

## ON THE IDENTITY OF *MAYTENUS BRIDGETII* (CELASTRACEAE), FROM SOUTHEASTERN BRAZIL

Leonardo Biral<sup>1</sup>

Recebido 29.07.2021; Aceito 21.09.2021

### ABSTRACT

*Maytenus briquetii* is a little-known name published by Loesener based on two collections from the States of Espírito Santo and Rio de Janeiro. In the past, the name was synonymized under *M. aquifolium*. Even with a synonym based on a collection from Espírito Santo, *M. aquifolium* was not cited as occurring in that State in a taxonomic revision of extra-Amazonian *Maytenus*. Analysing specimens of Celastraceae for the ongoing project “Flora of Espírito Santo”, the syntypes of *M. briquetii* were re-evaluated against the protologue and concluding that the name is a synonym of *Monteverdia macrophylla*, and not *M. aquifolium*. The occurrence of *Monteverdia aquifolium* has not yet been recorded in Espírito Santo. A lectotype is designated here for the name *M. briquetii*, based on a specimen analysed by Loesener and deposited in M herbarium.

**Key words:** floristics, lectotype, *Monteverdia*, nomenclature

### RESUMO

*Maytenus briquetii* é um nome pouco conhecido publicado por Loesener a partir de coletas provenientes dos Estados do Espírito Santo e Rio de Janeiro. No passado, o nome foi considerado sinônimo de *M. aquifolium*. Mesmo apresentando um sinônimo publicado com base em uma coleta do Espírito Santo, *M. aquifolium* não foi citada como ocorrente naquele estado em uma revisão taxonômica de *Maytenus* extra-amazônico. Analisando coletas de Celastraceae para o projeto “Flora do Espírito Santo”, os síntipos de *Maytenus briquetii* foram reavaliados juntos com o protólogo e concluiu-se se tratar de um sinônimo heterotípico de *Monteverdia macrophylla* e não *M. aquifolium*, sendo que esta última espécie não foi registrada até o momento para o Estado. Um lectótipo está sendo designado para o nome *M. briquetii*, a partir do síntipo analisado por Loesener e depositado no herbário M.

**Palavras chave:** florística, lectótipo, *Monteverdia*, nomenclatura

*Maytenus briquetii* Loes. was described by T. Loesener based on two collections from Brazil, one gathered by Glaziou in the State of Rio de Janeiro and another by von Luetzelburg in Espírito Santo. The species was synonymized under *M. aquifolium* Mart. by Carvalho-Okano and Leitão-Filho (2004) who cited both syntypes. Although Carvalho-Okano and Leitão-Filho (2004) indicated *M. briquetii* as a synonym of *M. aquifolium* and formally mentioned the syntype from Espírito Santo (von Luetzelburg 7148B), they did not include that State for *M. aquifolium* in their taxonomic revision of extra-Amazonian *Maytenus*. Due to the absence of records for *M. aquifolium* (currently placed in *Monteverdia*) in Espírito Santo, doubt arose as to the occurrence of the species in that State as well as to the identity of *M. briquetii*. During the analysis of Celastraceae specimens for the “Flora of Espírito Santo” project, both syntypes of *M. briquetii* were re-evaluated against the protologue. It was concluded that the name has to be considered as a heterotypic synonym of *Monteverdia macrophylla* (Mart.) Biral, rather than *Monteverdia aquifolium* (Mart.) Biral.

<sup>1</sup> Federal University of Technology, Paraná (UTFPR). Universidade Tecnológica Federal do Paraná, campus Santa Helena. Herbário SHPR. Prolongamento da rua Cerejeiras, s.n., CEP 85892-000, Bairro São Luiz, Santa Helena, PR, Brazil. Correspondence: leobiral@hotmail.com

The taxonomic identity of *M. briquetii* is discussed below and a lectotype has been designated.

The two specimens used by Loesener (1923) to describe *Maytenus briquetii* were *Glaziou 15898* (indicated as deposited in B) and *von Luetzelburg 7148B* (in M). The isosyntype *Glaziou 15898* (deposited in G and not seen by Loesener) was previously determined by Briquet to be *M. aquifolium*, as he noted in one of his publications (Briquet 1919: 347). In the protologue of *M. briquetii*, Loesener (1923) compared it with *M. aquifolium*. He noted that the latter is distinct from the former by the smaller, narrower and thinner leaves, a greater number of reticulate raised veins and the spines on the leaves margins, however these characters were not quantified by him in the comments.

