

Aldina Endl.

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This treatment is composed of the following taxa: *Aldina*, *Aldina discolor*, *Aldina heterophylla*, *Aldina kunhardtiana*, *Aldina latifolia*, *Aldina microphylla*, *Aldina occidentalis*, *Aldina polyphylla*.

HOW TO CITE

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DESCRIPTION

Tree, frequently buttressed. **Leaves** up to 11 odd-pinnate, often 1–3-foliolate when nearer the inflorescences, extipulate; petioles and rachis sometimes darkening; leaflets opposite to subopposite, mostly coriaceous, sometimes chartaceous, base rounded to cordate, a subtle sometimes dense white wax coat on the lower surface, venation brochidrodromous. **Inflorescences** terminal or axillary, racemose or paniculate-racemose, densely covered by minute appressed golden to rusty hairs; bracts and bracteoles minute. **Flower** bisexual, actinomorphic (radially symmetrical), fragrant; calyx glabrous in the inner surface, entire in bud, opening about halfway in 2–4 recurved, irregular segments; petals (3)4–6, imbricate in the bud, white to yellowish, glabrous, oblong, obovate and oblanceolate, usually concave to cuculate with folding impressions from stamens at the tips; stamens numerous, mostly ca. 60, rarely around 36, glabrous, white, free, commonly with a sheath at the base of ca. 3 mm long, the anthers large, uniform, narrowly oblong to linear, opening lengthwise by slits; gynoecium arising from the bottom of hypanthium cup, sessile or more often borne on a distinct stipe, swollen-articulate at junction with the somewhat oblong ovary; ovary 1–3 (non-Brazilian species), 2–5 ovulate, covered by yellowish, golden appressed hairs; style glabrous, subulate, straight or usually hooked; stigma punctiform. **Fruit** drupoid legume, ca. 5–9 cm long, 4–6 cm diameter, tardily dehiscent, thick, spongy when adapted to water floatation, globose to subglobose, glabrous to tomentose, and 1-seeded.

COMMENTS

Aldina is a Neotropical genus with 18 species distributed in the Amazon region. In Brazil, the genus is represented by 7 species distributed in a variety of habitats such as seasonally flooded forests (*igapós*), white sand forests (*campinas* and *campinarans*) and high altitude mountains. *Aldina* is closely related to *Andira* and *Hymenolobium*, comprising the *Andira* clade.

Life Form

Tree

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Amazonian Campinarana, Terra Firme Forest, Inundated Forest (Várzea), Ombrophylous Forest (Tropical Rain Forest), Rock outcrop vegetation

Geographic DistributionConfirmed occurrences

North (Amazonas, Rondônia)

Possible occurrences

Northeast (Bahia)

IDENTIFICATION KEY

1. Leaflets glabrous or glabrescent to tomentose with erect to appressed hairs on the lower face; mature flower buds 1–2.5 cm long, erect in the inflorescence axes; stamens ca. 60, commonly enveloping the gynoecium 2
1. Leaflets glabrous on both faces; mature flower buds 0.5–2 cm long, globose to obovoid, erect or bent in the inflorescence axes; stamens 36–60, enveloping the gynoecium or disperse 6
2. Leaflets oblong, densely tomentose with erect to decumbent rusty hairs on the lower face over a flaking white wax coat, secondary veins prominent below inflorescence with velvety rusty hairs; fruit globose with appressed brown hairs *A. kunhardtiana*
2. Leaflets broadly ovoid to narrowly oblong, white wax coat absent or attached to the surface; inflorescence pale yellow to pale green before drying; stamens coiling around the gynoecium or spread around it; fruit with spongy mesocarp if species from igapó forests 3
3. Leaflets oblong-ovoid, glabrous to glabrescent with appressed white hairs on the lower face, white wax coat absent; inflorescence pale yellow; fruit with spongy mesocarp *A. latifolia*
3. Leaflets broadly ovoid to narrow oblong, lower face of leaflets with white to pale golden appressed hairs, wax coat in an even layer; mature flower buds globoid to obovoid; barochoric fruit with fibrous mesocarp 4
4. Leaves 5–9(11)-foliolate; leaflets 5.5–16 × 1.5–4.5 cm, narrowly oblong-lanceolate tomentose to glabrescent with appressed pale grey hairs and uniform white wax coat below; mature flower buds obovate; stipe 1 cm long *A. polyphylla*
4. Leaves (1–3)5(7)-foliolate; leaflets 7–19(23) × 4–11 broadly oblong pubescent with minute white to golden-brown appressed hairs; mature flower buds globose or obovate; stipe 1–10 mm long 5
5. Leaves (1–3)5(7)-foliolate; indumentum with appressed white to golden hairs and a homogeneous white wax coat underneath; mature flower buds 1–2 cm long, oblong; stipe 0.5–10 mm long *A. discolor*
5. Leaves 3–7-foliolate; indumentum with white to brownish hairs collapsed after drying, erect when living and a fine layer of wax; mature flower buds 0.8–1.5 long, globose; stipe ca. 1 mm long *A. occidentalis*
6. Mature flower buds 0.5–1 cm long, globose, bent in the inflorescence axes; stipe 5–25 mm long, style 2–6 mm long; stamens 30–60 *A. heterophylla*
6. Mature flower buds 1–2 cm long, obovoid, erect in the inflorescence axes; stipe 2.4 cm long, stamens never less than 37 spread around gynoecium..... *A. microphylla*

