

Fig. 48. Distribution of *Cryptocarya moschata* Nees & Martius.



**Fig. 49.** Labels from type specimens of *Cryptocarya moschata* Nees & Martius collected by Sellow s.n. (1375). A. From LE; B. From KIEL; C. From L-0246991; D. From HAL-101917; E. From K; F. From L-0246990; G. From E-109558; H. From K; I. From US-00811475; J. From CGE. (Acronyms follow Holmgren *et al.*, 1990).

## 8. *Cryptocarya riedeliana* P.L.R. de Moraes, sp. nov.

Holotype: Brazil. Rio de Janeiro, Corcovado, 8 Sep. 1867 (fl., fr.), A.F.M. Glaziou 1516 [BR-837725!, photo in UEC!; isotypes (only flowering specimens): B-10000927!, BR-868666!, BR-868699!, C!, IAN-93355!, NY! (3 sheets), P-00221220 (photo in UEC!), RB (ex BR!), U (photo in UEC!)]. Fig. 50; Plate XI B (cf. Appendix 13.5).

A *Cryptocarya moschata* Nees & Martius et speciebus proximis petiolis plerumque non canaliculatis et crassioribus, tepalis angustioribus, tubo floris breviori et angustiori, staminibus androeciorum serierum I et II brevioribus (quia filamenta minora), staminibus serierum androeciorum III maioribus (quia filamenta maiora), fructibus stricte prolatis, maioribus, manifeste costulatis, tubo accrescenti tenui instructis differt.

Differs from *Cryptocarya moschata* Nees & Martius and related species in the petioles mostly acanaliculate and thicker, tepals narrower, flower tube shorter and narrower, stamens of androecial whorls I and II smaller due to filaments smaller, stamens of androecial whorl III larger due to filaments larger, fruits strictly prolate, larger, manifestly ribbed, with the accrescent tube thinner.

**Etymology** - The name of this species is proposed in honour of Ludwig Riedel, German botanist who lived in Brazil in the XIX<sup>th</sup> century and was a member of the Langsdorff Expedition.

**Illustrations** - Vattimo-Gil (1957, Fig. 7, habit and fruit), Vattimo-Gil (1966a, Fig. 213-221, flower pieces), Quinet & Andreatta (2002, Fig. 3 D1-D5, leaf and flower pieces).

**Vernacular names** - Canela-branca, canela-murici, canela-noz-moscada, nosca-moscada-do-brasil, nox-moscado-do-brasil, noz-moscada, noz-moscada-do-brasil.

**Description** - Trees up to 28 m tall, trunk cylindrical, DBH 5-32.8 cm, bark dark brown to brown-grayish, rough, rugose, with lenticels (Fig. 51 A-B). Branches terete, dark brown to grayish, with lenticels. Branchlets 5 cm below terminal bud c. 2.0-4.8 mm in diam., rather thick, somewhat shining, smooth to sulcate or longitudinally striate, glabrous, light to dark brown or red-brown, initially angular or terete from the beginning; terminal buds ovoid, minute, densely yellowish tomentose, with short, appressed hairs. Petioles long, mostly stout, 12.0-29.0 mm long, 1.0-3.3 mm thick, slightly to canaliculate or acanaliculate to flattish above, roundish below, glabrous, rugose, dark (dried). Leaves alternate, narrow elliptical to lanceolate, 6.0-17.2 cm long, 1.5-4.6 cm broad, coriaceous to rigid-coriaceous (Fig. 51 C-D), mostly glabrous on both surfaces, some specimens sparsely glabrescent below, tip mostly acute to short acuminate, base usually acute to obtuse, margin flat and hardly recurved, sclerified; above shining, poorly to densely prominulously reticulate; beneath paler, rather dull, papillae inconspicuous; midrib impressed to level above, prominulous towards the base, prominulous to prominent towards the base below, secondary veins erect-patent (5-8 per side), arcuate towards margin, inconspicuous to prominulous above, prominulous below; tertiary venation prominulous and densely reticulate below; venation pattern camptodromous-brochidodromous. Inflorescences (Fig. 50 A) axillary and subterminal, panicles, few to many-flowered, 0.8-1.7 mm in diam. at

the base, 1.8-8.0 cm long, lax to dense, sparse to mostly densely yellowish or rusty-tomentellous, with  $\pm$  short,  $\pm$  appressed and  $\pm$  ascending hairs; peduncles short to long; bracts and bracteoles minute, ovate, densely yellowish-tomentelous, deciduous to sub-persistent. *Flower buds* and *flowers* yellow (Fig. 51), densely yellowish or rusty-tomentellous, c. 3.3-4.2 mm long, 1.5-2.86 mm in diam. at apex, tube urceolate, 1.1-1.4 mm long, 0.7-1.25 mm in diam.; pedicels tomentose, 0.53-0.75 mm long; tepals equal to subequal, 1.7-2.4 mm long, 0.9-1.0 mm broad, concave, ovate-elliptical, tip acute to rounded, pilose within; stamens included; stamens of whorls I and II introrse, incurved, 0.96-1.4 mm long ( $\bar{X} = 1.21 \pm 0.14$  mm;  $N = 12$ ), anthers sparse pilose or ciliate, ovate, 0.48-0.81 mm long ( $\bar{X} = 0.68 \pm 0.09$  mm;  $N = 13$ ), 0.36-0.46 mm broad ( $\bar{X} = 0.41 \pm 0.04$  mm;  $N = 8$ ), connectives prolonged beyond the large sporangia, tip obtuse to truncate, filaments pilose, as long or shorter than anthers, adnate to tepals; stamens of whorl III lateral to extrorse-lateral, rather erect, 1.14-1.89 mm long ( $\bar{X} = 1.44 \pm 0.27$  mm;  $N = 9$ ), anthers narrow-ovate, sparse pilose, 0.62-1.05 mm long ( $\bar{X} = 0.78 \pm 0.15$  mm;  $N = 9$ ), 0.32-0.35 mm broad ( $\bar{X} = 0.34 \pm 0.01$  mm;  $N = 4$ ), connectives truncate, prolonged beyond the large sporangia, filaments rather thick, equal or longer than anthers, pilose; glands subglobose, sagittate, 0.44-0.87 mm long ( $\bar{X} = 0.62 \pm 0.15$  mm;  $N = 12$ ), c. 0.37 mm broad, pedicel thick and long, pilose, rather distant from the filaments; staminodes relatively small, ovate-acute, sagittate, 0.8-0.9 mm long, c. 0.35 mm broad, tip and abaxial side pilose, stalks conspicuous, relatively short, stout, pilose; gynoecium immersed in the tube, glabrous, c. 2.9 mm long, ovary ellipsoid, c. 0.9 mm long, c. 0.35 mm in diam., gradually merging into the about 1.9 mm long style with small, discoid stigma. *Mature fruits* yellow, orange, or green (Fig. 50 K, 51 E). *Mature fresh fruits* (with the accrescent flower tube) from a tree of Serra da Estrela, RJ, 2.5-3.95 cm long ( $\bar{X} = 3.22 \pm 0.37$  cm;  $N = 24$ ), 1.68-2.3 cm broad ( $\bar{X} = 1.99 \pm 0.17$  cm;  $N = 24$ ). The diaspores from the former fruits are 2.24-3.56 cm long ( $\bar{X} = 2.95 \pm 0.34$  cm;  $N = 24$ ), 1.32-1.82 cm broad ( $\bar{X} = 1.59 \pm 0.14$  cm;  $N = 24$ ). Dried fruits from herbarium specimens, ellipsoid, many-ribbed, 1.96-3.28 cm long ( $\bar{X} = 2.51 \pm 0.26$  cm;  $N = 39$ ), 1.34-2.56 cm broad ( $\bar{X} = 1.63 \pm 0.20$  cm;  $N = 39$ ); flesh portion originated from the accrescent flower tube usually thin.

