



## Lectotypification of twelve names of the tribe Paullinieae (Sapindaceae)

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The Paullinieae tribe belongs to the Sapindaceae family and includes climbing plants, rarely erect, herbaceous or woody. The distribution is predominantly american, with some species found on other continents. In the review of the tribe, several nomenclatural problems were verified mainly in relation of the types identification. Therefore, in this work, twelve lectotypes are proposed: three species for the genus *Paullinia*, six for *Serjania*, two for *Thinouia* and one for *Urvillea*.

### List of names and lectotypifications

***Paullinia elegans* Cambess.** In: Augusto de Saint-Hilaire, *Flora Brasiliae Meridionalis* 1: 370. 1825. “Nascitur in dumetis prope vicum S. Luiz Gonzaga in provincia Missionum, necnon in sylvis prope vicum Contendas in parte deserta occidentaliq[ue] provinciae Minas Geraës.”

Lectotype (designated here): Brazil, Rio Grande do Sul, São Luiz Gonzaga, *Saint-Hilaire, A. de s.n.*, barcode MPU010883! [digital image].

**Note:** In the protologue of the species is indicated the place of collection without mentioning a particular specimen. Three specimens were found that correspond to the information contained in the protologue: MPU010883, P02296872 and P02296873. The first was chosen as lectotype because it is well preserved and has more flowers and fruits.

***Paullinia meliifolia* Juss.** *Annales du Muséum National D’histoire Naturelle*, 4:347. 1804. “In Brasilia, Car. ex sicca in herb. Commers.”

Lectotype (designated here): Brazil, Rio de Janeiro (“*Sebastianopolis*”), *Commerson, P. s.n.*, barcode P02296910! [digital image].

**Note:** The protologue mentions that the material used in the description was collected by Commerson in Brazil without indication of a particular specimen. Two specimens were found that correspond to the information contained in the protologue: P02296910 and G00098663. The first was chosen as a lectotype because it is well preserved and has more flowers.

***Paullinia trigonia* Vell.** *Florae Fluminensis*: 159. 1829 (1825 publ. 1829).

Lectotype (designated here): original illustration, *Florae Fluminensis Icones* 4: *tábula* 30!. 1831 (1827 publ. 1831) [digital image].

**Note:** We choose as lectotype an illustration of Vellozo (1831) the only original material available.

***Serjania fuscifolia* Radlk.** *Conspectus Sectionum Specierumque Generis Serjaniae*: 10. 1874. Type: “*sp. brasiliensis*”. *Monographie der Sapindaceen-Gattung Serjania*: 221-222. 1875. “In Brasilia orientali a provincia S. Paulo usque ad prov. Pará: Burchell n. 5014! Correa de Mello n. 4! Martius Hb. Flor. Bras. n. 1247! (leg. Ackermann); Martius! (Minas Geraes); Regnell III, 354! Lindberg n. 241! Warming! Martius! (in sylvis et sepidus ad Pará); Schüch! Wallis! Cf. p. 98, annot.”

Lectotype (designated here): Brazil, *Regnell, A. III 354*, barcode BR000000590544! [digital image]; syntypes: Brazil, *Regnell, A. III 354*, barcodes C10018698!, C10018697! and BR000000590577!; São Paulo, *Correia de Mello, J. s.n.* M0212338!; Brazil, *Burchell, W. 5014*, BR000000590574!; Brazil, *Martius, C.F.P. 1247*, K000037217!, K000037218!, GH00050931!, NY01546610!, M0212345!, NY01546611! and FI006762!; Brazil, *Lindberg, G. 241*, BR0000005905089!; Brazil, Pará, *Martius, C.F.P. s.n.*, M0212341! and Brazil, Minas Gerais, *Warming, J.E.B. s.n.*, C10018696! [digital images].

**Note:** In the protologue Radlkofer (1874) indicates Brazil as the place of the type. In a later work, in *Monographie der Sapindaceen Gattung Serjania*, Radlkoffer (1875) cites the specimens which based the description. BR000000590544 was chosen as lectotype because it is better preserved.

***Serjania glabrata* Kunth.** In: *Humboldt et Bonpland. Nova Genera et Species Plantarum 5: 110. 1821. "Crescit locis temperatis Peruviae, prope Colazei, in ripa fulvii Guacabamba".*

Lectotype (designated here): Peru, Colazei, *Bonpland, A.J.A & Humboldt, F.W.H.A. von 3580.*, barcode P00679944! [digital image].

**Note:** The specimen P00679944 was chosen as lectotype because the label contains the collection place specified in the protologue.

***Serjania hebecarpa* Benth.** Hooker's Journal of Botany and Kew Garden Miscellany 3: 192-193. 1851. "Gathered by Gardner in the provinces of Ceará (n. 1498) and Minas Geraes (n. 4479)."