REFERENCE

Cardoso, D. et al. 2017. Amazon plant diversity revealed by a taxonomically verified species list. *Proceedings of the National Academy of Sciences* 114(40): 10695–10700.

Cowan, R. S. 1953. Leguminosae-Caesalpinioideae & Leguminosae-Papilionatae. In: B. Maguire & collaborators, The Botany of the Guayana Highland. Mem. New York Bot. Gard. 8(2): 103–119.

Cowan, R. S. 1958. In: Maguire, B. et al., The Botany of the Guayana Highland—Part III. Mem. New York Bot. Gard. 10(1): 142–156.

Stergios, B. & Cowan, R. S. 1999. *Aldina*. In: Berry, P.E. Yatskievych, K. & Holst, B.K. Flora of the Venezuelan Guayana. 5: 245–253.

Funk, V.; Hollowell, T.; Berry, P.; Kelloff, C. & Alexander, S.N. 2007. Checklist of the Plants of the Guiana Shield (Venezuela: Amazonas, Bolivar, Delta Amacuro; Guyana, Surinam, French Guiana). Contr. U.S. Natl. Herb. 55: 1–584.

Ramos, G., Lima, H. C. ; Prenner, G.; Queiroz, L. P.; Zartman, C. E. & Cardoso, D. 2016. Molecular systematics of the Amazonian genus *Aldina*, a phylogenetic enigmatic ectomycorrhizal lineage of papilionoid legumes. Molecular Phylogenetics and Evolution 97: 11–18.

Aldina discolor Spruce ex Benth.

Has as synonym

heterotypic *Aldina stergiosii* M.Yu.Gontsch. & Yakovlev

DESCRIPTION

Root: nodule absent; **sapopema** present. **Stem:** exudate red present. **Leaf:** leaf compound; **phytotaxy** alternate; **leaflet** subopposite; **leaflet indumentum** present; **size of the leaflet** 1.5 to 2 cm long; **number of the leaflet** 1 - 5. **Inflorescence:** **indumentum** rusty sericeous; **inflorescence type** terminal or axillary raceme. **Flower:** **symmetry floral** actinomorphic; **calyx** entire at the flower-bud; **stamen** 60; **flower size** 1.5 to 2.0. **Fruit:** **drupe** not woody; **hair** present. **Seed:** **number seed** 2.

ADDITIONAL DESCRIPTION

Tree: up to 25 m high, commonly with buttresses; banches, petioles, pulvinus and inflorescences covered with appressed hairs, these frequently pale yellow in situ, rusty after drying. **Leaves:** (1–3) 5 (7)-pinnate, 18–34 cm long, unifoliolate leaves 15 cm long; leaflets 7–19(–23) × 4–11 cm, blade chartaceous to coriaceous, ovate to oblong-ovate, rounded at the base, sometimes subcordate, apex varying from rounded to shortly acute, tip obtuse to acute, upper face glabrous, lower face glaucous, pubescent to glabrescent with appressed white to pale golden hairs, frequently with a tessellate layer of wax, more visible after drying. **Venation:** nearly obscure on the upper face, prominent below. **Inflorescence:** 9–22 (–35) cm long, axillary or terminal racemes, less frequently panicles, generally lax, occasionally branched, covered by short appressed white to rusty golden hairs; flower buds obovoid, 0.8–2 cm long. **Flowers:** 1.5–3 cm long; calix 1–2 cm long, splitting into two to three recurved lobes after anthesis; petals 5, narrowly oblong or oblanceolate with a hooded tip; stamens numerous, 1–2.5 cm long; stipe 0.3–1 cm long, terete; ovary oblong, joint with the stipe, covered by appressed pale golden hairs; style 0.3–1 cm long, subulate, sometimes recurved at the tip. **Fruit:** 2.5–6.5 × 1.5–4.5 diam., globose, glabrescent, 1–4 seeded.