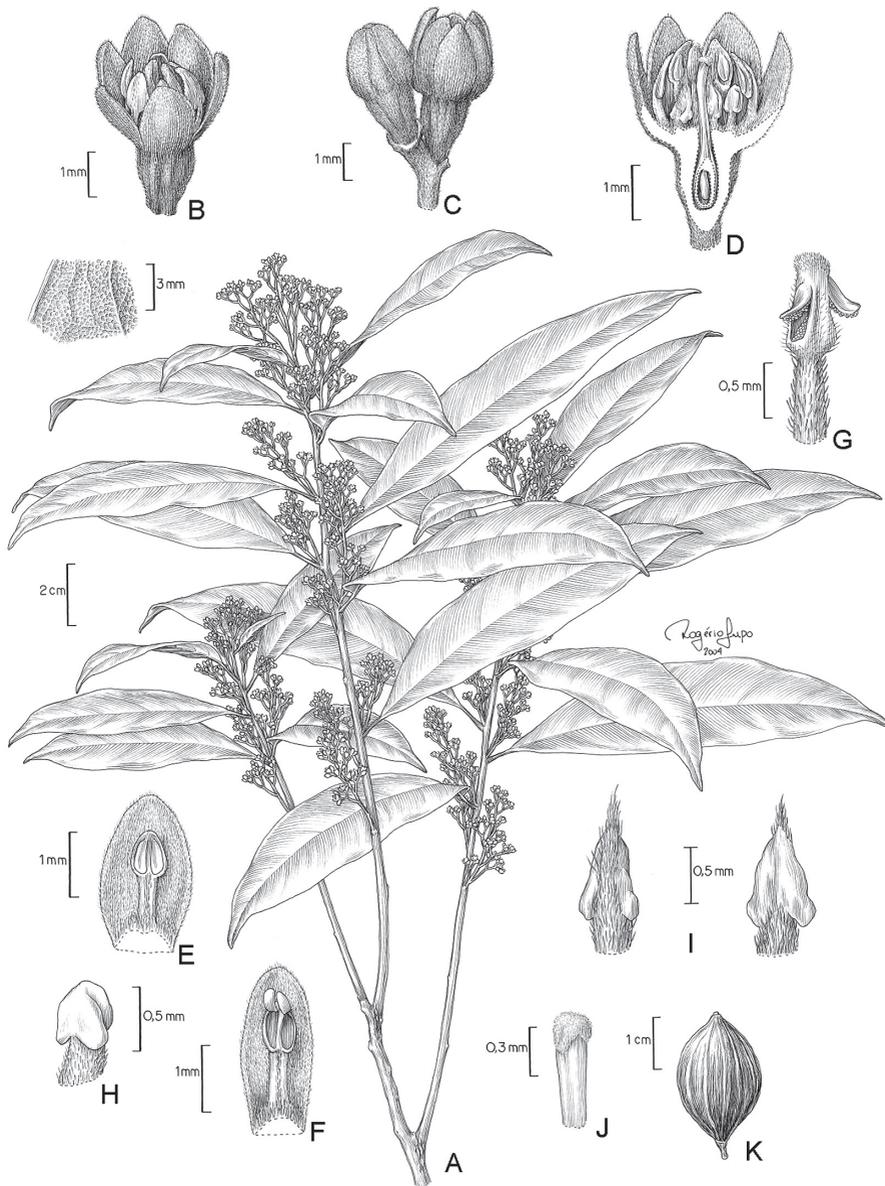
**Phenology** - Flowering material in March, and July to October. Immature fruits in February, April to June, and November; mature fruits in March, and June to October.

**Distribution and habitat (Fig. 53)** - Species only known from few collections of Bahia, Espírito Santo, and Rio de Janeiro in the Ombrophilous Dense Forest, from 35 to 1100 m altitude.

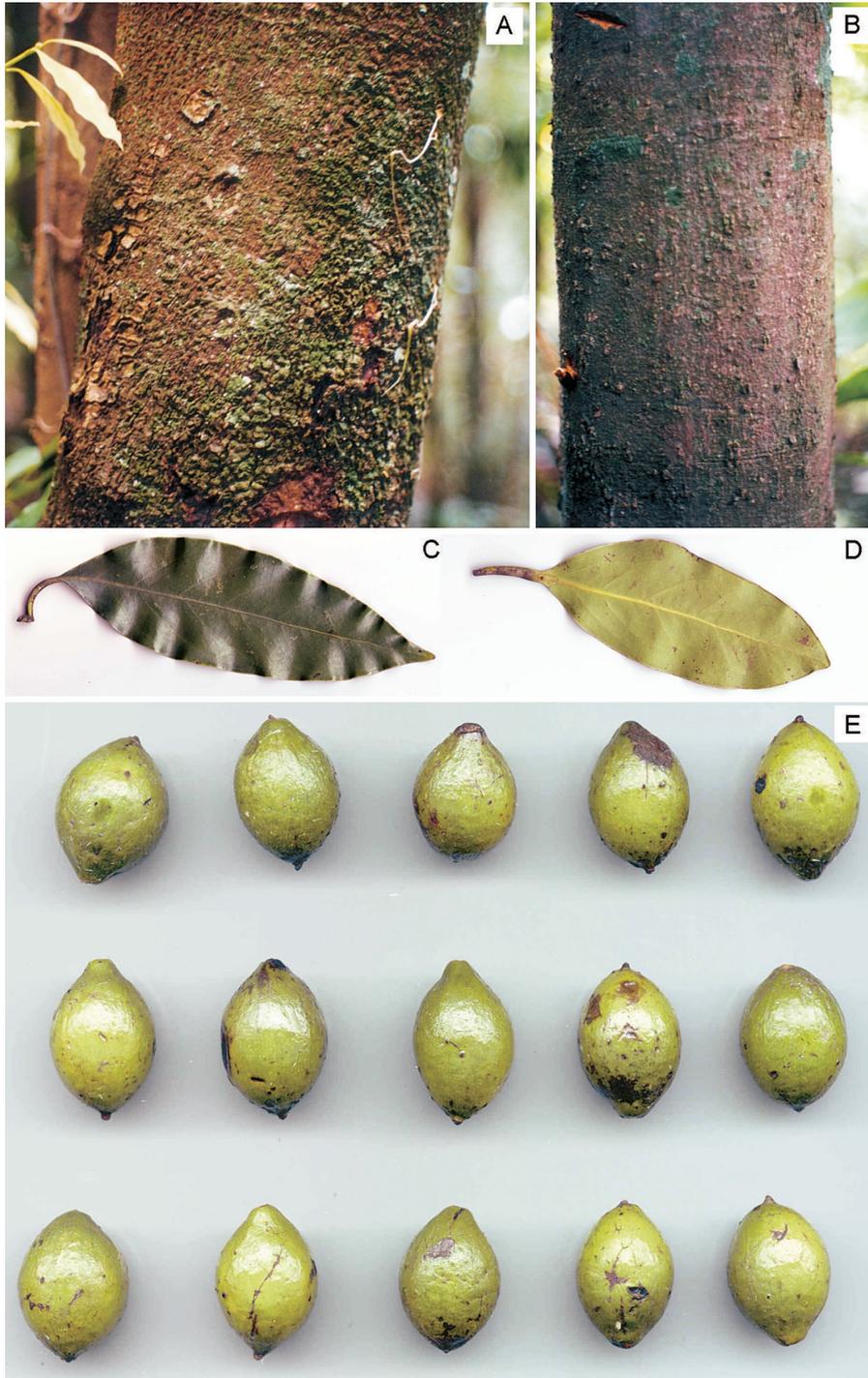
**Comments** - Until now, in most herbaria, *Cryptocarya riedeliana* was identified as *C. moschata* Nees & Martius or *C. aschersoniana* Mez. I decided to separate it from these species mainly because it looks distinct, but also because it has a clearly different field aspect. The key character to distinguish *C. riedeliana* from both *C. moschata* and *C. aschersoniana* is the combination of its leaves coriaceous to rigid-coriaceous, above shining and mostly poorly reticulate, beneath paler, rather dull, with papillae inconspicuous, midrib impressed to level

