

## NEW SPECIES OF SOUROUBEA (MARCRAVIACEAE)

A. C. DE ROON

Instituut voor Systematische Plantkunde, Utrecht

**Souroubea intermedia** de Roon, *sp. nov.* (plate 1).

*Frutex* scandens. *Folia* petiolis 4–8 mm longis; lamina coriacea, obovato-oblonga vel oblonga vel interdum lanceolata, valde asymmetrica, 7–14 cm longa, 2.5–5 cm lata, apice subacuta vel leviter acuminata vel obtusa, basi cuneata vel acuta, costa supra plana vel prominula, subtus prominente, nervis lateralibus supra et subtus plerumque prominentibus; glandulae hypophyllae minutae, saepe vix manifestae, secus marginem seriatim dispositae vel dispersae. *Flores* in racemis multifloris (ad 50 vel ultra); rhachis 10–15 cm longa, ochracea, furfuraceo-puberula; pedicelli 1–2 cm longi, ca 1 mm in diametro, subtiliter ochraceo-puberuli; nectaria calcariformia, auriculata, parva, ad ca 1 cm longa, calcari clavato, 5–7 mm longo, 1–2 mm in diametro, auriculis calcari paulo brevioribus, 3–4 mm longis; bracteolae perlate triangulares, 1–1.5 mm longae, 1.5–2 mm latae; sepala transverse subelliptica vel suborbicularia, ca 1.5 mm longa, 2–2.5 mm lata; petala oblonga, 4–6 mm longa, 2–3 mm lata, ad basim circa per 1 mm connata, per anthesim reflexa; stamina 5, filamentis appianatis, 3–3.5 mm longis, ad basim ca 1 mm latis, apicem versus angustatis, basibus petalorum insertis, antheris ca 1.5 mm longis; ovarium quinqueangulare, 5-loculare, stigmatibus sessilibus, crasso, radiato-lobato.

TYPUS: Colombia: Chocó: Banks of Quebrada Togoromá, dense tidal forest, June 13, 1944, Killip & Cuatrecasas 39146 (holotype US; isotypes F, MO). Paratypes: Colombia: Valle: Río Calima (región del Chocó); margen derecha, lomas frente a Quebrada de la Brea, Cuatrecasas 21090 (F); Nariño: Western Cordillera, above Diviso (Njambí), Vogel 64 (U).

The species in its foliar anatomy is related to *S. crassipes* and its allies. From these and other large-flowered species as e.g. *S. sympetala* it is distinguished by a multiflorous inflorescence and smaller flowers. It is different from the other small-flowered species of the genus, besides by anatomical characters, by the shape of the distinctly auriculate nectaries.

**Souroubea crassipetala** de Roon, *sp. nov.* (plate 2, fig. 1–3).

*Frutex* scandens, validus. *Folia* petiolis 5–15 mm longis, 2–4 mm latis, canaliculatis; lamina rigide coriacea, obovata vel obovato-oblonga, 1.5–2 plo longior quam lata, 9–13 cm longa, 4–8 cm lata, apice obtusa vel rotundata, basi acuta vel obtusa, costa supra sulcata, subtus prominente, nervis lateralibus subtus prominentibus; glandulae hypophyllae quoad magnitudinem et numerum variables, saltem 5–10 a margine 5–10 mm remotae seriatim dispositae, interdum