COMMENTS

This species is widely distributed over the Amazon basin in white-sand forests of Brazil (Amazonas), Venezuela, and Colombia.

Life Form

Tree

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Amazonian Campinarana, Ombrophylous Forest (Tropical Rain Forest)

Geographic Distribution

Confirmed occurrences

North (Amazonas)

HERBARIUM MATERIAL

R. Spruce, 2802, P (P02771884), P (P02771883), NY,  (NY00231172), GH,  (GH00057521), **Typus**
D. Cardoso, 3358, ALCB (ALCB048756), Amazonas

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Aldina discolor* Spruce ex Benth.



Figure 2: *Aldina discolor* Spruce ex Benth.



Figure 3: *Aldina discolor* Spruce ex Benth.



Figure 4: *Aldina discolor* Spruce ex Benth.

REFERENCE

- Ducke, A. 1949. Notas sobre a Flora Neotropical - II: As Leguminosas da Amazonia Brasileira (ed. 2). Bol. Tecn. Inst. Agron. N. 18: 1–248.
- Cowan, R. S. 1953. Leguminosae–Caesalpinioideae & Leguminosae–Papilionatae. In: B. Maguire & collaborators, The Botany of the Guayana Highland. Mem. New York Bot. Gard. 8(2): 103–119.

Aldina heterophylla Spruce ex Benth.

DESCRIPTION

Root: nodule absent; **sapopema** absent. **Stem:** exudate red present. **Leaf:** leaf compound; **phyllotaxy** alternate; **leaflet** subopposite/opposite; **leaflet indumentum** absent; **size of the leaflet** 0.5 to 1 (2) cm long; **number of the leaflet** 1 - 5. **Inflorescence:** **indumentum** rusty sericeous/whitish sericeous; **inflorescence type** terminal or axillary panicle. **Flower:** **symmetry floral** actinomorphic; **calyx** entire at the flower-bud; **stamen** 35; **flower size** up to 1.5 cm. **Fruit:** **drupe** not woody; **hair** absent. **Seed:** **number seed** 1.

ADDITIONAL DESCRIPTION

Tree up to 25(–40) m tall. All parts glabrous except the inflorescence. **Leaves** 5.5– 22 cm long, unifoliolate leaves 6.5–15 cm long, 1–3(5)-foliolate; leaflets 5–11(–14) × 3–8.5 cm commonly naviculate in situ, ovate, oblong-lanceolate, coriaceous, base rounded, apex acuminate, glabrous on both surfaces; venation inconspicuous on both faces, except for the midvein below. **Inflorescence** 7–21 cm long, terminal panicles, occasionally axillary, densely covered with appressed pale-yellow to ferruginous hairs. **Flowers** 1.5–2 cm long; mature buds 0.5– 1 cm, globose, attached in the inflorescence in a bent position; calyx ca. 1 cm long, splitting into three to four lobes; petals, oblanceolate with the apex cuculate; stamens 36, not involving the gynoecium; stipe 5 mm long jointed with the ovary, style ca. 2 mm long, straight, subulate, glabrous. **Fruit** 1.5–3 × 2.3–3 cm diam., globose, glabrescent, green, drying dark brown to black, occasionally slightly wrinkled; suture line swollen, 1 seeded.

COMMENTS

This species is endemic to Brazil and has been known only from the white-sand forests of Manaus, Presidente Figueiredo and surrounding areas in the state of Amazonas.

Life Form

Tree

Substrate

Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Amazonian Campinarana, Ombrophylous Forest (Tropical Rain Forest)


Geographic Distribution

Confirmed occurrences

North (Amazonas)

HERBARIUM MATERIAL

D. Cardoso, 3288, ALCB (ALCB029097), Amazonas

R. Spruce, 1369, P (P02771877), K,  (K000500846), **Typus**

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Aldina heterophylla* Spruce ex Benth.



