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CHEMICAL COMPOUNDS ISOLATED FROM LEAVES OF *ANNONA TOMENTOSA*

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The Annonaceae family has 135 genera and 2500 species, is known for edible fruits and medicinal properties of many species, which activities have being assigned to aporphine alkaloids, acetogenins, and flavonoids [1-4]. The aim of this work is to perform the phytochemical study of extracts from *Annona tomentosa* leaves R.E.Fr (Annonaceae) and to isolate secondary metabolites. This plant is popularly known as bush araticum and araticum creeping. The species was collected in São Luís-MA and the leaves were dried, crushed and extracts were prepared by maceration at room temperature with dichloromethane and methanol. The extracts were subjected to liquid-liquid partition obtaining the fractions with hexane, chloroform, dichloromethane, ethyl acetate and water. The dichloromethane extract was subjected to chromatographic fractionation of column using silica gel (0.063-0.200 nm) and hexane, ethyl acetate and methanol in increasing polarity were used as eluent. The collected fractions were analyzed by thin layer chromatography (TLC), and combined according to the chromatographic profile, yielding 25 fractions. The fraction number 7 designated as ATFD-7 (0.4302 g) was fractioned by preparative chromatography using a flash chromatography (Isolera™ Spektra System) with acceleration chromatography isolation (ACI™) at low and medium pressure with SNAP 25 column and eluted with hexane, chloroform and methanol in order of increasing polarity. This fractionation yielded 12 groups of fractions, after analysis TLC plate. The fraction ATFD-7-2 yielded a kaurane diterpene, kaur-16-en-19-oic acid. The ethyl acetate fraction, obtained from the solvent partition of methanol extract (ATFM-A), was fractionated by column chromatography on silica gel 60 (0.063-0.200 nm), eluted with hexane, ethyl acetate and methanol in increasing polarity. The collected fractions were analyzed by TLC and grouped in 31 groups of fractions named ATFM-A. The groups ATFM-A22 and ATFM-A26 were subjected to successive chromatography using Sephadex LH-20 as stationary phase and methanol as eluent. The fractions ATFM-A22-4-3 and ATFM-A26-3-3 yielded two flavonoids glycosides, 5,7,3',4'-tetrahydroxy-3-O-rhamnosyl-flavone and 5,7,3',4'-tetrahydroxy-3-O-rhamnosyl-(1→2)-rhamnosyl-flavone, respectively. The structures were defined by ^{1}H and ^{13}C NMR spectra analysis and comparison with literature data of diterpene [5], and the flavonoids [6,7].

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