10th Brazilian Conference on Natural Products
XXXVI RESEM
4-7 November 2025, Belo Horizonte, MG, Brazil

Section: 06

PHYTOCHEMICAL STUDY OF THE METHANOL EXTRACT FROM THE LEAVES OF REMIJIA AMAZONICA (RUBIACEAE)

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Remijia amazonica (Rubiaceae) is a species known as Amazonian cinchona, found in the North and Central-West regions of Brazil. Studies conducted with the genus *Remijia* have shown significant phytochemical potential, with the isolation of alkaloids, flavonoids, phenolic acids, steroids, and triterpenes. In this context, the present study aimed to evaluate the phytochemical profile of the methanolic extract of *R. amazonica* leaves. The botanical material was collected from the Adolpho Ducke Forest Reserve in Manaus, Amazonas, Brazil, dried in a forced circulation oven (<50°C), ground, and subsequently extracted in an ultrasonic bath with solvents in increasing order of polarity: hexane and methanol (MeOH). Subsequently, a liquid-liquid partition of the MeOH extract was performed, yielding three phases: dichloromethane (FDCM), ethyl acetate (FEtOAc), and hydromethanolic (FH_2O/MeOH). The following methodologies were used to isolate and identify the substances: comparative thin layer chromatography (TLC), open column chromatography (CCA), analysis of one- and two-dimensional ^{1}H and ^{13}C NMR (nuclear magnetic resonance) data (HSQC, HSQCedit, HMBC, DEPT, and COSY), combined with mass spectrometry and comparisons with the literature. Phytochemical analysis of the FDCM phase indicated the presence of alkaloids when revealed with Dragendorff's reagent in CCDC and terpenes when revealed with anisaldehyde and $Ce(SO_4)_2$. The EtOAc and H_2O/MeOH phases, when stained with anisaldehyde, presented a reddish coloration, and after staining with $FeCl_3$ and NP/PEG, they showed evidence of substances with aromatic rings. Through FDCM fractionation, two *Corynanthe*-type indole alkaloids with a molecular mass of 383 u were isolated and identified, designated 11-methoxy-3-isorauniticine and 9-methoxy-3-*iso*-19-epiajmalicine. This corroborates the genus, since indole alkaloids are considered chemosystematic markers of the genus *Remijia*, in addition to a coumarin (scopoletin). All three substances were described for the first time in the species and in the genus *Remijia*. Therefore, these results highlight the great chemical potential of the species and reinforce the need for further research to contribute to the genus and the Rubiaceae family. The authors would like to thank PPGBOT-INPA, PPGBIOTEC-UFAM, CNPq, CAPES, FAPEM, FINEP and LTQPN-INPA.

Keywords: *Indole alkaloids, coumarin, phytochemistry, chemosystematic markers.*