Figure 2: *Aldina heterophylla* Spruce ex Benth.



Figure 3: *Aldina heterophylla* Spruce ex Benth.

REFERENCE

Ducke, A. 1949. Notas sobre a Flora Neotropical - II: As Leguminosas da Amazonia Brasileira (ed. 2). Bol. Tecn. Inst. Agron. N. 18: 1–248.

Ramos, G.; Lima, H.C.; Prenner, G.; Queiroz, L.P.; Zartman, C.E.; Cardoso, D. 2016. Molecular systematics of the Amazonian genus *Aldina*, a phylogenetic enigmatic ectomycorrhizal lineage of papilionoid legumes. *Molecular Phylogenetics and Evolution* 97: 11–18.

Aldina kunhardtiana R.S.Cowan

DESCRIPTION

Root: nodule absent; **sapopema** absent. **Stem:** exudate red present. **Leaf:** leaf compound; **phytotaxy** alternate; **leaflet** subopposite/opposite; **leaflet indumentum** present; **size of the leaflet** 0.5 to 1 (2) cm long; **number of the leaflet** 1 - 5. **Inflorescence:** **indumentum** rusty sericeous; **inflorescence type** terminal or axillary panicle. **Flower:** **symmetry floral** actinomorphic; **calyx** entire at the flower-bud; **stamen** 60; **flower size** bigger than 3.0/2.0 to 3.0 cm/1.5 to 2.0/up to 1.5 cm. **Fruit:** **drupe** not woody; **hair** present. **Seed:** **number seed** 1.

ADDITIONAL DESCRIPTION

Tree up to 25 m tall. All parts except upper leaf surface fuscous-velvety. **Leaves** 17–42 cm long, mostly 5–9 (–13)-foliolate. **Leaflets** 5–23 × 3–10 cm, alternate to subalternate, ovate, oblong-elliptic, coriaceous, base rounded, apex rounded, glaucous to yellowish below densely covered with greenish to ferruginous hairs, erect to slightly decumbent; **venation:** midvein, secondary and tertiary veins conspicuous below. **Inflorescence** 9–36 cm long, terminal panicles, occasionally axillary, densely covered with appressed velvety rusty hairs. **Flowers** 2–2.5 cm long; mature buds 1–1.8 (–2.5) cm long, obovate; calyx 1–2 cm long, entire at the bud, splitting into 2–3 recurved lobes; petals 5 white, oblanceolate with the apex cuculate; stamens usually grouped and slightly coiled before pollination, anthers cream; ovary ca. 4–8 × 4 mm, oblong, densely covered with appressed golden-brown hairs; stipe ca. 5–10 mm long jointed with the ovary, the style 6–10 mm long commonly recurved, subulate, glabrous, the stigma simple. **Fruit** 4.5–8.5 × 2.5–7 diam., globose with a median suture, appressed pubescent with dark-brown hairs.

COMMENTS

This species is distributed in terra-firme forests of Amazonas in Brazil, Venezuela and occasionally in non-inundated areas near river banks of Colombia.

Life Form

Tree

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Amazonian Campinarana, Terra Firme Forest

Geographic Distribution

Confirmed occurrences

North (Amazonas)

HERBARIUM MATERIAL

D. Cardoso, 3300, ALCB (ALCB048761), Amazonas

B. Maguire, 28485, K,  (K000500830), RB, 97864,  (RB00548722), RB, 97864,  (RB00549497), **Typus**

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Aldina kunhardtiana* R.S.Cowan



Figure 2: *Aldina kunhardtiana* R.S.Cowan



Figure 3: *Aldina kunhardtiana* R.S.Cowan

Aldina latifolia Spruce ex Beth.

This treatment is composed of the following taxa: *Aldina latifolia*, *Aldina latifolia* var. *latifolia*.

Has as synonym

homotype *Aldina latifolia* var. *pubescens* R.S. Cowan

homotype *Aldina latifolia* var. *pubescens* R.S. Cowan

heterotypic *Aldina amazonica* M. Yu. Gontsch. & Yakovlev

DESCRIPTION

Root: nodule absent; **sapopema** present. **Stem:** exudate red present. **Leaf:** leaf compound; **phytotaxy** alternate; **leaflet** subopposite/opposite; **leaflet indumentum** present; **size of the leaflet** 1.5 to 2 cm long; **number of the leaflet** 1 - 5. **Inflorescence:** **indumentum** whitish sericeous; **inflorescence type** terminal or axillary panicle. **Flower:** **symmetry floral** actinomorphic; **calyx** entire at the flower-bud; **stamen** 60; **flower size** 2.0 to 3.0 cm. **Fruit:** **drupe** spongy; **hair** absent. **Seed:** **number seed** 2/1.