above, prominulous towards the base, prominulous to prominent towards the base below, petioles long and stout, nearly always acanaliculate, flowers with tepals narrower, flower tube shorter and narrower, stamens of androecial whorls I and II smaller due to filaments smaller, stamens of androecial whorl III larger due to filaments larger, and fruits strictly prolate, larger, manifestly ribbed. None of these features by itself would warrant specific recognition, but their constant combination makes *C. riedeliana* quite distinct. The bark of the here recognised new species is dark brown to brown-grayish, rough, rugose, with lenticels, without flaking. This, together with the slightly different phenology, sets *C. riedeliana* apart from its congenics.

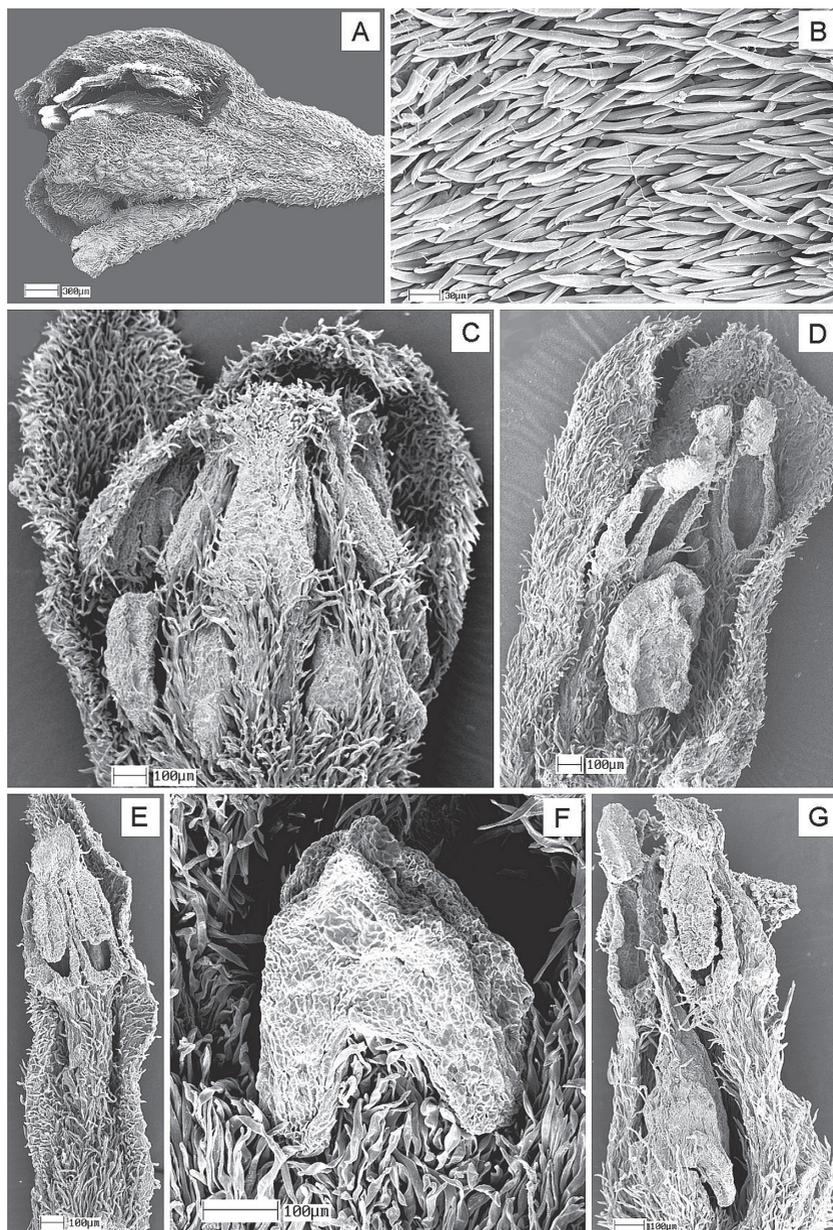
**Specimens examined** - 48 (listed in appendix 13.3).



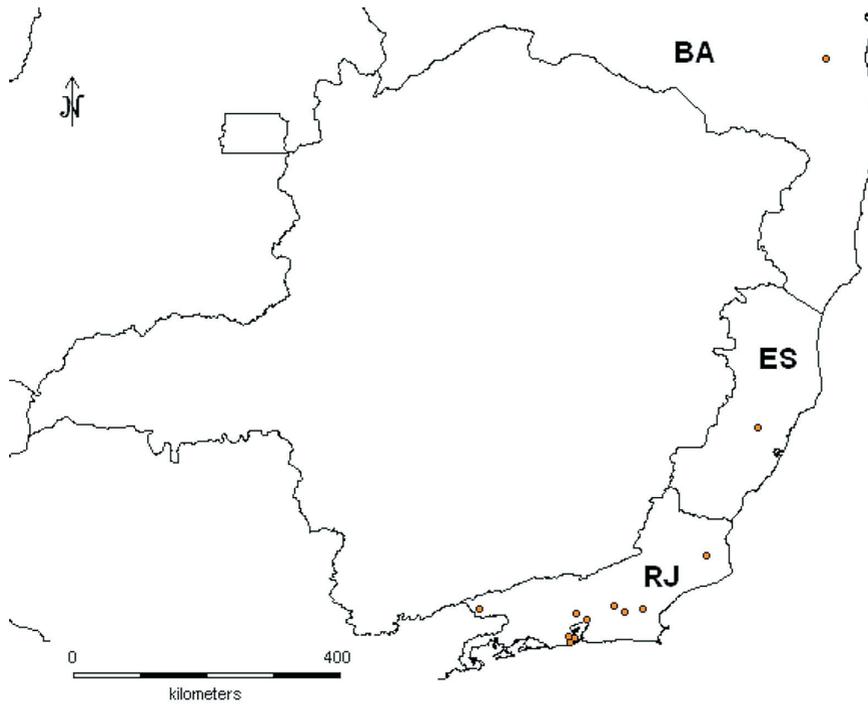
**Fig. 50.** *Cryptocarya riedeliana* P.L.R. de Moraes (habitus and floral parts: from Duarte 7991). A. Habitus; B, D. Flowers; C. Flower bud; E. Stamen of whorl I; F. Stamen of whorl II; G. Stamen of whorl III; H. Gland; I. Staminodes; J. Detail of style and stigma; K. Fruit (from Moraes 2465).



