

Spasmolytic Activity of the Ethanolic Extract and Essential Oil of *Aloysia citriodora* Palau

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ABSTRACT The leaves of *Aloysia citriodora* Palau (Jordanian “malliseh”) are traditionally used to remediate irritative gastrointestinal symptoms. The aim of this study is to assess the spasmolytic activity of the ethanolic extract and essential oil of “malliseh” on spasmogen-induced isometric tension in small intestine isolated from Wistar rats (*Rattus norvegicus*). Isometric tension of mounted tissue preparations was continuously measured. Tissue preparations were serially pretreated with increasing concentrations of either the ethanolic extract or the essential oil. Following each pretreatment, tissue preparations were treated with a single application of acetylcholine chloride, barium chloride, or potassium chloride. The ethanolic extract of “malliseh” exhibited spasmolytic activity against acetylcholine- and barium-induced isometric tension, but not potassium-induced isometric tension. The essential oil of “malliseh” partially inhibited acetylcholine-, barium- and potassium-induced isometric tension. The traditional use of “malliseh” may be justified. The ethanolic extract and essential oil of “malliseh” induce dose-dependent, reversible inhibition of spasmogen-induced isometric tension in small intestine isolated from rats, albeit by distinct mechanisms.