

39. *Chrysophyllum imperiale* (Linden ex Koch)

Bentham & Hooker, Gen. pl. 2: 653. 1876; J.

D. Hooker, Bot. Mag. 41: tab. 6823. 1885.

Figs. 143, 144a.

Theophrasta imperialis Linden ex Koch & Fintelmann, Wochenschr. Gartnerei Pflanzenk. 2: 91. 1859; Regel Gartenfl. 13: 323; t. 453. 1864; Andre, L'illustration Horticole 21: 77, 152, pl. 184. 1874. Type. Brazil. Rio de Janeiro: Serra da Estrella, *Glaziou* 20402 (neotype, K chosen here; isoneotype, M, P).

Martiusella imperialis (Linden) Pierre, Not. bot. 66. 1891.

Chloroluma imperialis (Linden) Aubréville, Adansonia n.s. 1: 33. 1961.

Planchonella imperialis (Linden) Baehni, Boissiera 11: 67. 1965.

Tree, young shoots densely appressed brown-pubescent at first, soon glabrous, greyish-brown, lenticellate, cracked and fissured. *Leaves* loosely

clustered at the shoot apex, spirally arranged, 9–40 × 3.3–12.5 cm, oblanceolate to narrowly cuneiform, apex obtuse, rounded or truncate, base long tapering, finally obtuse, rounded or truncate, margin shallowly spinulose-serrate, thinly coriaceous, glabrous above, some residual matted indumentum below or glabrous; venation eucamptodromous, with a marginal vein, midrib slightly raised on upper surface, secondary veins 11–31 pairs, usually slightly convergent, arcuate, slightly raised on the upper surface, strongly raised below; intersecondaries short or absent; tertiaries mostly oblique to horizontal. Petiole 1.4–2.5 cm long, shortly pubescent or glabrous. *Fascicles* axillary or in the axils of fallen leaves, five–many-flowered. Pedicel 5–9 mm long, appressed puberulous. *Flowers* bisexual. Sepals five, 3–4 mm long, broadly ovate to suborbicular, apex rounded, appressed puberulous outside, glabrous or scattered appressed puberulous inside. Corolla 4–5 mm long, tube equalling or slightly exceeding the lobes; lobes 5–6, ovate, obtuse, glabrous. Stamens 5–6, fixed at or near the base of the corolla tube; filaments 2.5–3 mm long, geniculate, glabrous; anthers ca. 1 mm long, lanceolate-sagittate, glabrous. Staminodes absent. Ovary broadly ovoid, five-locular, densely strigose; style ca. 2 mm long after anthesis, strigose; style-head simple. *Fruit* ca. 3 cm long, subglobose, apex obtuse to acute, base truncate or depressed, smooth, glabrous. *Seeds* several, ca. 2.2 cm long, laterally compressed, testa smooth, shining, 0.5–1 mm thick; scar adaxial, extending for most of the length of the seed, ca. 2 mm wide; embryo with thin foliaceous cotyledons and long exerted radicle, surrounded by copious endosperm.

Distribution. Minas Gerais and Rio de Janeiro, Brazil, in lowland forest.

Collections examined. BRAZIL. MINAS GERAIS: Juiz de Fora (SW2143) *Brade* 14120 (MG); Mantena (SW1840), *Emygdio et al.* 2521 (R). RIO DE JANEIRO: Estrella (SW2243), *Glaziou* 6633 (K); São Christorão, *Glaziou* 8230 (F, K, NY); without precise locality, *Glaziou* 9745 (K, R), 11163 (K); Mage, Paraiso (SW2242), *Martinelli et al.* 1974 (RB). SÃO PAULO: Horto Florestal (cult), *Cunha* 4 (NY).

Field characters. A large tree, flowering Nov, fruit Jun.

Local name. Guapeba, marmelleiro do matto.

Relationships. *Chrysophyllum imperiale* is a most distinctive species on account of its spinulose-serrate leaves. Its floral and seed structure indicate its close relationship with *C. gonocarpum* and *C. viride* from the same geographical area. In addition to its spinulose-serrate leaves, it differs from both these species by the shape of its leaf base, the slightly larger flowers with stamens fixed at or near the base of the corolla tube, and its generally larger fruit.

The relationships of *C. imperiale* and *C. subspinosum* are discussed under the latter.

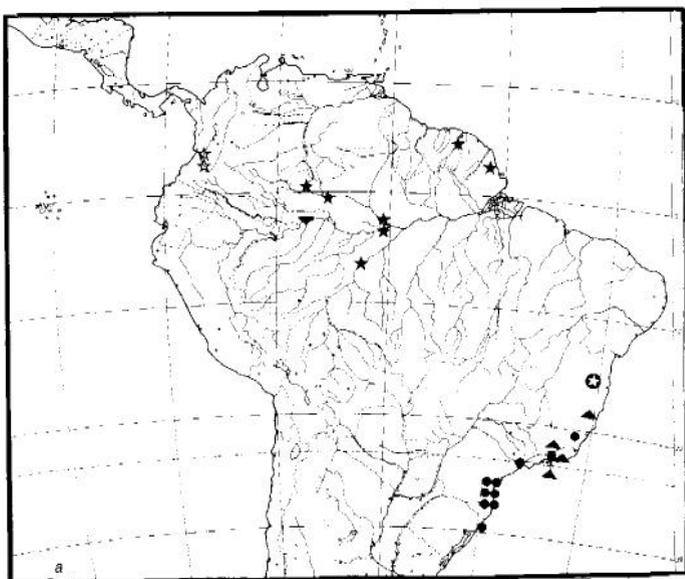


FIG. 144a. ● *Chrysophyllum viride*; ▲ *C. imperiale*; ● *C. subspinosum*; ☆ *C. lanatum*; ★ *C. eximium*; ▼ *C. superbum*.