**Fig. 51.** *Cryptocarya riedeliana* P.L.R. de Moraes. A-B. Barks; C-D. Detail of leaves; E. Fruits collected at Serra da Estrela, Petrópolis, RJ, June 2001. (Photographs by author).



**Fig. 52.** SEM micrographs of flowers of *Cryptocarya riedeliana* P.L.R. de Moraes. A. Flower bud (from *Glaziou 1516*, C); B. External indument (from *Duarte 7991*, RB); C. Longitudinal section of flower bud (from *Duarte 7991*, RB); D. Adaxial side of stamens of the androecial whorls I and II, introrses, and gland (from *Glaziou 1516*, C); E. Adaxial side of stamen of androecial whorl I (from *Duarte 4990*, RB); F. Adaxial side of gland (from *Duarte 7991*, RB); G. Abaxial/lateral sides of stamens of the androecial whorl III, lateral-extrorses, and staminode (from *Duarte 4990*, RB). (Photomicrographs by author).



**Fig. 53.** Distribution of *Cryptocarya riedeliana* P.L.R. de Moraes.

## 9. *Cryptocarya saligna* Mez

*Jahrb. Königl. Bot. Gart. Berlin* 5: 13 (1889). – Lectotype (designated by Moraes, 2005a): Brazil. Rio de Janeiro, “loco non indicato”, “Alto Macahé de Nova Friburgo” (fide Glaziou, 1910), s.d. (19 Dec. 1881, see discussion) (fl.), *A.F.M. Glaziou 14205* [C!, photo in UEC! (lectotype designated by Kostermans, 1937: B<sup>†</sup>, F Neg. No. 3847!); isolectotypes: BR-868700! (photo in UEC!), F-647868! (type fragment from B<sup>†</sup>, photo in UEC!), G (negatives in UEC!), K! (cibachrome in UEC!), IAN-93770! (photo in UEC!), LE (photo in UEC!), MO-1580358! (photo in UEC!), NY-00355049! (photo in UEC!), P-00221787 (photo in UEC!), S (photo and photocopy in UEC!), U (right-hand specimen, photo in UEC!), US-2546803 (photo in UEC!), US-00099523 (photo in UEC!)]. Plate XII A (cf. Appendix 13.5).

= *Cryptocarya longistyla* Mez, in P. Taubert's *Plantae Glaziovianae novae vel minus cognitae*, *Bot. Jahrb. Syst.* 17: 518 (1893). – Lectotype (designated by Moraes, 2005a): Brazil. Rio de Janeiro, Nova Friburgo, “in Monte Alto Macahé”, Jan. (18 Jan. 1892; see discussion) (fl.), *A.F.M. Glaziou 19801* [C!, sheet with the label of “Herbarium Eug. Warming”, with handwriting notes of “19801”, “Rio de Janeiro, Alto Macahé de Nova Friburgo”, and “18 Jan. 1892”, plus scale with number 22066; F Neg. No. 22066!; photocopy and photo in UEC! (Holotype: B<sup>†</sup>); isolectotypes: C! (photocopy and photo in UEC!), F-620002! (type fragment from B<sup>†</sup>, photo in UEC!), G (2 sheets, negatives in UEC!), IAN-93772! (photo in UEC!), K! (cibachrome in UEC!), LE (photo in UEC!), MO-1580357! (photo in UEC!), MO-1671013!, NY-00355042! (photo in UEC!), NY-00355043!, NY-00355044! (photo in UEC!), OUPR-8924! (photo in UEC!), P-00221217 (photo in UEC!), R-30933!, RB-48685! (2 sheets, photos in UEC!), U (left-hand specimen, photo in UEC!), U-0017930!, US-00099507 (photo in UEC!), US-00099508 (photo in UEC!)]. Plate XII B (cf. Appendix 13.5).

**Illustrations** - Vattimo-Gil (1956, Estampa 1 – fruiting habit; 1957, Fig. 5, habit and fruit), Vattimo-Gil (1959, Estampa 1, Fig. 8, fruit; Fig. 9, leaf), Vattimo-Gil (1966a, Fig. 209-212, flower pieces), Vattimo-Gil (1966b, Fig. 1-11, flower pieces; 56, leaf; 57, 60, fruits), Coe-Teixeira (1965, táb. I, Fig. 2, leaf and flower pieces, leaf and fruit), Moraes (2003, pr. 3, L, flowering habit; M-N, flower and stamen of androecial whorl I; O, fruit).

**Vernacular names** - Anhuvinha-branca, canela-ameixa, canela-bosta, canela-gosmenta, canela-oiti, canela-sassafráz, canela-sebosa, canelinha, tabucuva-preta.

**Description** - *Trees* up to 30 m tall, trunk cylindrical, frequently multistemmed, DBH 9.96-146.74 cm ( $\bar{X}$  = 41.02 ± 29.78 cm;  $N$  = 61), bark grayish, smooth to rugose, with lenticels (Fig. 54 A-C). *Branches* terete, gray or dark brown, with longitudinal lenticels. *Branchlets* 5 cm below terminal bud c. 1.2-2.4 mm in diam., light yellowish to brownish to grayish, initially angular from the beginning, sub-cylindrical towards the base, smooth or sulcate or striate, glabrous or glabrescent or pubescent with ± short, ± appressed hairs. *Petioles* 5.0-10.5 mm long, 1.2-1.6 mm thick, canaliculate, roundish below, glabrous to glabrescent towards the base. *Leaves* alternate, narrow-elliptical to elliptic-lanceolate to obovate, 2.6-12.1 cm long, 0.9-4.7 cm broad, chartaceous to rigid-chartaceous (Fig. 55 A-F); young leaves sparse pubescent on both surfaces, whereas mature leaves are usually glabrous on both surfaces, but rarely glabrescent mainly on the midrib below, tip acute to acuminate to caudate-acuminate (short to long), base acute to attenuate, revolute, margin flat to slightly recurved, sclerified; above somewhat shining,

