

## LECTOTYPES OF *BERBERIS CHOCHOCO* AND ITS SYNONYMS

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### ABSTRACT

Lectotypes are designated for *Berberis chochoco* and its synonyms *Chrysodendron tinctorium* var. *oblongifolium*, *C. tinctorium* var. *latifolium*, and *C. tinctorium* var. *longifolium*. The species is a member of the Berberidaceae native to central and northeastern México.

KEY WORDS: *Berberis*, *Mahonia*, *Chrysodendron*, México, lectotype

*Berberis chochoco* Schltdl. is a member of the Berberidaceae common in central and northeastern México. Lectotypes of *B. chochoco* and three of its four published synonyms have either never been designated or have been designated incorrectly. Correct designations are given below.

Schlechtendal (1854) mentioned that the material on which he based his description of *Berberis chochoco* was collected by Ehrenberg. He mentioned that Ehrenberg had recorded the local common name as "Schoschoko," which Schlechtendal used as the basis of his specific epithet. He did not, however, mention any particular specimen. There is therefore no holotype. Fedde (1901) mentioned *Ehrenberg 1250* and another specimen, but did not designate either as type. The specimen of *Ehrenberg 1250* at HAL bears an annotation label on which Fedde renumbered the specimen with his own number, 1034. The duplicate at US also bears Fedde's number 1034. Fedde (1901) used both numbers in referring to the same specimen, thus creating some confusion. Ahrendt (1961) and Marroquín (1972) both gave *Ehrenberg 1034/1250* as type. Both, however, erroneously listed BM as the place of deposit. A search of type and general collections at BM yielded no such specimen. The specimen at HAL is designated lectotype below because Schlechtendal was located there. It does bear a note from Ehrenberg mentioning the common name "Schoschoko."

Four synonyms of *Berberis chochoco* were published prior to 1854, all in the same place. *Chrysodendron tinctorium* Terán & Berland. and three varietal names based on this specific name were published in a 16-page pamphlet in Matamoros, Tamaulipas, México (Terán & Berlandier 1832). The name remained unknown and unused until Johnston (1924) discovered a copy of the pamphlet in the Gray Herbarium Library at Harvard University. Johnston identified Berlandier's vouchers as *Mahonia chochoco* (Schltdl.) Fedde, a species common in central and northeastern México. Johnston's recombination, *Mahonia tinctoria* (Terán & Berland.) I.M. Johnst., has not been used by any subsequent author. A formal proposal to permanently reject the name is in press in *Taxon* (Laferrière 1995).



Berlandier provided *Chrysodendron tinctorium* with full descriptions in Spanish and Latin. This was followed by very brief descriptions of three varieties, containing information only on leaf shape. Johnston declared these to be trivial leaf variations and made no attempt to formally recombine the epithets. One of the three, var. *oblongifolium* Terán & Berland., appears to include the type specimen of the specific name, but is nevertheless validly published and legitimate. The other two are represented by two specimens on the same sheet bearing the varietal names on Berlandier's original labels. These are designated lectotypes below.

*Berberis chochoco* Schltdl., Bot. Zeit. 12:652. 1854. --- *Mahonia chochoco* (Schltdl.) Fedde, Bot. Jahrb. 31:103. 1901. TYPE: MEXICO. in barranca near Minoschtla, "Schoschoko," Jan 1840, *Ehrenberg 1250* (LECTOTYPE [here designated]: HAL!; Isolectotypes: B!, US! [pro "1034;" US #617126]; WRSL† [fide Fedde 1901; now destroyed fide W. Stojanowska, pers. comm.]).

(=) *Chrysodendron tinctorium* Terán & Berland., Mem. Comis. límites: 7. 1832, pro "tinctoria," nom. rej. prop. --- *Mahonia tinctoria* (Terán & Berland.) I.M. Johnst., Contr. Gray Herb. 70:89. 1924, non *Berberis tinctoria* Lesch., Mem. Mus. Paris 9:306. 1822. TYPE: MEXICO. Tamaulipas: "in montibus prope San Carlos" [c. 100 km N of Ciudad Victoria], Nov 1831, *Berlandier 927* (LECTOTYPE [vide Marroquín in Cuad. Inst. Invest. Cient. Univ. Autón. Nuevo León 15:12. 1972.]: GH!; Isolectotype: US [fide Marroquín 1972]).

(=) *Chrysodendron tinctorium* Terán & Berland. var. *oblongifolium* Terán & Berland., Mem. Comis. límites: 7. 1832, pro "oblongifolia." TYPE: MEXICO. Tamaulipas: "in montibus prope San Carlos" [c. 100 km N of Ciudad Victoria], Nov 1831, *Berlandier 927* (LECTOTYPE [here designated]: GH!; Isolectotype: US [fide Marroquín 1972]).

(=) *Chrysodendron tinctorium* Terán & Berland. var. *latifolium* Terán & Berland., Mem. Comis. límites: 7. 1832, pro "latifolia." TYPE: MEXICO. Tamaulipas: in montibus prope San Carlos, *Berlandier 2357 pro parte* (LECTOTYPE [here designated]: upper right corner of sheet at GH!).

(=) *Chrysodendron tinctorium* Terán & Berland. var. *longifolium* Terán & Berland., Mem. Comis. límites: 7. 1832, pro "longifolia." TYPE: MEXICO. Tamaulipas: in montibus prope San Carlos, *Berlandier 2357 pro parte* (LECTOTYPE [here designated]: lower left corner of sheet at GH!; Isolectotype: specimen on right side of sheet at US! [US #2779]).

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