ADDITIONAL DESCRIPTION

Tree up to 25 m tall; bark slightly fissured, glaucous. **Leaves** 16–35 cm long, unifoliolate leaves up to 11 cm long, (1–3)5(7)-foliolate; leaflets 7–21 × 3.5–10 cm, subcoriaceous to coriaceous, nitid above, glabrous to appressed pubescent below, ovate, oblong-ovate, base rounded, apex rounded to shortly acuminate, margin entire; venation inconspicuous except for the midvein below. **Inflorescence** 14–29 (–31) cm long, racemes or sparsely branched panicles, densely appressed golden; mature buds 1–2.5 cm long, obovate, with appressed pale-yellowish hairs; calyx 1–2 cm long, densely covered with pale yellowish hairs on the outer surface, splitting into two to four unequal, recurved parts, these 0.7–1 cm long. **Flowers** 2–3 cm long; petals white, oblanceolate with a hood-like curvature at the tip; stamens glabrous, free and numerous, anthers ca. 5 × 0.1 mm cream; the stipe 0.5–1.3 cm long, jointed with the ovary, oblong, densely appressed-puberulent, later glabrescent, 4–5 ovulate, style glabrous, straight or recurved at the apex, stigma simple. **Fruit** 1.5–9 × 1–6 cm diam., a hydrochoric nuroid fruit, globose to subglobose, glabrous, green, generally oblong in its early stages, 1–2 seeded.

COMMENTS

Aldina latifolia can be found along the igapós (periodically flooded forests) and igarapés of the main courses of black water of the Amazon basin, encompassing rivers from Venezuela, Colombia and those in the Brazilian states of Amazonas and Roraima.

Life Form

Tree

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

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

Geographic Distribution

Confirmed occurrences

North (Amazonas, Rondônia)

IDENTIFICATION KEY

1. Leaflets glabrous beneath *A. latifolia* var. *latifolia*
1'. Abaxial pubescent beneath *A. latifolia* var. *pubescens*

HERBARIUM MATERIAL

- R. Spruce, s.n., NY (NY00231179), Amazonas, **Typus**
R. Spruce, 1355, P (P02771872), Amazonas, **Typus**
R. Spruce, s.n., LD (LD1756979), Amazonas, **Typus**
R. Spruce, s.n., LE (LE00002442), Amazonas, **Typus**
R. Spruce, 1355, K (K000500834), Amazonas, **Typus**
R. Spruce, s.n., GH (GH00057525), Amazonas, **Typus**
R. Spruce, s.n., F (F0058830F), Amazonas, **Typus**

FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Aldina latifolia* Spruce ex Beth.



Figure 2: *Aldina latifolia* Spruce ex Beth.



Figure 3: *Aldina latifolia* Spruce ex Beth.



Figure 4: *Aldina latifolia* Spruce ex Beth.



Figure 5: *Aldina latifolia* Spruce ex Beth.



Figure 6: *Aldina latifolia* Spruce ex Beth.

REFERENCE

- Ducke, A. 1949. Notas sobre a Flora Neotropical - II: As Leguminosas da Amazonia Brasileira (ed. 2). Bol. Tecn. Inst. Agron. N. 18: 1-248.
- Ramos et al., 2016. Molecular systematics of the Amazonian genus *Aldina*, a phylogenetically enigmatic ectomycorrhizal lineage of papilionoid legumes. *Molecular phylogenetics and evolution*. 97: 11-18.
- Ramos & Cardoso, 2016. Towards a taxonomic revision of the papilionoid legume genus *Aldina*: lectotypification of a name published in *Flora Brasiliensis*. *Neodiversity*. 9: 1-3.