rather poorly reticulate; beneath paler, dull, with papillae inconspicuous, often glaucous; midrib impressed to level or slightly depressed above, prominent below, secondary veins (4-14 per side) patent, arcuate, poorly reticulate to slightly raised above, poorly to slightly salient below; tertiary venation poorly to prominulously reticulate below; venation pattern camptodromous-brochidodromous. *Inflorescences* green, glaucous, axillary, thyrso-paniculate, pyramidal, many-flowered, 0.8-1.3 mm in diam. at the base, 2.0-11.0 cm long, lax, either sparsely pubescent to densely pubescent, with  $\pm$  short,  $\pm$  appressed hairs, or glabrescent to glabrous, usually shorter than leaves; peduncles glabrous to glabrescent or pubescent; bracteoles minute, ovate, yellowish pilose, deciduous to sub-persistent. *Flower buds* green to greenish. *Flowers* green to light yellow, or cream to cream-greenish, glabrous to glabrescent (Fig. 56 A) or slightly to densely yellowish or rusty-tomentellous, with  $\pm$  short,  $\pm$  appressed hairs, pruinose, (2.0-)2.4-3.3(-4.13) mm long, 1.2-1.73(-2.0) mm in diam. at apex; tube cylindrical to obconical-sub-urceolate, glabrous within, (0.7-)0.9-1.35(-1.6) mm long, (0.5-)0.64-0.9(-1.1) mm in diam.; pedicels sparsely to densely tomentellous, (0.3-)0.77-1.3(-1.55) mm long; tepals (Fig. 56 B) subequal, erect-patent, (0.6-)0.83-1.31(-1.5) mm long ( $\bar{X} = 1.05 \pm 0.15$  mm;  $N = 10$ ), 0.43-0.77 mm broad ( $\bar{X} = 0.62 \pm 0.12$  mm;  $N = 9$ ), concave, incurved at apex, narrowly ovate to ovate-elliptical, roundish to acutish, margin and within hirsute; stamens included to exerted; stamens of whorls I and II introrse, 0.48-0.76 mm long ( $\bar{X} = 0.63 \pm 0.09$ ;  $N = 10$ ), anthers glabrous, broadly ovate, 0.21-0.54 mm long ( $\bar{X} = 0.41 \pm 0.29$  mm;  $N = 19$ ), 0.26-0.59 mm broad ( $\bar{X} = 0.40 \pm 0.09$  mm;  $N = 16$ ), connectives papillose, slightly prolonged beyond the large sporangia, tip acutish to obtuse, filaments as long as or shorter than anthers, glabrescent to densely hirsute, adnate to the tepals (Fig. 56 C); stamens of whorl III lateral, 0.73-1.04 mm long ( $\bar{X} = 0.84 \pm 0.08$  mm;  $N = 16$ ), anthers glabrous, narrowly ovate, 0.36-0.66 mm long ( $\bar{X} = 0.52 \pm 0.07$  mm;  $N = 21$ ), 0.22-0.37 mm broad ( $\bar{X} = 0.29 \pm 0.04$  mm;  $N = 12$ ), connectives thick, obtuse, strongly protruding beyond the large sporangia, filaments as long, nearly as broad, densely hirsute (Fig. 56 D); glands small, globose, 0.27-0.49 mm long ( $\bar{X} = 0.34 \pm 0.05$  mm;  $N = 18$ ), 0.22-0.46 mm broad ( $\bar{X} = 0.33 \pm 0.08$  mm;  $N = 18$ ), sub-sessile to shortly pedicelled (Fig. 56 F); staminodes narrowly sagittate, glabrous, 0.4-0.75 mm long ( $\bar{X} = 0.58 \pm 0.11$  mm;  $N = 13$ ), 0.22-0.32 mm broad ( $\bar{X} = 0.25 \pm 0.04$  mm;  $N = 4$ ), stalks very short, pilose (Fig. 56 E); gynoecium exerted, c. 1.4-2.35(-2.5) mm long ( $\bar{X} = 1.83 \pm 0.28$  mm;  $N = 13$ ), glabrous, ovary ellipsoid, c. 0.55-0.87(-1.0) mm long ( $\bar{X} = 0.69 \pm 0.08$  mm;  $N = 13$ ), 0.27-0.54 mm in diam. ( $\bar{X} = 0.36 \pm 0.06$  mm;  $N = 14$ ), gradually merging into the cylindrical-conical, gradually narrowed, towards top very slender, glabrous, 0.87-1.6 mm long ( $\bar{X} = 1.15 \pm 0.25$  mm;  $N = 13$ ) style with minute, truncate stigma (Fig. 56 G). *Immature fruits* green (Fig. 57 A) with pericarp slightly ribbed. *Fruits* yellow to orange-yellowish, or orange, or orange-greenish, or red, relatively large, ellipsoid to pyriform, smooth, c. 1.47-4.94(-5.5) cm long ( $\bar{X} = 3.26 \pm 0.53$  cm;  $N = 373$ ), c. (0.87-)0.95-2.84(-3.0) cm in diam. ( $\bar{X} = 1.92 \pm 0.32$  cm;  $N = 373$ ) (Fig. 9 N, 57 B); flesh portion originated from the accrescent flower tube thin.

**Phenology** - Flowering material from August to January, with only one collection in May, main flowering time October to November. Fruiting material throughout the year, but mainly immature fruits. Mature fruits mostly from September to

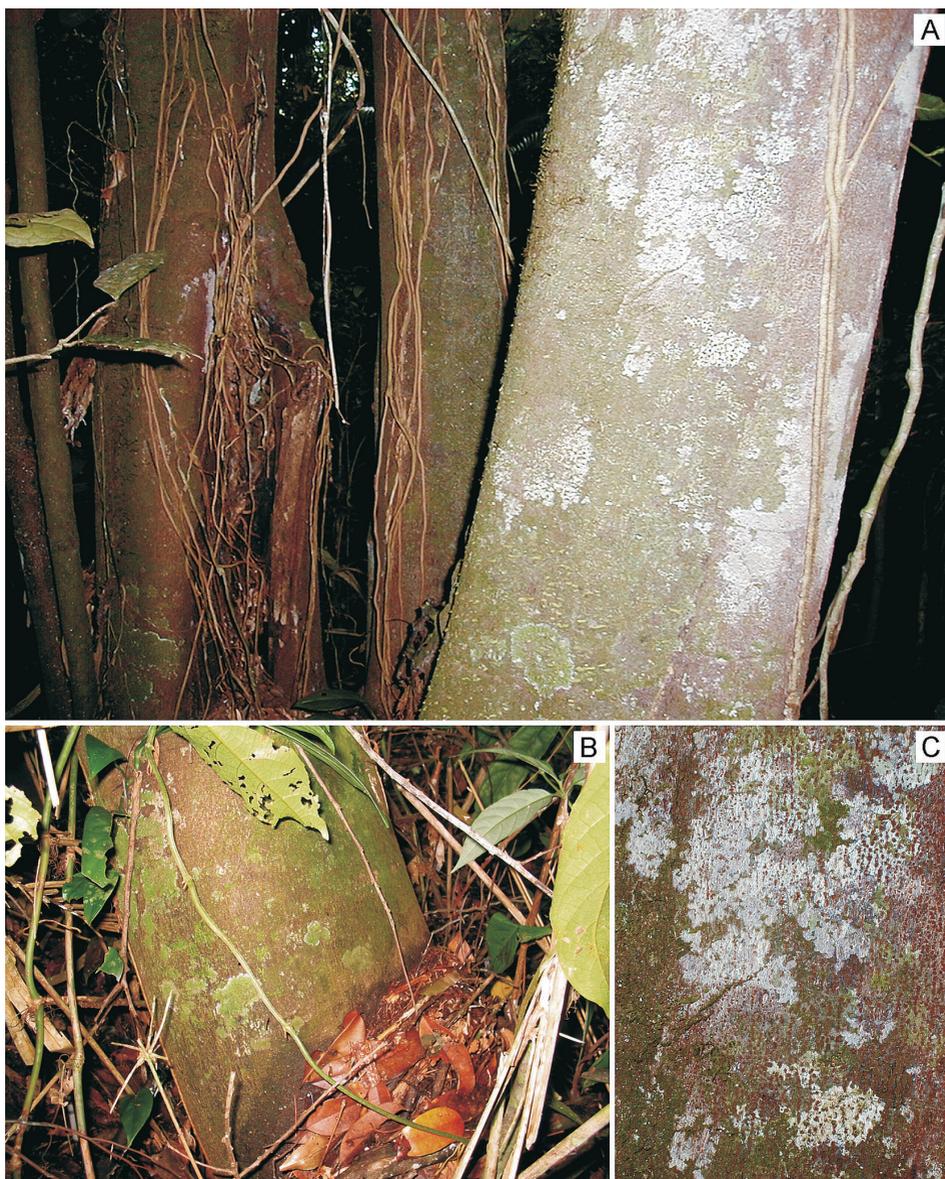
December. Several collections with both flowers and fruits in September and October.

