, rarely small trees or scandent shrubs, sparsely branched or unbranched, without latex; stems costate or not costate, terete or scarcely to strongly hexagonal in cross-section, densely white-tomentose, sometimes ochraceous-tomentose, rarely glabrous; nodes usually, but not always, with interpetiolar, chartaceous pseudostipules, these commonly fusing into a complete or partial leafy disc, with or without conspicuous auricles, auricles oriented toward the stem apex, glabrescent adaxially, densely white-tomentose abaxially. Leaves simple, opposite, usually scattered along the main stem and branches, in some herbaceous species either basally rosulate or clustered at the shoot apex; leaf blades chartaceous, sometimes coriaceous, ovate to elliptic, sometimes subtriangular or rarely obovate, apex acute, attenuate, or acuminate, base cuneate, rounded, truncate, or decurrent, sometimes cordate, margins mucronate-serrate or serrulate, planate, rarely revolute; venation acrodromous with a central midvein and two conspicuous lateral main veins, occasionally with additional conspicuous basal secondary veins (actinodromous), rarely with the lateral main veins inconspicuous and the leaf appearing to have pinnate venation (*L. umbellatum*); upper surface usually smooth, rarely bullate, glabrous or glabrescent, sometimes hirsute or strigose, sometimes mixed with arachnoid pubescence, abaxially densely white-tomentose, sometimes ochraceous-tomentose; petiolate, sometimes inconspicuously petiolate when blade decurrent, petiole wingless or winged, wings narrow or wide. Inflorescences terminal, umbelliform, corymbiform, or glomerulose cymes, few- or many-headed; capitula radiate or sub-radiate, heterogamous, sessile or pedunculate, peduncles tomentose. Involucro campanulate or sometimes hemispherical; phyllaries 50–150, (4–) 5–7 (–8)-seriate, imbricate, coriaceous, greenish or sometimes reddish toward the apex; outer series shorter, ovate, apex acute, arachnoid-pubescent or glabrous; inner series linear, apex attenuate and erect, rarely twisted, glabrous. Receptacle epaleate, fimbriate to chaffy, chaff laciniate surrounding depressions. Ray florets pistillate, fertile, without staminodia, (10–) 20–150; corolla yellow or orange, limb linear, elliptic or obovate to ovate, usually 4-veined with apex 3-dentate or 1–3-veined with apex entire or rarely 2-dentate, glabrous or pubescent; style shaft glabrous, without a nectary at the base; style branches long, filiform, rounded at the apex, curved to coiled, glabrous, rarely papillose at the apex. Disc florets bisexual, fertile, 15–90; corolla yellow, tubular, funneliform, deeply 5-lobed, tube usually gradually expanded into the throat (connate portion of the limb), rarely abruptly expanded (e.g., *L. saloyense*), glabrous or pubescent; stamens with thecae pale yellow, calcarate, short-caudate, tails digitate or papillose, apical appendage ovate to sub-triangular, smooth; filament smooth, anther collar with conspicuous thickenings; endothecial cells with polarized, radial and “U” thickenings; style shaft hispidulous distally, with a nectary at the base; style branches long, filiform, rounded at the apex, curved to coiled, externally hispidulous, the sweeping hairs extending down the style proximal to the bifurcation point a distance less than the length of the style branches. Cypselae cylindrical, ellipsoidal or obconical, brownish, with conspicuous basal carpodia, slightly or strongly 8–10-costate, pubescent with twin hairs; walls with quadrate to short-rectangular, rarely somewhat acicular, crystals. Pappus biseriate, yellow, yellowish-white, or yellowish-orange; outer series of a few short scabrous capillary bristles, or absent; inner series of long, numerous, scabrous capillary bristles.

Forma de Vida

Arbusto, Erva, Subarbusto

Substrato

Terrícola

DISTRIBUIÇÃO

Nativa, não é endêmica do Brasil

Domínios Fitogeográficos

Amazônia

Tipos de Vegetação

Floresta de Terra Firme

Distribuição GeográficaOcorrências confirmadas

Norte (Acre)

CHAVE DE IDENTIFICAÇÃO

1. Tallos generalmente sin pseudoestípulas en los nudos. *L. acuminatum*
1. Tallos con pseudoestípulas en los nudos. *L. amplexicaule*

BIBLIOGRAFIA

Gutiérrez, D.G. 2015. *Liabum* (Asteraceae, Liabeae). En F.O. Zuloaga, M.J. Belgrano & A.M.R. Anton (eds.), S.E. Freire (coord.), Flora Argentina, Flora Vascular de la República Argentina. Dicotyledoneae, Asteraceae, 7(2): 290. Estudio Sigma S.R.L. Buenos Aires.

