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ISOLATION AND IDENTIFICATION OF METABOLITES FROM *Plectranthus barbatus* (LAMIACEAE) AND IN VITRO EVALUATION OF EXTRACTS AGAINST *Schistosoma mansoni*

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Schistosomiasis is a neglected tropical disease caused by flatworms of the genus *Schistosoma*, mainly *S. mansoni*, affects over 250 million people globally with significant socioeconomic impact, especially in Brazil. Praziquantel (PZQ) is the only drug currently available for treatment. However, the emerging resistance and ineffectiveness against juvenile worms of PZQ underscore the urgent need for new schistosomicidal drugs. This study investigated the schistosomicidal potential of extracts from *Plectranthus barbatus* and conducted a phytochemical investigation of these samples. Root and leaf extracts were obtained by maceration and evaluated for their in vitro activity against adult *S. mansoni* worms. Both extracts exhibited schistosomicidal activity, achieving 100% parasite mortality within 48 hours, with the root extract showing the highest activity. The extracts were characterized by HPLC-DAD and UHPLC-ESI-QTOF-MS. Chromatographic fractionation and spectroscopic analyses (MS, ^{1}H and ^{13}C NMR) led to the isolation and identification of barbatusin (**1**), forskolin (**2**), and rosmarinic acid (**3**). Cytotoxicity showed low toxicity for the leaf extract, with 100% cell viability, even at the highest concentrations tested (up to 100 µg/mL). These results highlight the potential of *P. barbatus* as a promising source of active schistosomicidal metabolites. We thank UFJF, FAPEMIG, and CAPES for financial support, and CENTRALBIO-UFJF for assistance in conducting this research.

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