**Distribution and habitat (Fig. 58)** - Species only known from southeast Brazil, mainly collected in the Ombrophilous Dense Forest, but also in Semi-deciduous forests of Minas Gerais, from sea level (?) – 150 m to 700-1125 m altitude. Low frequency in the Atlantic Rain Forest, but several populations in the state of São Paulo at Pariqüera-Açu, E.E. de Juréia-Itatins, P.E. da Cantareira, and P.E. da Serra do Mar, Nucleus Picinguaba, at a relatively high density of adult forest patches.

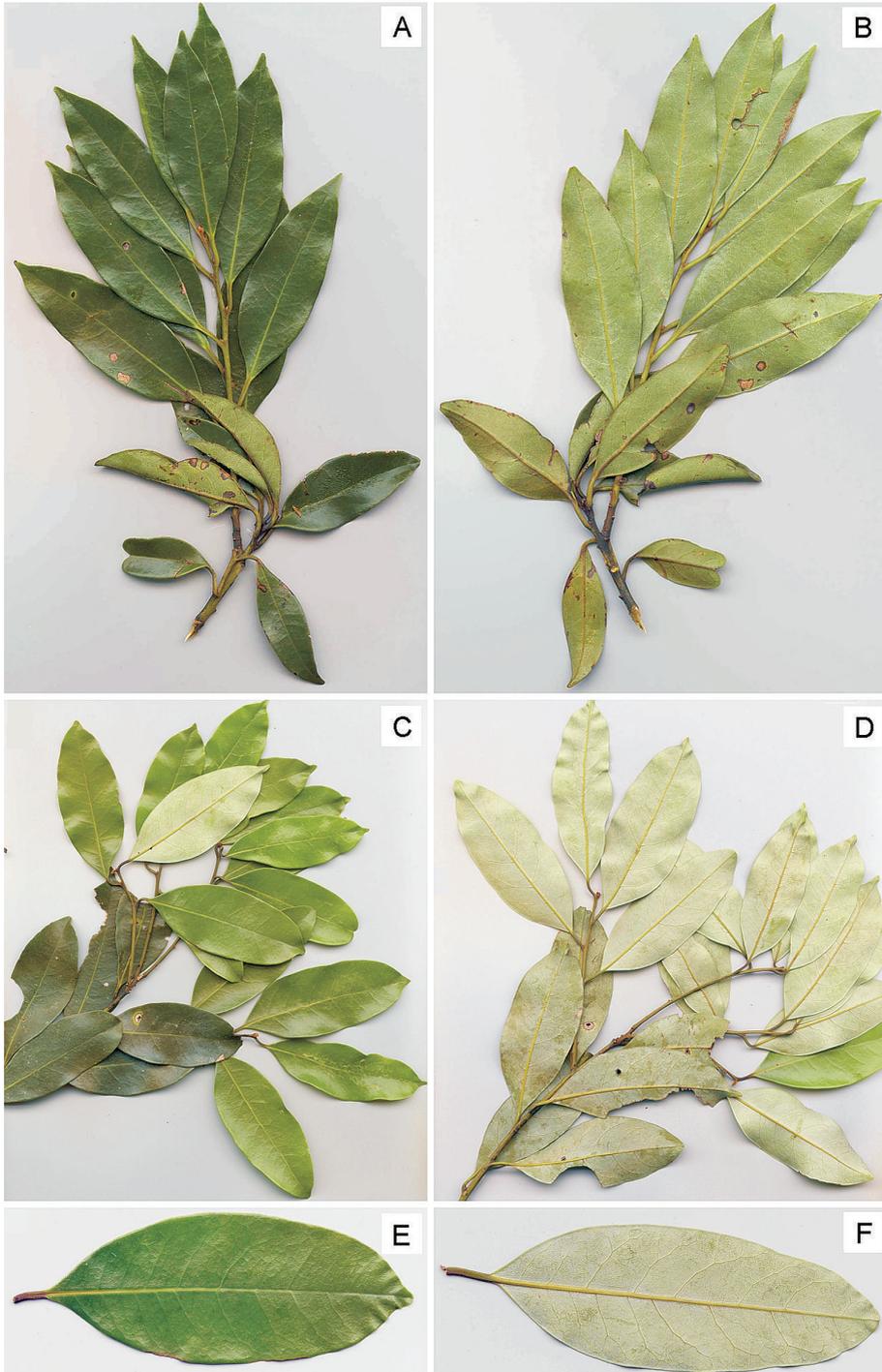
**Uses** - Agripino *et al.* (2004) demonstrated that extracts from the leaves of *C. saligna*, collected at E.E. Juréia-Itatins, SP, have limited antimicrobial and DNA-damaging properties. Rolim & Chiarello (2004) reported that *C. saligna* is also used as a shade tree for cocoa in the cabruca system in the state of Espírito Santo.

**Comments** - *Cryptocarya saligna* is recognised by its usually narrow-elliptic, discolored leaves, often glaucous on the lower surface, nearly glabrous, flowers with gynoeceium exserted. Collections from Linhares, ES, and Caratinga, MG, present glabrescent leaves on the lower surface, mainly on the midrib. In São Paulo state, populations of the northern coastal region have fruits that are larger and more reddish than those from the southern coast that are orange.

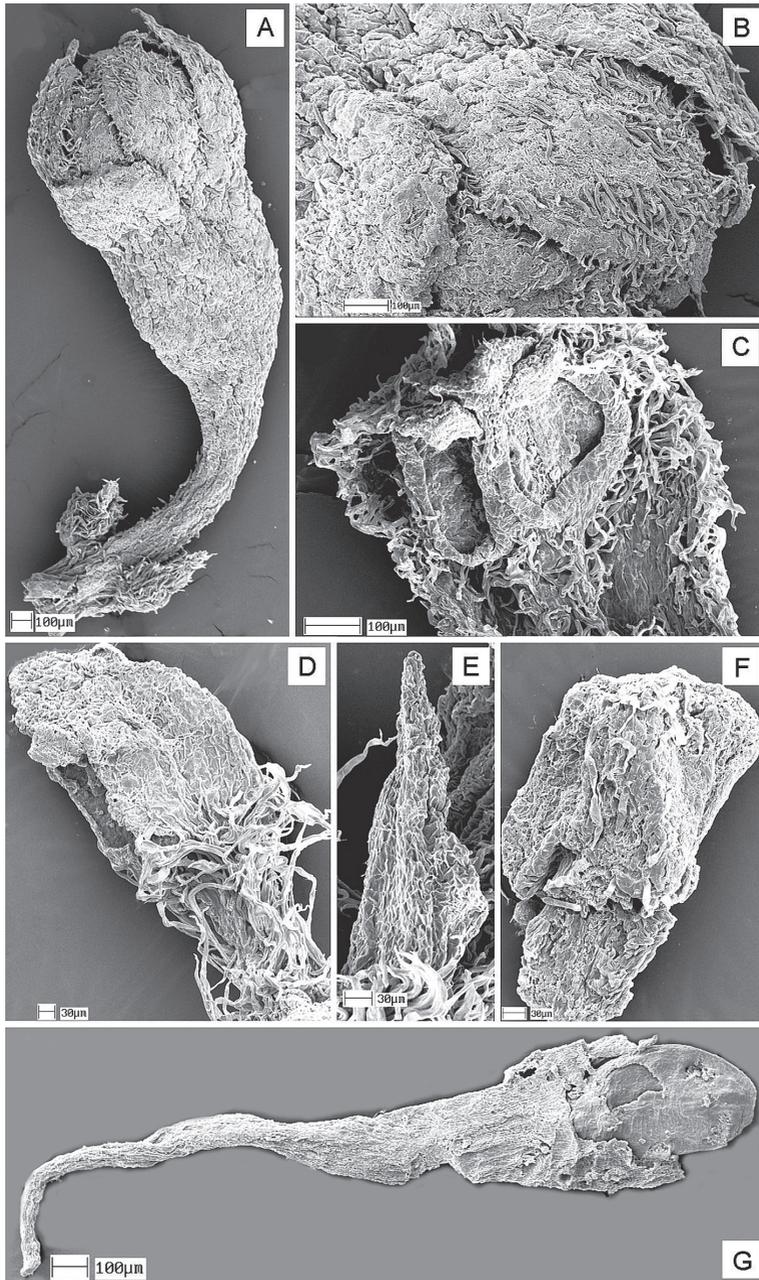
**Specimens examined** - 127 (listed in appendix 13.3).



