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The cytotoxicity effect of two saponins from *Gymnocarpos decander* species on Hela cells

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The modern pharmaceutical industry relies mainly on the diversity of plant secondary metabolites to find new molecules with novel biological properties, in this perspective our objectives are the inventory as well as the chemical and pharmacological evaluation of Algerian species, in order to valorize and rationalize their traditional uses and to isolate compounds of potential therapeutic interest. The n-butanol and ethyl acetate extracts of *Gymnocarpos decander* (Caryophyllaceae) were able to isolate five new products including two saponins and three flavanol glycosides, with three known products. The extract obtained undergoes chromatographic and spectroscopic investigations in order to isolate and establish the structures of the molecules that compose them by using various spectroscopic experiments (UV, 1D NMR and 2D and SM). In addition, the cytotoxicity tests of the new compounds (1-5) isolated from the Butanol phase of *Gymnocarpos decander* performed on the three cell lines Jurkat T (leukemia), Hela (cancer of the cervix) and MCF7 (breast cancer), have shown that only the products one and two (both saponins) have a cytotoxic effect vis-a-vis the three cell lines, in particular Hela cells. These results of anti-proliferative activity are encouraging and stimulate further research projects on the species of this family.

Biography

Mohamed Bouheroum has his research studies in Phytochemistry on Algerian Medicinal Plants looking for bioactive molecules. He has completed his Master's degree from Manchester University and PhD from the Constantine 1 University, Algeria. He is currently working as a Professor and Chief of a Team performing phytochemistry researches on Algerian medicinal plants in Varenbimol laboratory at Constantine 1 University, Algeria.

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