Aldina latifolia Spruce ex Beth. var. *latifolia*

DESCRIPTION

Life Form

Tree

Substrate

Terrestrial

DISTRIBUTION

Native, Not endemic to Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

Geographic Distribution

Confirmed occurrences

North (Amazonas)

HERBARIUM MATERIAL

R. Spruce, 1355, K

REFERENCE

Cowan, R. S. 1953. Leguminosae–Caesalpinioideae & Leguminosae–Papilionatae. In: B. Maguire & collaborators, The Botany of the Guayana Highland. Mem. New York Bot. Gard. 8(2): 103–119.

Aldina microphylla M. Yu. Gontsch. & Yakovlev

DESCRIPTION

Root: nodule absent; **sapopema** absent. **Stem:** exudate red present. **Leaf:** leaf compound; **phylotaxy** alternate; **leaflet** opposite; **leaflet indumentum** absent; **size of the leaflet** 1.5 to 2 cm long; **number of the leaflet** 1 - 5. **Inflorescence:** **indumentum** golden; **inflorescence type** terminal or axillary panicle/terminal or axillary raceme. **Flower:** **symmetry floral** actinomorphic; **calyx** entire at the flower-bud; **stamen** 60; **flower size** 1.5 to 2.0. **Fruit:** **drupe** not woody; **hair** absent. **Seed:** **number seed** 1.

ADDITIONAL DESCRIPTION

Spreading trees up to 8 m tall. **Leaves** 8–12 cm long, (1)3–5-foliolate; leaflets 3.5–6.5 × 2–4.5 cm, coriaceous, glabrous on both faces, ovate, oblong-ovate, base rounded to cuneate, apex acuminate to subacute; venation inconspicuous except for the midvein below. **Inflorescence** 11–23 cm long, terminal racemes and panicles, densely covered with appressed hairs. **Flowers** 1–2 cm long; mature buds 1–2 cm long, obovate; calyx 1–1.5 cm long entire at the bud, splitting into 3–4 unequal reflexed parts; petals ca. 1.5 × 0.8 cm, 4–5, oblong; stamens ca. 1.5 cm long; gynophore 2.4 cm long, densely covered with appressed golden-brown hairs jointed with the ovary; ovary 0.5–0.9 × 0.5–0.6 cm, oblong-elliptic, pubescent to glabrescent, style 3–6 mm long, glabrous. **Fruit** unknown.

COMMENTS

Aldina microphylla is known to be distributed in high altitudes slopes of the Serra do Aracá in the state of Amazonas.

Life Form

Tree

Substrate

Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Rock outcrop vegetation

Geographic Distribution

Confirmed occurrences

North (Amazonas)

HERBARIUM MATERIAL

J.J. Pipoly & G.J. Samuels, 6846, INPA, 134109, Amazonas, **Typus**

J.J. Pipoly & G.J. Samuels, 6846, US, 3019379 (00459448), Amazonas, **Typus**

M.G. da Silva et al., 7151, NY (01185460), Amazonas, **Typus**

REFERENCE

Gontscharov, M.Y.; Yakovlev, G.P. & Povydysh, M.N. 2006. On the new subtribe Aldiniinae of the tribe Swartzieae s.l. (Fabaceae) and new species of the genus *Aldina*. Bot. Zhurn. 91(2): 312–321.

Aldina occidentalis Ducke

DESCRIPTION

Root: nodule absent; **sapopema** absent. **Stem:** exudate red present. **Leaf:** leaf compound; **phyllotaxy** alternate; **leaflet** subopposite/opposite; **leaflet indumentum** present; **size of the leaflet** 0.5 to 1 (2) cm long; **number of the leaflet** 1 - 5. **Inflorescence:** **indumentum** rusty sericeous; **inflorescence type** terminal or axillary panicle. **Flower:** **symmetry floral** actinomorphic; **calyx** entire at the flower-bud; **stamen** 60; **flower size** bigger than 3.0/2.0 to 3.0 cm/1.5 to 2.0/up to 1.5 cm. **Fruit:** **drupe** not woody; **hair** present. **Seed:** **number seed** 2.