**Fig. 54.** Appearance of barks of *Cryptocarya saligna* Mez. A. Multistemmed tree from Pariçüera-Açu, SP; B. Reserva Natural da CVRD, Linhares, ES; C. Detail of bark from A. (Photographs by author).



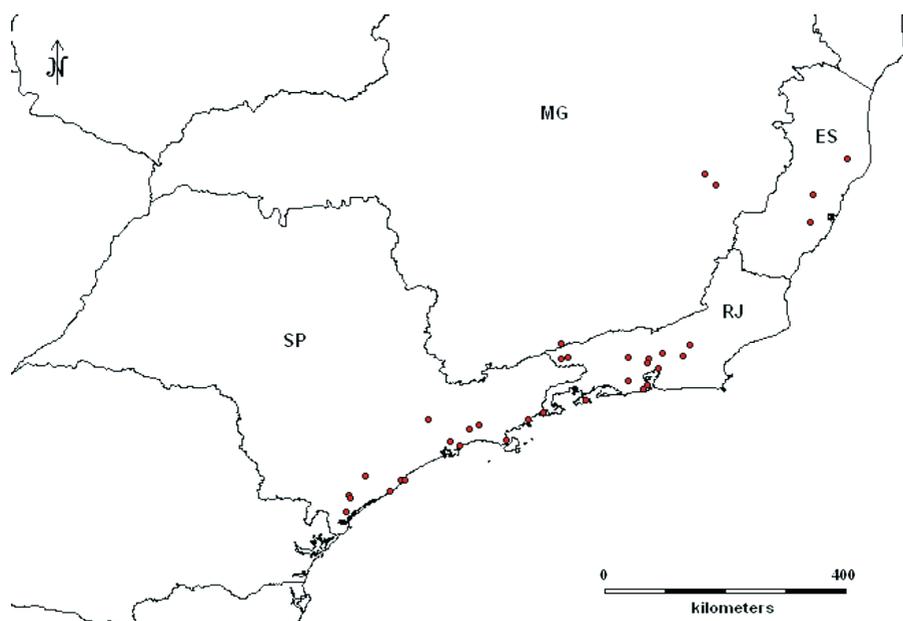
**Fig. 55.** *Cryptocarya saligna* Mez. A-B. Branches collected at Serra da Estrela, Petrópolis, RJ; C-D. Branches collected at Pariqüera-Açu, SP; E-F. Detail of leaves. (Photographs by author).



**Fig. 56.** SEM micrographs of flowers of *Cryptocarya saligna* Mez.  
 A. Flower bud (from *Glaziou 14205*, IAN); B. Detail of external indument (from *Glaziou 14205*, IAN); C. Adaxial side of stamen of the androecial whorl I, introrse (from *Glaziou 19801*, RB); D. Adaxial side of stamen of the androecial whorl III, lateral-extrorse (from *Glaziou 19801*, RB); E. Staminode (from *Glaziou 19801*, RB); F. Gland (from *Glaziou 14205*, IAN); G. Gynoecium (from *Glaziou 14205*, IAN).  
 (Photomicrographs by author).



**Fig. 57.** *Cryptocarya saligna* Mez. A. Unripe fruits collected at Serra da Estrela, Petrópolis, RJ, in June 2001; B. Ripe fruits collected at Pariquera-Açu, SP, in October 2000. (Photographs by author).



**Fig. 58.** Distribution of *Cryptocarya saligna* Mez.

## 10. *Cryptocarya sellowiana* P.L.R. de Moraes sp. nov.

Holotype: Brazil. Minas Gerais, Santa Bárbara, Represa de Peti, 23 Apr. 1992 (fr.), A.T. Oliveira Filho et al. s.n. (ESAL-13252!; isotype: UEC-142307!). Fig. 59; Plate XIII B (cf. Appendix 13.5).

Ab omnibus speciebus *Cryptocaryae* ex regione Neotropica foliorum indumento, laminis infra pilis longis, ± erectis vestitis, petiolis supra profunde canaliculatis, pilis longis ± appressis, ± ascendentibus, pedunculis tomentosis, longis, ± ascendentibus instructis, fructibus laevibus, pilosis, frustis floralibus apicem versus persistentibus differt.

Differs from other species of Neotropical *Cryptocarya* in the indument of leaves, abaxially covered with long, ± erect straight hairs, petioles deeply canaliculate above, covered with long, ± appressed, ± ascending hairs, peduncles tomentose, with long, ± ascending hairs, fruits smooth, pilose, with remnant of flower pieces at apex.

**Etymology** - This species is named in honour of Friedrich Sellow, Prussian botanist who lived in Brazil from 1814 to 1831.

**Vernacular name** - Canela-pião.

**Description** - *Trees* 9-12 m tall, trunk cylindrical, DBH 12.7 cm, bark rough. *Branches* terete, brownish, with longitudinal lenticels, glabrous. *Branchlets* 5 cm below terminal bud c. 1.6-2.6 mm in diam., light brownish, initially slightly angular to flat from the beginning, slightly striate, with longitudinal lenticels, sparse pubescent to glabrescent towards the base, with long, ± appressed and ± ascending hairs; terminal buds minute, ovoid, tomentose, completely covered by yellowish, long, ascending hairs. *Petioles* 8.2-9.8 mm long, 1.3-1.7 mm thick, deeply canaliculate above, roundish below, glabrescent to sparse pubescent, with long, ± appressed and ± ascending hairs. *Leaves* alternate, lanceolate to obovate, 8.1-12.4 cm long, 3.3-4.2 cm broad, chartaceous to stiffly chartaceous, glabrescent above, pubescent below, with long, ± erect straight hairs, tip obtuse or rounded to short acuminate, base acute, margin flat to slightly recurved, sclerified; above somewhat shining, prominulous reticulate; beneath paler, with papillae conspicuous; midrib prominulous above, prominent below, secondary veins patent (6-10 per side), prominulous above, prominent below; tertiary venation rather lax, prominulously reticulate below; venation pattern camptodromous-brochidodromous. *Inflorescences* unknown, however, remnant peduncles are axillary, subterminal, 1.0-1.3 mm in diam. at the base, long, tomentose, with long, ± ascending hairs. Remnant of *flowers* from fruits indicate they are completely covered by yellowish, ± long, ± ascending hairs. *Fruits* black, globose, c. 2.2 cm long, c. 1.77 cm in diam., smooth, with remnant of flower pieces at apex.