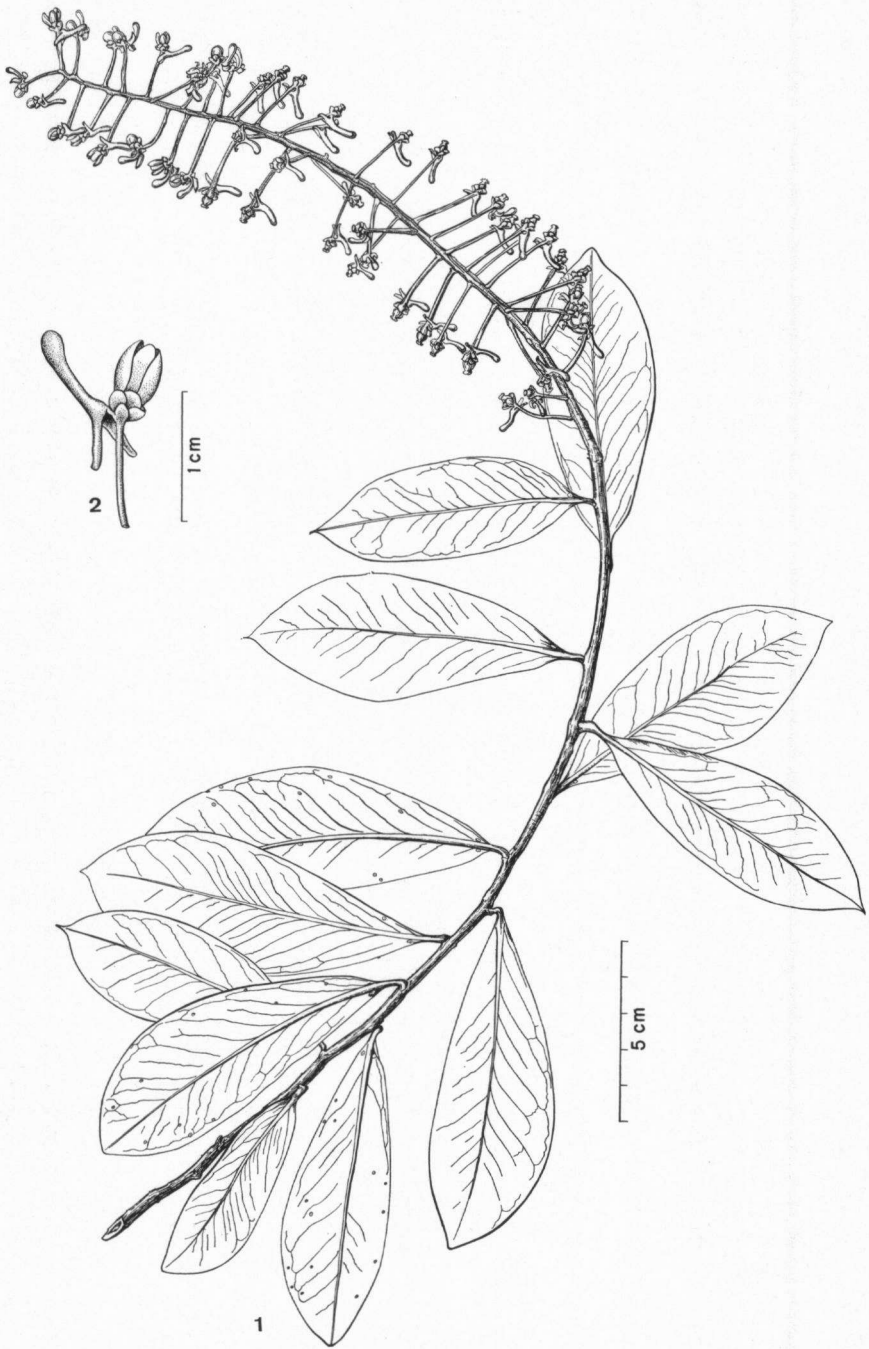


Plate 1. *Souroubea intermedia*, habit and flower with nectary, after Killip & Cuatrecasas 39146.