Gutiérrez, D.G. & L. Katinas. 2015. Systematics of *Liabum* (Liabeae, Asteraceae). *Systematic Botany Monographs* 97: 1-121.

Liabum acuminatum Rusby

DESCRIÇÃO

Raiz: raiz(es) presente(s). **Caule:** forma herbáceo(s); **látex** ausente(s); **tricoma(s)** presente(s)/ausente(s). **Folha:** ápice(s) agudo(s)/acuminada(s)/atenuado(s); **filotaxia** oposta(s); **forma** ovada(s)/elíptica(s)/subtriangular; **margem(ns)** inteira/dentado(s); **pecíolo(s)** presente(s)/ausente(s). **Flor:** ligulada(s) presente(s); **tubulosa(s)** presente(s). **Fruto:** pápus piloso(s); **pápus** presente(s); **tricoma(s)** presente(s).

DESCRIÇÃO ADICIONAL

Perennial caulescent erect herbs to subshrubs, 0.3–1 m tall; stems costate or not costate, terete or hexagonal in cross-section, densely and persistently white-tomentose; pseudostipules absent. Leaves scattered along the main stem and branches; leaf blades 6–17 cm long, 1.5–5 cm wide, chartaceous, narrowly elliptic or elliptic, rarely ovate or obovate, apex acute or attenuate, base cuneate, margin mucronate-serrate, venation acrodromous, with the pair of lateral veins reaching the apex of the blade, surface smooth, green, glabrous adaxially, densely white-tomentose abaxially; petioles 1–3.5 cm long, not winged. Inflorescence not scapose, umbelliform, dense, rarely lax, with more than 50 capitula; capitula sub-radiate, pedunculate, peduncles up to 12 mm long, densely whitetomentose. Involucro 7–9 mm long, 4.5–7 mm wide, campanulate; phyllaries 85–90 in 5–7 series, 1.5–8.5 mm long, 0.5–0.7 mm wide, greenish, outermost phyllaries ovate, apex acute, pubescence arachnoid, innermost phyllaries linear, apex attenuate, glabrescent; receptacle with chaff 1.5–3 mm long. Ray florets 85–120; corolla 8–9.5 mm long, yellow, glabrous or slightly pubescent, tube 4.5–5.5 mm long, 0.15–0.2 mm wide, limb 3.5–4.0 mm long, 0.25–0.3 mm wide, linear, 1–3-veined, apex entire or slightly 2-dentate; style 6–11 mm long, branches 1.5–2.2 mm long. Disc florets ca. 15; corolla 7–8.5 mm long, tubular, tube 3.5–4.5 mm long, ca. 0.2 mm wide, gradually expanded into the limb, yellow, glabrescent, limb 3.5–4 mm long, 0.5–0.7 mm wide, lobes 1.4–1.8 mm long, ca. 0.5 mm wide, shorter than the throat, pubescent at the apex; anthers 1.8–2.5 mm long, apical appendage 0.45–0.5 mm long, tails 0.2 mm long; style 9–15 mm long, branches 1.7–2 mm long, papillae covering style branches and extending down the shaft of the style a distance less than the length of the branches. Cypselae 1.1–1.5 mm long, ca. 0.3 mm wide, cylindrical to ellipsoid. Pappus bristles pale yellow, white-yellowish, or yellowish-orange, scabrous; outer series up to 2 mm long, sometimes absent; inner series 6.5–9 mm long.

Forma de Vida

Erva, Subarbusto

Substrato

Terrícola

DISTRIBUIÇÃO

Nativa, não é endêmica do Brasil

Domínios Fitogeográficos

Amazônia

Tipos de Vegetação

Floresta de Terra Firme

Distribuição Geográfica

Ocorrências confirmadas

Norte (Acre)

MATERIAL TESTEMUNHO

E. Ule, 9906, US, MG (MG014730), Acre

G.T. Prance, 7310, US, NY, MO, RB, 281516, (RB00282624), INPA, 24102, (INPA0024102)

BIBLIOGRAFIA

Gutiérrez, D.G. 2015. *Liabum acuminatum* (Asteraceae, Liabeae). En Zuloaga, F.O., M.J. Belgrano & A.M.R. Anton (eds.), Flora Argentina, Flora Vascular de la República Argentina. Dicotyledoneae, Asteraceae, 7(2): 290. Estudio Sigma S.R.L., Buenos Aires.

