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Phytochemical Investigation of Berries of the Embelia schimperi Plant

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Abstract : Embelia is a genus of climbing shrubs in the family Myrsinaceae. Embelia schimperi is as important in traditional medicine as the other species in the genus. The plant has been much known as a local medicine for the treatment of tapeworms. In this project, extraction, phytochemical screening tests, isolation, and characterization of berries of the Embelia schimperi plant have been conducted. The chemical investigations of methanol and ethyl acetate (1:1) ratio extracts of the berries lead to the isolation of three new compounds. The compounds were identified to be alkaloids coded as AD, AN, and AG. Structural elucidations of the isolated compounds were accomplished using spectroscopic methods (IR, UV, ^{1}H NMR, ^{13}C NMR, DEPT and 2D NMR, HPLC, and LC-MS). The alkaloid coded as (AN) has a wide MIC range of 6.31-25.46 mg/mL against all tested bacteria strains.

Keywords : Embelia schimper, HPLC, alkaloids, 2D NMR, MIC
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