Lectotype (designated here): Brazil, Ceará, *Gardner, G. 1498*: barcode P02296765! [digital image]; syntypes: Brazil, Ceará, Gardner, G. 1498, barcodes S11-24343!, P02296766!, NY01546625!, NY01546621!, GH00050937!, K000037249! and NY01546622!; Brazil, Minas Gerais, *Gardner, G. 4479*, NY01546624!, NY01546623!, K000037251!, P02296767!, K000037252! and GH00050936! [digital images].

**Notes:** The specimen P02296765 was chosen as lectotype because it is well preserved and has flowers and fruits.

***Serjania herteri* Ferrucci.** *Bonplandia* 5(19): 169. 1981. ≡ *Serjania australis* (A. St. Hil.) Hert. *Estudios Botánicos en la Región Uruguaya* 4: 83. 1930; illegitimate name. ≡ *Paullinia australis* A. St.-Hil., *Histoire des Plantes les Plus Remarquables du Brésil et du Paraguay* 1: 236-238. 1824. "In sylvulis non infrequens ad margines fluminis Uruguay, à stativis S. Josephi usque ad provincium Missionum".

Lectotype (designated here): the banks of the Uruguay River ("provincium Missionum"), *Saint-Hilaire, A. de s.n.*, barcode MPU010889! [digital image].

**Note:** The specimen MPU010889 was chosen as lectotype because the label contains the collection place specified in the protologue.

***Serjania meridionalis* Cambess.** In: *Augusto de Saint-Hilaire, Flora Brasiliae Meridionalis 1: 366. 1825. "Crescit in sylvis ad ripas fluminis uruguay prope vicum S. Francisco de Borja in provincia Missionum".*

Lectotype (designated here): Brazil, near the Uruguai River, in São Borja (*S. Francisco Borja*), Rio Grande do Sul, Brazil, *Saint-Hilaire, A. de s.n.*, barcode P02296795! [digital image].

**Note:** In the protologue the place of collection is indicated without specifying a particular specimen. Four specimens are considered compatible with the mentioned collection site: P02296795, P02296793, P02296794 and MPU010840. The first was chosen as lectotype because it is better preserved.

***Serjania multiflora* Cambess.** In: *Augusto de Saint-Hilaire, Flora Brasiliae Meridionalis 1:365. 1825. "A fidelissimo famulo Laruotte in pascuis et sylvis caeduis prope vicum Itambe, in provincia Minas Geraës, lecta".*

Lectotype (designated here): Brazil, Minas Gerais, Itambé, *Saint-Hilaire, A. de s.n.*, barcode P02296797! [digital image].

**Note:** In the protologue the place of collection is indicated without specifying a particular specimen. Three specimens are considered compatible with the mentioned collection site: P02296797, P02296798 and MPU010839. The first was chosen as a lectotype because it is better preserved.

***Thinouia mucronata* Radlk.** *Sitzungsberichte der Mathematisch-physikalischen Classe der k.b. Akademie der Wissenschaften zu München* 8. 282. 1878. "Brasilia, prov. S. Paulo et Min. Ger.: Riedel n. 1845; Mosén n. 3953; Regnell III. N. 1812, etc."

Lectotype (designated here): Brazil, São Paulo, 1875, *Mosén, H. 3953*, catalogue number S17-1112! [digital image]; isolectotype: S17-1101! [digital image]; syntype: Brazil, São Paulo, *Regnell, A.F. III 1812*, S17-1088! [digital image].

**Note:** The specimen S17-1112 was chosen as lectotype because it has more fruits than the S17-1101.

***Thinouia ventricosa* Radlk.** *Sitzungsberichte der Mathematisch-physikalischen Classe der k.b. Akademie der Wissenschaften zu München* 8. 282. 1878. "Brasilia, prov. S. Paulo: Manso (Mart. Hb. Fl. Bras. n. 1303, partim): Correa de Mello n. 7, etc".

Lectotype (designated here): Brazil, *Martius, C.F.P. 1303*, barcode M0212718! [digital image].

**Note:** The specimen M0212718 was chosen as lectotype because the label contains the collection number specified in the protologue of the species.

***Urvillea uniloba* Radlk.** *Sitzungsberichte der Mathematisch-physikalischen Classe der k.b. Akademie der Wissenschaften zu München* 8: 264. 1878. "Republ. Argent. Courbon (Montevideo); Fox (S, Isidore pr. Buenos Aires); Tweedie (Ser. sin. W. Hook.); Fox n. 284, 395; Bras. meridionalis: Sello."

Lectotype (designated here): Uruguai, *Tweedie s.n.*, barcode K000542543! [digital image]; syntype: Montevideú, Uruguai, *Courbon, A. s.n.*, barcode P02297004! [digital image].

**Note:** The specimen K000542543 was chosen as a lectotype because it is well preserved and has flowers and fruits.

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