



## Lectotypification and notes on the distribution and conservation status of *Erythroxylum lancifolium* (Erythroxylaceae), species endemic to the Brazilian Atlantic Forest

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*Erythroxylum* Browne (1756: 278) is the largest genus in Erythroxylaceae Kunth (1821: 175), including 230–240 species (Plowman & Berry 1999, Plowman & Hensold 2004). It is distributed in tropical areas, with its greatest diversity (187 species) in the Neotropics (Plowman & Hensold 2004). The Neotropical species are characterized by intrapetiolar stipules, branchlets usually formed by the compression of cataphylls (brachyblasts), alternate, simple, and glabrous leaves, heterostylous flowers, often arranged in fascicles, and drupes with one pyrene (Plowman & Berry 1999). For Brazil 127 species of *Erythroxylum* have been recorded, with most of the diversity and endemism in the Atlantic Forest, especially in its northeastern section (Loiola & Costa-Lima 2015).

During our studies of *Erythroxylum* of the Atlantic Forest in northeastern Brazil, we found specimens of *Erythroxylum lancifolium* Peyritsch (1878: 144), previously known only from the type locality, in montane forests near Petrópolis, state of Rio de Janeiro, also in the states of Bahia and Espírito Santo. Its conservation status was evaluated according to criteria and categories of the IUCN (2001, 2014), with Area of Occupancy (AOO, based on 2 km<sup>2</sup> grids) and Extent of Occurrence (EOO) calculated using GeoCAT (Bachman *et al.* 2011) [<http://geocat.kew.org>].

*Erythroxylum lancifolium* was described by Peyritsch (1878) in *Flora brasiliensis* on the basis of syntypes of two Glaziou's collections (*Glaziou 6486* and *Glaziou 14551*). In accordance with the Article 9.2 of the ICN (McNeill *et al.* 2012), a lectotype for the species is being designated here. This lectotype, with a list of voucher specimens, had already been suggested by T.C. Plowman in his unpublished "List of types of *Erythroxylum* (Erythroxylaceae) examined for Flora Neotropica", located at the Field Museum and dated 22 February 1988. To avoid future confusion in the recognition of the lectotype, we have chosen the same specimens listed by Plowman. A first illustration of the species is also being provided.

***Erythroxylum lancifolium*** Peyritsch (1878: 144). Type:—BRAZIL. Rio de Janeiro: "Petropolis a Itamaraty", 09 September 1873, *A.F.M. Glaziou 6486* (lectotype: R 853!, **designated here**; isolectotypes: B, destroyed, = F neg. 12624!, G 00353854!, K 000407478!, LE 00002678! = F neg. 57043, P [3 sheets], R 853a!). (Fig. 1)

**Distribution, habitat, and conservation status:**—*Erythroxylum lancifolium* is endemic to the Atlantic Forest of the eastern Brazil. The species was considered restricted to the municipality of Petrópolis, in the montane part of the state of Rio de Janeiro, but has now records for the southern part of Rio de Janeiro, Espírito Santo, and southern Bahia. It is found in the understory of submontane and montane forests (at 600–1,300 m), always near streams.

Although it has a relatively wide distribution (EOO estimated at about 98,608 km<sup>2</sup>), *Erythroxylum lancifolium* occurs in restricted environments throughout its distribution range (AOO estimated at 20 km<sup>2</sup>). In accordance with the criteria B2ab(iii) of the IUCN (2001, 2014), this species must be considered Endangered (EN), since it is known from only five localities, characterized by reduction in the extent and quality of its habitat, due to agricultural activities and urban expansion.