5th BCNP Brazilian Conference on Natural Products
XXXI RESEM
Atibaia – SP – Brazil
ISBN: 978-85-66836-10-3
Oct. 26–29th 2015

ANALYSIS OF ETHYL ACETATE FRACTION FROM THE BARK OF *Dalbergia monetaria* L.

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Abstract: *Dalbergia monetaria* L. (Fabaceae), popularly known as Veronica, is a plant whose bark is broadly used by several Amazonian communities to treat several infectious diseases[1] and there are only a few chemical studies on this species[2]. Thus, *D. monetaria* was chosen as a target for a bioguided study to identify antimicrobial substances correlated to this activity. Bark of *D. monetaria* was collected in the city of Abaetetuba, Pará State, in October 2013. Plant material was dried in circulation oven, reduced to powder and extracted by continued reflux method in ethanol, which was further eliminated by evaporation under vacuum. Crude ethanolic extract was partitioned yielding an ethyl acetate fraction (EAF) and others. EAF was analyzed by NMR (Varian MR-400-400 MHz) and LC-MS (Shimadzu LC-10 coupled with a micrOTOFQ Bruke II in negative mode) using a Phenomenex Luna C18 column, and as mobile phase: H_2O: MeOH + 0.1% formic acid, UV wavelength=254 nm. Both ^{1}H and ^{13}C NMR data showed signals for anomeric and aromatic ^{1}H and ^{13}C. LC-MS analysis showed a major peak in the total ion chromatogram, whose mass spectra exhibited a $[M-H]^-$ = 447. Several natural products have a similar molecular weight, but fragmentation pattern and chemical shifts in the NMR spectra compared to literature[4] and internet databanks data strongly suggest that this major compound in EAF might be the glycosylated flavone luteolin-4'-O-glucoside. Literature shows that this flavone has a strong antibacterial activity against pathogenic *S. aureus* and *E. coli*[4]. Isolation of this metabolite is being performed to assure its unequivocal identification. It is the first report of luteolin-4'-O-glucoside in *Dalbergia monetaria*.

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