ADDITIONAL DESCRIPTION

Tree vegetative structures covered by velvet indumentum. **Leaves** 10.5–24 cm long (3–)5(–7)-foliolate; petiole 2–7.5 cm long; leaflets 8–13.5 × 4–7 cm, coriaceous, oblong-ovate, base rounded, apex rounded, upper face glabrous; venation inconspicuous, prominent below with pubescent indumentum with short "weak" hairs that collapse after drying, subtle wax layer present. **Inflorescence** 10–28 cm long, terminal panicles, lax and broad with appressed rusty hairs; flower buds 1–1.3 cm long, globose to subglobose. **Flowers** 1.5–2.5 cm long; calyx ca. 1 cm long, splitting into 2–3 parts; petals 4–6, 1.5 × 0.8 cm, white, obovate; stamens 1–2 cm long, glabrous, white; style glabrous, 2.5 mm long, erect; stigma simple, glabrous; ovary 5 × 2 mm oblong, 4-ovules, sessile or borne in a very short ca. 1 mm long. **Fruit:** unknown.

COMMENTS

The few records of *Aldina occidentalis* describe a habitat of non-flooded forest with white sand (campinas/campinaranas) in São Paulo de Olivença, State of Amazonas.

Life Form

Tree

Substrate

Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Amazonian Campinarana, Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

Geographic Distribution

Confirmed occurrences

North (Amazonas)

Possible occurrences

Northeast (Bahia)

HERBARIUM MATERIAL

A. Ducke, 24051, RB, Amazonas, **Typus**

A. Ducke, 24051, US, 1694129 (00002858), Amazonas, **Typus**

A. Ducke, 24051, K (000500833), Amazonas, **Typus**

REFERENCE

Ducke, A. 1949. Notas sobre a Flora Neotropical - II: As Leguminosas da Amazonia Brasileira (ed. 2). Bol. Tecn. Inst. Agron. N. 18: 1-248.

Aldina polyphylla Ducke

DESCRIPTION

Root: nodule absent; **sapopema** absent. **Stem:** exudate red present. **Leaf:** leaf compound; **phytotaxy** alternate; **leaflet** subopposite/opposite; **leaflet indumentum** absent; **size of the leaflet** 0.5 to 1 (2) cm long; **number of the leaflet** 1 - 5. **Inflorescence:** **indumentum** golden; **inflorescence type** terminal or axillary panicle. **Flower:** **symmetry floral** actinomorphic; **calyx** entire at the flower-bud; **stamen** 60; **flower size** bigger than 3.0/2.0 to 3.0 cm/1.5 to 2.0/up to 1.5 cm. **Fruit:** **drupe** spongy; **hair** absent. **Seed:** **number seed** 1.

ADDITIONAL DESCRIPTION

Tree up to 20 m tall. All vegetative parts glabrous except for the lower leaflet surface. **Leaves** mostly 12–36 cm long, 5–7 (9–11)-foliolate; leaflets 5.5–16 × 1.5–4.5 cm, oblanceolate to lanceolate, coriaceous, base rounded, apex long acuminate, the upper surface glabrous, nitid, the lower surface glaucous with hairs; venation subobscure above, midrib conspicuous below. **Inflorescence** 12–24 (–28) cm long, terminal racemes and panicles, densely appressed-puberulent. **Flowers** 1.5–3 × 1–2.5 cm; calyx ca 1.8 cm long entire at the bud, split into two or three recurved parts; mature buds ca. 1–2 cm long, obovate; petals 4–5, oblong with the apex cuculate; stamens cream; ovary about 7 × 3 mm, oblong-ovate, 5-ovulate; style about 8 mm long, glabrous, uncinated at tip; stipe 1 cm long jointed with the ovary. **Fruit** unknown.

COMMENTS

This species is endemic to Brazil and has been collected in the vicinities of São Gabriel da Cachoeira and Santa Isabel do Rio Negro in the state of Amazonas.

Life Form

Tree

Substrate

Terrestrial

DISTRIBUTION

Native, Is endemic from Brazil

Phytogeographic Domains

Amazon Rainforest

Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

Geographic Distribution

Confirmed occurrences

North (Amazonas)

HERBARIUM MATERIAL

- A. Ducke, 35083, K (000500832), Amazonas, **Typus**
- A. Ducke, 35083, P (02771858), Amazonas, **Typus**
- A. Ducke, 35083, RB (00539368), Amazonas, **Typus**
- A. Ducke, 35083, S (S-R-9326), Amazonas, **Typus**
- A. Ducke, 35083, U (U0003462), Amazonas, **Typus**
- A. Ducke, 35083, US (US00002856), Amazonas, **Typus**

REFERENCE

Ducke, A. 1949. Notas sobre a Flora Neotropical - II: As Leguminosas da Amazonia Brasileira (ed. 2). Bol. Tecn. Inst. Agron. N. 18: 1-248.