



PENTACYCLIC TRITERPENES FROM THE BRANCHES OF *Monteverdia acanthophylla* (CELASTRACEAE)

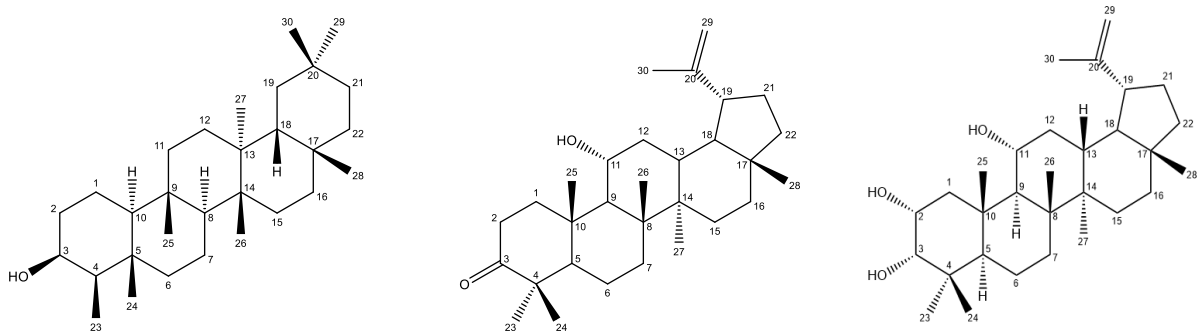
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Monteverdia acanthophylla (basionym *Maytenus acanthophylla*) is a Brazilian species in the family Celastraceae, commonly known as “pau-de-jararaca” or “espinheira-santa”, occurring mainly in the states of Bahia and Minas Gerais and.¹ This study reports the phytochemical investigation of hexane and chloroform extracts obtained from the branches of the species. Chromatographic methods, including thin-layer chromatography (TLC) and column chromatography (CC), were employed to isolate the compounds. Structural elucidation was carried out by ¹H and ¹³C nuclear magnetic resonance (NMR) spectroscopy, supported by 2D NMR experiments (HSQC, HMBC, COSY, and NOESY). The pentacyclic triterpene friedelan-3 β -ol (**1**, friedelane-type skeleton) and the lupane-type triterpenes 11 α -hydroxylup-20(29)-en-3-one (**2**) and lup-20(29)-ene-2 α ,3 α ,11 α -triol (**3**), in addition to fatty acids, were identified. Among these, the two lupane triterpenes are reported here for the first time from *M. acanthophylla*. Furthermore, the compound **3** is described for the first time in the literature.

Figure 1: Chemical structure of compounds **1–3**.



friedelan-3 β -ol (**1**) 11 α -hydroxylup-20(29)-en-3-one (**2**)

lup-20(29)-ene-2 α ,3 α ,11 α -triol (**3**)

Keywords: Celastraceae; phytochemical study; pentacyclic triterpenes; lupanes.

References: 1) BIRAL, L. et al. Systematics of New World *Maytenus* (Celastraceae) and a New Delimitation of the Genus. *Systematic Botany*, 42, 680–693, 2017. 2)

Acknowledgments: CAPES, CNPq and FAPEMIG