Upon examination of the syntypes of *Maytenus briquetii*, the protologue, and Celastraceae specimens from southeastern Brazil, it must be concluded that *M. briquetii* is not a synonym of *M. aquifolium*, in contradiction to Carvalho-Okano & Leitão-Filho (2004). Rather, *M. briquetii* is a heterotypic synonym of *Monteverdia macrophylla*. *Monteverdia macrophylla* differs from *Monteverdia aquifolium* by the life form (shrubs or small trees up to 4 m tall vs. trees up to 15 m), the size of the leaves (11.2-30.5 x 4.1-11 cm vs. 5.4-20.9 x 1.8-6.6 cm), and the shape and color of ripe fruits (apex quadrangular, red to vinaceous vs. apex rounded, orange). Probably, the spiny leaves and the lack of fruits in the collection *Glaziou 15898* in G, which was examined by Briquet and Carvalho-Okano (*vide* labels), contributed to their interpretation of *M. briquetii* as *Maytenus aquifolium*. The another syntype, *von Luetzelburg 7148B* deposited in M, was not seen by Carvalho-Okano during her doctoral thesis (Carvalho-Okano 1992), and she had not access to the other isosyntypes of *Glaziou 15898*, distributed in several herbaria and available nowadays through high-quality images on the website of those institutions. In the course of examining specimens of Celastraceae in Espírito Santo, *Monteverdia aquifolium* so far has not been found in that State. *Monteverdia macrophylla* is present mainly in dense Atlantic Rain Forest from Bahia to Rio de Janeiro, with records from 14 municipalities in the State of Espírito Santo.

The types of the names *Maytenus briquetii* and *M. macrophylla* are presented below. The designation of a lectotype of *M. macrophylla* is discussed elsewhere (Biral & Lombardi, submitted). The syntype *von Luetzelburg 7148B* at M, with a fruiting branch and identified by the author of the species (determinavit), is designated here as lectotype of *M. briquetii*.

**Monteverdia macrophylla** (Mart.) Biral, Syst. Bot. 42(4): 689. 2017. *Maytenus macrophylla* Martius, Flora 24(2, Beibl.): 95. 1841. Type: BRAZIL. Bahia: crescit in silvis ad Ilheos, Jan 1834, *Luschnath* in *Herb. Fl. Bras.* 631 (syntypes, BM [n.v., indicated by Carvalho-Okano & Leitão-Filho 2004: 35], BR [BR0000005222025!, BR0000005222681! & BR0000005222964!], G [G00177335! & G00177336!], GH [GH00049872 image!], HAL [HAL0118503 image!], L [L0043303! & L0043304!], LE [n.v., indicated by Carvalho-Okano & Leitão-Filho 2004: 35], MO [MO260558! & MO260985!], M!, NY [NY00337427!], P [P05556059 image!], W [0059541 & 1889-315874 images!]; B† [F neg. 13299!]).

*Maytenus briquetii* Loesener in Pilger, Notizbl. Bot. Gart. Berlin-Dahlem 77(8): 535. 1923. Type: BRAZIL. Espírito Santo: [Urwald] Am Rio Mutum, [nördlich vom Rio Doce], 1917, *von Luetzelburg 7148B* (lectotype, M!, **designated here**). Rio de Janeiro: [Fazenda de Laranjeiras, près de Cantagal, annotated on the label in A and P], 24 Aug 1886, *Glaziou 15898* (syntype, B† [F neg 13274]; isosyntypes, A [A00049844 image!], G [G00177132!], K [K000494616 image!] P [P05585959 image!]). *Syn. Nov.*

## ACKNOWLEDGMENTS

I thank the coordination of the Flora of Espírito Santo project by the opportunity to contribute, the curators and staff of the herbaria G and M for the hospitality during the visits to these institutions, James Roper for checking the English text, the Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) for fellowship grant (#2011/21879-5), and the anonymous reviewer for the valuable suggestions on the manuscript.

## REFERENCES

- BRIQUET, J. 1919. Decades plantarum novarum vel minus cognitarum. Celastraceae. *Annuaire du Conservatoire et du Jardin Botaniques de Genève* 20: 342–427.
- CARVALHO-OKANO, R.M. 1992. *Estudos taxonômicos do gênero Maytenus (Celastraceae) no Brasil extra-amazônico*. Thesis, Universidade Estadual de Campinas, Campinas, x + 253 pp.
- CARVALHO-OKANO, R.M. & LEITÃO-FILHO, H.F. 2004. O gênero *Maytenus* Mol. emend. Mol. (Celastraceae) no Brasil extra-amazônico. In: REIS, M.S. & SILVA, S.R. (Orgs.) *Conservação e uso sustentável de plantas medicinais e aromáticas: Maytenus spp., espinheira-santa*. Ibama, Brasília, pp. 11–51.
- LOESENER, T. 1923. Celastraceae. In: PILGER, R. *Plantae Lützelburgianae brasiliensis II. Notizblatt des Botanischen Gartens und Museums zu Berlin-Dahlem* 8 (77): 535–536.