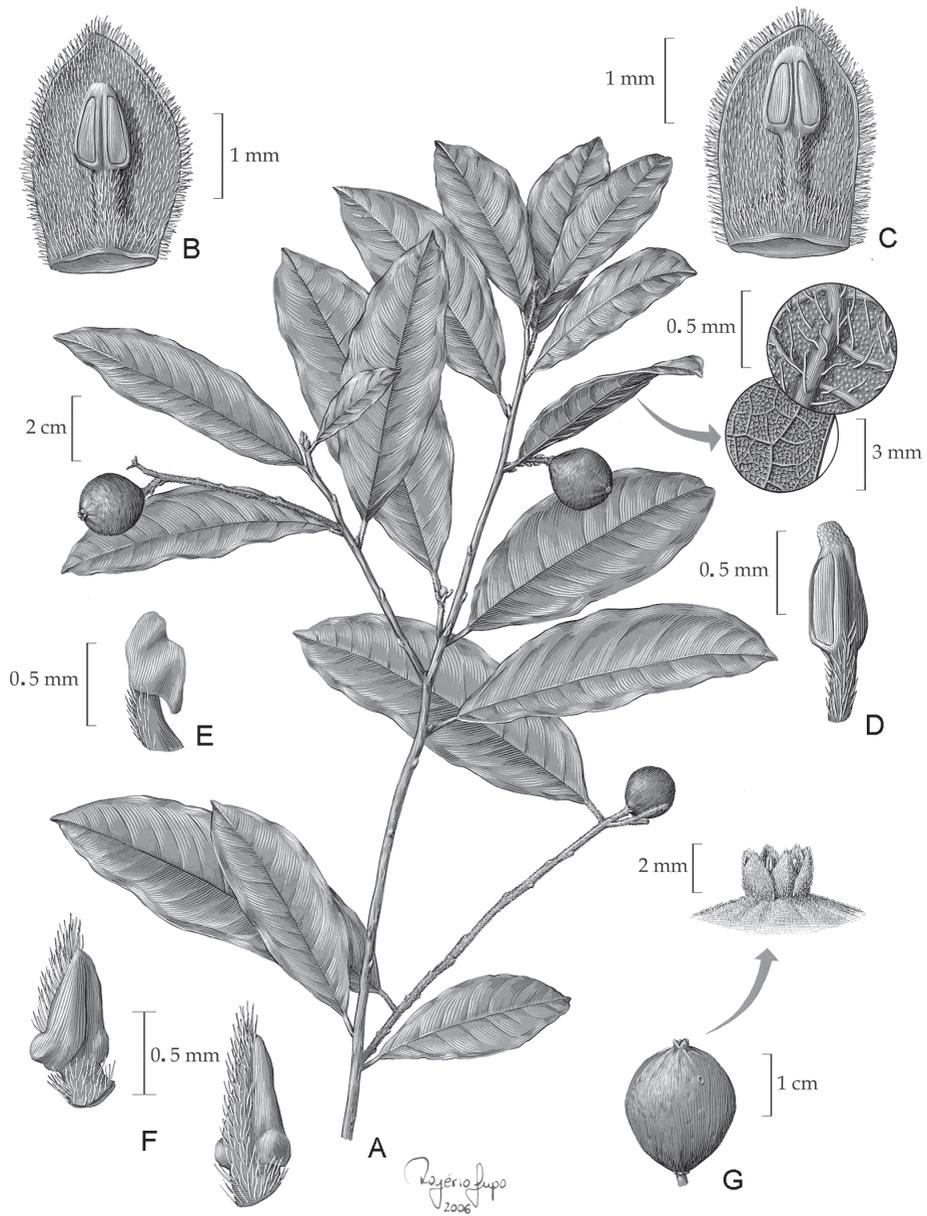
**Phenology** - Flowering period unknown. Fruiting material in April, June and August.

**Distribution and habitat (Fig. 60)** - Species only known from the type and two other collections from the region of Rio Piracicaba, MG, c. 20 to 30 km distant from each other, in Semi-deciduous forests, c. 620-730 m altitude.

**Uses** - Unknown at present.

**Comments** - *Cryptocarya sellowiana* is a locally distinctive taxon, seemingly close related to *C. mandioccana*. In contrast to all the other species, it is easily recognised by its leaves abaxially covered with long, ± erect straight hairs, petioles deeply canaliculate above, covered with long, ± appressed ± ascending hairs, peduncles tomentose, with long, ± ascending hairs. In fruiting material it is possible to sort the species apart, because its mature fruits are smooth, and still hairy, with remnant of flower pieces at apex. The species could be considered a local variation of *C. mandioccana* so further study is needed to clarify the intraspecific relationships within this new species.

**Specimens examined** - 3 (cf. in appendix 13.3).



**Fig. 59.** *Cryptocarya sellowiana* P.L.R. de Moraes. A. Habitus; B. Stamen of whorl I; C. Stamen of whorl II; D. Stamen of whorl III; E. Gland; F. Staminodes; G. Fruit with remnants of flower (from Oliveira Filho et al. s.n., ESAL-13252).

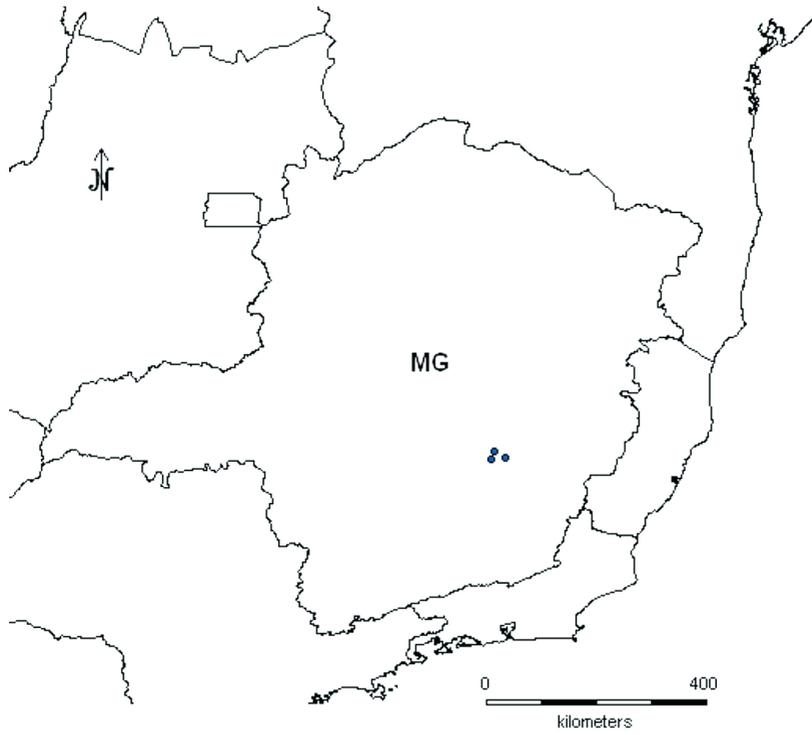


Fig. 60. Distribution of *Cryptocarya sellowiana* P.L.R. de Moraes.