



New synonyms and lectotypifications in Brazilian *Erythroxylum* (Erythroxylaceae)

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Erythroxylum Browne (1756: 278) includes about 230–240 species and is the only genus of Erythroxylaceae Kunth (1821: 175) occurring in the Neotropical region (Plowman & Berry 1999, Plowman & Hensold 2004). The eastern and northeastern Brazil and Venezuela are considered centers of its diversity and endemism (Daly 2004). For Brazil, 123 species are recognized, with the greatest species richness in the Atlantic Forest Domain, especially in its northeastern region, where 46 species have been reported, with 17 of them endemic (Loiola & Costa-Lima 2014).

In our taxonomic studies of *Erythroxylum* of the Atlantic Forest of northeastern Brazil, herbarium specimens from ALCB, ASE, BAH, BHCN, CEPEC, CESJ, CVRD, EAC, EAN, FLOR, HABIT*, HB, HTSA*, HST*, HUEFS, HUESB*, HRB, HUCPE*, HUVA, HVASF, IAN, IBGE, INPA, IPA, JOI, JPB, MAC, MBM, MBML, MOSS, PEUFR, R, RB, RFFP, SP, TEPB, UB, UEC, UFP, UFRN, UPCB, VIC, and VIES [the acronyms are those of Thiers (2014); * = not in Thiers], along with the types and online type collections from BM, BR, C, E, F, G, GH, K, L, LE, M, MO, MPU, NY, P, S, U, US, and W, have been analyzed. One of the results of that analysis are new synonymizations for *Erythroxylum pulchrum* Saint-Hilaire (1829: 94), *E. rimosum* Schulz (1907: 53), and *E. subrotundum* Saint-Hilaire (1829: 69), presented below. *Erythroxylum rimosum* and the new synonyms of *E. pulchrum*, *E. rimosum*, and *E. subrotundum* were based on syntype collections, and, in accordance with Art. 9.2 of the International Code of Nomenclature for algae, fungi and plants (ICN, McNeill *et al.* 2012), lectotypes are designated here. These lectotypes had already been suggested by T.C. Plowman in his unpublished “List of types of *Erythroxylum* (Erythroxylaceae) examined for Flora Neotropica” (dated 22 February 1988), deposited at the Field Museum. To avoid future confusion, voucher specimens indicated by Plowman have been used in the designation of lectotypes.

Nomenclature

1. *Erythroxylum pulchrum* Saint-Hilaire (1829: 94). Type:—BRAZIL. Rio de Janeiro: Rio de Janeiro, woods near city, October 1816–1821, *A. St. Hilaire* #C2 134C (holotype: P = F neg. 58478!; isotype: MPU 012223! = F neg. 58984!).

= *Erythroxylum pulchrum* var. *macrophyllum* Schulz (1907: 61). Type:—BRAZIL. Rio de Janeiro: Rio de Janeiro, Mt. Corcovado, *s.d.*, *A. Glaziou* 6108 (lectotype: K 000407424!, **designated here**; isolectotypes: L 0018062!, LE, NY, P), *syn. nov.*

Schulz (1907) proposed *Erythroxylum pulchrum* var. *macrophyllum* on the basis of the leaf blade length (12–21.4 cm long vs. 6.5–11.2 cm long in *E. pulchrum* var. *pulchrum*). Our analysis of specimens from herbarium collections, including types, as well as of live material, showed that that character is highly variable, even within a single individual: larger leaf blades (up to 30 cm long) are often found in young individuals and on the lowest basal branches.

2. *Erythroxylum rimosum* Schulz (1907: 53). Type:—BRAZIL. Ceará: Dry hilly places near Crato, October 1838, *G. Gardner* 1492 (lectotype: K 000407433! = F neg. 55752! and IPA neg. 351!, **designated here**; isolectotypes: B = F

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