Gutiérrez, D.G. & L. Katinas. 2015. Systematics of *Liabum* (Liabeae, Asteraceae). *Syst. Bot. Monogr.* 97: 1-121.

Liabum amplexicaule Poepp.

DESCRIÇÃO

Raiz: raiz(es) presente(s). **Caule:** forma herbáceo(s); **látex** ausente(s); **tricoma(s)** presente(s)/ausente(s). **Folha:** ápice(s) agudo(s)/acuminada(s)/atenuado(s); **filotaxia** oposta(s); **forma** ovada(s)/elíptica(s)/subtriangular; **margem(ns)** inteira/dentado(s); **pecíolo(s)** presente(s)/ausente(s). **Flor:** **ligulada(s)** presente(s); **tubulosa(s)** presente(s). **Fruto:** **pápus** piloso(s); **pápus** presente(s); **tricoma(s)** presente(s).

DESCRIÇÃO ADICIONAL

Perennial caulescent erect herbs to subshrubs, 0.4–2 m tall; stems costate or not costate, terete or hexagonal in cross-section, densely and persistently white-tomentose; pseudostipules 0.5–1.5 mm long, without auricles, green, glabrous adaxially, densely white-tomentose abaxially. Leaves scattered along the main stem and branches; leaf blades 6–19 cm long, 1.5–5 cm wide, chartaceous, narrowly elliptic or elliptic, rarely ovate, apex acute or attenuate, base cuneate, margin mucronate-serrate, venation acrodromous, with the pair of lateral veins usually reaching the apex of the blade, surface smooth, green glabrous adaxially, densely white-tomentose abaxially; petioles 1–3 cm long, not winged. Inflorescence not scapose, umbelliform, dense, rarely lax, with more than 50, occasionally as few as 12, capitula; capitula sub-radiate, pedunculate, peduncles up to 10 mm long, densely white-tomentose. Involucro 7.5–9 mm long, 6.5–9 mm wide, campanulate; phyllaries 80–90 in 5–7 series, 1.5–8 mm long, 0.5–0.85 mm wide, greenish, outermost phyllaries ovate, apex acute, pubescence arachnoid, innermost phyllaries linear, apex attenuate, glabrescent; receptacle with chaff 1.5–3 mm long. Ray florets 85–110; corolla 8–10.5 mm long, yellow, glabrous or slightly pubescent, tube 4.5–6 mm long, 0.15–0.2 mm wide, limb 3.5–4.5 mm long, 0.25–0.4 mm wide, linear, 1–3-veined, apex entire or inconspicuously 2-dentate; style 7–7.2 mm long, branches 1–1.3 mm long. Disc florets 12–15; corolla 7–8 mm long, tubular; tube 3.5–4 mm long, ca. 0.2 mm wide, gradually expanded into the limb, yellow, glabrescent, limb 3.5–4 mm long, 0.5–0.7 mm wide, lobes 1.4–1.8 mm long, ca. 0.25 mm wide, shorter than the throat, pubescent at the apex; anthers 2–2.3 mm long, apical appendage 0.5–0.6 mm long, tails 0.2–0.3 mm long; style 8–10 mm long, branches 1.7–2 mm long, papillae covering style branches and extending down the shaft of the style a distance equal to the length of the branches. Cypselae 1.1–1.5 mm long, 0.3–0.4 mm wide, cylindrical to ellipsoid. Pappus bristles pale yellow, white-yellowish, yellowishorange, scabrous; outer series 1–1.5 mm long, sometimes absent; inner series up to 7.5 mm long. Chromosome number: n = 16–19II.

Forma de Vida

Erva, Subarbusto

Substrato

Terrícola

DISTRIBUIÇÃO

Nativa, não é endêmica do Brasil

Domínios Fitogeográficos

Amazônia

Tipos de Vegetação

Floresta de Terra Firme

Distribuição Geográfica

Ocorrências confirmadas

Norte (Acre)

MATERIAL TESTEMUNHO

A.R.S. Oliveira, 306, NY,  (NY00583524), MO (MO1933402), Acre

D. Daly, 11263, NY,  (NY00710105), MO (MO1933411), Acre

D. Daly, 9631, NY,  (NY00472174), US, Acre

BIBLIOGRAFIA

Gutiérrez, D.G. & L. Katinas. 2015. Systematics of *Liabum* (Liabeae, Asteraceae). Syst. Bot. Monogr. 97: 1-121.