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CHEMICAL COMPOSITION OF ESSENTIAL OILS FROM THE LEAVES, BARKS AND HEARTWOOD OF OCOTEA ACIPHYLLA (LAURACEAE)

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Ocotea aciphylla (abacatirana), native to the Amazon and belonging to the Lauraceae family, is little studied regarding its chemical composition and therapeutic potential. In this work, essential oils (EOs) from leaves, bark, and heartwood were obtained by hydrodistillation (4 h) and characterized by gas chromatography-mass spectrometry (GC-MS). The leaves presented a yield of 0.70% and 58 peaks, with major constituents (E)-caryophyllene (17.53%), germacrene D (15.23%), viridiflorene (10.59%), and aromadendrene (7.32%), associated with antimicrobial and immunomodulatory activities (FRANCO et al., 2021). The bark showed a yield of 0.28% and 73 peaks, with emphasis on eremoligenol (9.09%), viridiflorol (7.50%), rosifoliol (5.59%), intermedeol (5.23%), α-terpineol (4.70%) and α-eudesmol (4.36%), compounds with anti-inflammatory, antimycobacterial and antioxidant properties (HACHILAFI et al., 2023). The heartwood showed a yield of 0.63% and 96 peaks, with the main ones being α-terpineol (3.80%), δ-cadinene (3.77%), elemol (3.15%), guaiol (4.28%), β-eudesmol (4.41%) and γ-eudesmol (12.02%). The latter exhibit activities such as neurogenic vasodilation, reduction of dural leakage, and hepatoprotection (KENDALL, 2017). The leaves showed greater diversity and concentration of secondary metabolites, possibly due to their defense function against biotic and abiotic factors, while the heartwood, which has a structural function, exhibited a similar chemical profile but with lower yield. The results highlight the potential of *O. aciphylla* as a source of bioactive compounds of pharmacological and industrial interest, reinforcing the importance of further studies, especially *in vivo*, to validate its efficacy and elucidate its mechanisms of action, contributing to the valorization and sustainable use of Amazonian biodiversity.

Keywords: *Ocotea aciphylla, volatiles, GC-MS, Ocotea, Lauraceae*