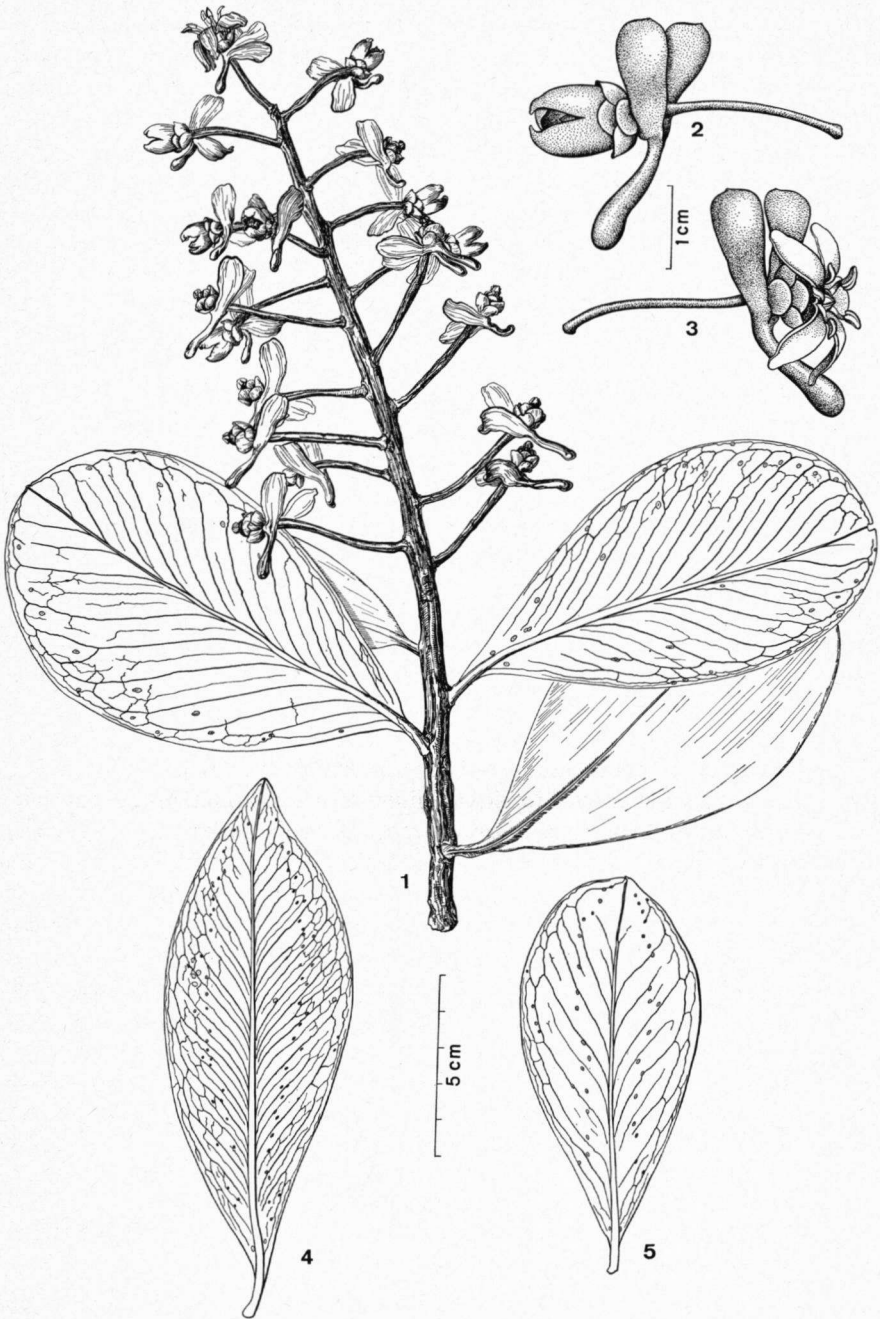


Plate 2. Fig. 1-3: *Souroubea crassipetala*, habit and flowers with nectaries, after *Ducke 1100*; fig. 4 and 5: *Souroubea stichadenia*, leaves from below, fig. 4 after *Gay 834*, fig. 5 after *Krukoff 11037*.

aliquot dispersae et aliquot minutissimae secus marginem seriatim dispositae. *Flores* in racemis ca 20-floris; rhachis 10–15 cm longa; pedicelli 1.5–4 cm longi, puberulenti, glabrescentes; nectaria calcariformia, auriculata, 2–3 cm longa, rigide coriacea, calcari clavato, curvato, 7–15 mm longo, ad apicem 2.5–3 mm diametro, auriculis calcar longitudine aequantibus, 7–15 mm longis, 4–7 mm latis; bracteolae 3–5 mm latae; sepala transverse subelliptica, 3–5 mm longa, 4–7 mm lata; corolla gamopetala, pro genere crassiora, rigide coriacea, 10–14 mm longa, petalis per partem variabilem longitudinis connatis, anthesi lobi 7–10 mm longi, 3–6 mm lati, reflexi; stamina 5, filamentis applanatis, 6–9 mm longis, ad basim 2.5–4 mm latis et per circa 2 mm connatis, apicem versus angustatis, antheris 2.5–3 mm longis; ovarium subglobosum, quinquangulare, 5-loculare, stigmatibus sessilibus, crasso, radiato-lobato.

TYPUS: Brazil: Amazonas: Esperança (boca do Javari), matta da terre firme, Oct. 7, 1942, *Ducke 1100* (holotype U; isotypes: MG, MO, NY, RJ, US).

The species is characterised by its very thick petals which are connate over a varying length. It is related to *S. stichadenia* from which it can be distinguished by the number and the arrangement of the hypophyllous glands.

