Isolation and characterization of the Active Ingredient of Selected Palestinian Medicinal Plant

Suleiman Al-Khalil
Medical Laboratory Sciences Department, Faculty of Science, An-Najah National University, Nablus - Palestine.
al-khalil@najah.edu

Two medicinal plants Rosmarinus officinalis and Salvia Fruticosa are used in traditional medicine in Palestine for the treatment of gastrointestinal tract, also as antiseptic, antispasmodic and wound healing. In previous studies we have demonstrated the inhibitory effect of different aqueous and organic extracts of the aerial parts of these shrubs. In this study we have been able to isolate the main active ingredient of R. officinalis, which is called Verbenone. The isolated compound was identified by means of different techniques such as UV, GC, IR, HNMR and C\textsuperscript{13} NMR, with respect to Salvia Fruticosa (triloba) grows widely on the hills of the West Bank, and has been used by the local population to relieve intestinal pain. Intensive studies were conducted to determine the organic and aqueous extracts of Salvia Fruticosa on intestinal motility. In the current study, the aerial parts of Salvia Fruticosa were collected and identified and the powdered were extracted with n-Hexane, DCM and methanol. The n-Hexane crude extract was found to be the most active with anti-inflammatory activity by inhibiting 5-lipoxygenase and cyclooxygenase enzymes. The n-Hexane crude extract was subjected to VLC and the fractions were collected and identified by TLC, HPLC, GC-MS, HNMR and C\textsuperscript{13} NMR.

Key words: Rosmarinus officinalis, Salvia Fruticosa (triloba), organic extracts.