*Souroubea stichadenia* de Roon, *sp. nov.* (plate 2, fig. 4 and 5)

*Frutex* scandens. *Folia* petiolis 5–15 mm longis, ca 2 mm latis, canaliculatis; lamina coriacea, obovata vel obovato-oblonga, interdum elliptica vel oblonga, plerumque asymmetrica, 2–2.5 (1.5–3) plo longior quam lata, 7–13 cm longa, 3–6.5 cm lata, apice acuta vel subacuminata vel obtusa, interdum subrotundata, basi acuta; costa supra plana vel prominula et plerumque sulcata, subtus prominens; nervae laterales subtus plerumque prominentes vel prominulae; glandulae hypophyllae parvae, numerosae, plurimae 1–1.5 cm infra marginem seriatim dispositae. *Flores* in racemis ca 25-floris; rhachis 9–12 cm longa, puberula, glabrescens; pedicelli prope basin rhachidis usque ad 4.5 cm longi, apicem rhachidis versus abbreviati, ultimi usque 1 cm longi; nectaria calcariformia, auriculata, 1.5–3 cm longa, calcari clavato, curvato, 7–15 mm longo, auriculis calcar longitudine circiter aequantibus, 7–15 mm longis, ca 3 mm latis; bracteolae 3–5 mm latae; sepala depresso ovata, 3–5 mm longa, 4–7 mm lata; corolla gamopetala, manifeste coriacea, 8–10 mm longa, anthesis lobi 6–7 mm longi, reflexi; stamina 5, filamentis applanatis, ca 6 mm longis, apicem versus angustatis, basis plerumque connatis, antheris 2–3 mm longis; ovarium subglobosum, quinquangulare, 5-loculare, stigmatibus sessilibus, crasso, radiato-lobato.

TYPUS: Bolivia: La Paz: prov. Larecaja, Copacabana (10 km south of Mapiri), alt. 850–950 m, Oct. 8–Nov. 15, 1939, *Krukoff 11037* (holotype NY, isotypes: F, G-DEL, GH, MO, NY, S, U, UC, US). Paratypes: Bolivia: La Paz: Mapiri region, San Carlos, *Buchtien 1858* (US); San Antonio near Mapiri, *Buchtien 2033* (US); Peru: near Tatanara, *Lechler 2659* (G-BOIS); without loc., *Gay 843, 898* (P).

The species is distinguished by its gamopetalous corolla and its coriaceous leaves with distichous hypophyllous glands.

***Souroubea fragilis* de Roon, *sp. nov.***

*Frutex*; rami ramisque scandentes, argenteo-cenerascentes, ad apicem in parte hornotini bruneis. *Folia* petiolis 5–10 mm longis, ca 2 mm latis; lamina chartacea vel subcoriacea, fragilis, obovato-oblonga, saepe asymmetrica, 2–2.5 plo longior quam lata, 8–13 cm longa, 3–6 cm lata, apice acuta vel leviter acuminata vel interdum obtusa, basi cuneata, costa supra plana vel leviter canaliculata, subtus prominens, nervis lateralibus supra prominulis, subtus prominentibus; glandulae hypophyllae numerosae vel interdum paucae, parvae, ca 1 cm inter marginem plus minusve distincte seriatae. *Flores* in racemis ca 20 (?)-floris; rhachis ca 16 cm longa, ochracea vel atroporphyrea; pedicelli graciles, 2–4 cm longi in sicco ca 1 mm crassi, fragiles; nectaria calcariformia, auriculata, calcar 4–8 mm longum, auriculis calcaris duplo longioribus, 8–15 mm longis, 3–5 mm latis, revolutis; bracteolae ca 2–2.5 mm longae, ca 3–4 mm latae; sepala semi- vel suborbicularia, 2.5–3 mm longa, 4–5 mm lata; petala elliptico-oblonga, ca 8 mm longa, ca 4 mm lata, ad basim circa per 1 mm connata; stamina 5, filamentis applanatis, 4–5 mm longis, cum basi petalorum connatis, antheris ovatis, ca 2 mm longis; ovarium ovatum, leviter quinquangulare, 5-loculare, stigmatibus sessilibus.

TYPUS: Bolivia: La Paz: Yungas, Coroico, alt. 5500 ft., Sept., *Bang* 2401 (holotype NY; isotypes: F, G-BOIS, G-DEL, GH, LE, MICH, MO, US, W).

The species in its foliar anatomy is related to *S. crassipes* and allies. It is characterised, first, by the nectaries with the auricles being twice as long as the spur and, secondly when dried, by its thin and brittle leaves and pedicels.

ACKNOWLEDGEMENTS

The author is much indebted to DR. K. U. KRAMER and MR. L. Y. TH. WESTRA for correcting the latin descriptions and the English text and to Miss E. M. HUPKENS VAN DER ELST and MR. T. SCHIPPER for drawing the figures.