

3rd International Conference on Medicinal Chemistry & Computer Aided Drug Designing

December 08-10, 2014 DoubleTree by Hilton Hotel San Francisco Airport, USA

Evaluation of *Satureja hortensis* leaves essential oil pharmacological activities

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Satureja hortensis L. plant's (Lamiaceae) pharmacological activities appears in a wide spectrum, due to their secondary metabolites and essential oils. The antimicrobial, antinociceptive and anti-inflammatory activities of Armenian flora *Satureja hortensis* L. leaves essential oil have been studied. The mentioned oil antinociceptive and anti-inflammatory activities have been estimated correspondingly in the tail-flick and xylene induced acute ears edema test of rats' experimental model. The rats were pretreated with 20, 50 and 100 mg/kg doses. Essential oil antimicrobial effects preliminary qualitative comparable estimation was studied in a number of conditionally pathogenic microorganisms. The experiments were carried out *in vitro* in the petri plates using Mueller-Hinton media. The obtained results showed that the highest antinociceptive activity of the mentioned oil registered in the dose 50 mg/kg for 62.95% ($p < 0.001$) and the anti-inflammatory activity is highly expressed in the dose 20 mg/kg, preventing edema for 50.45% ($p < 0.05$). It was revealed that the essential oil has certain activity on *E. coli*, *S. aureus*, *Bacillus* sp., and fungi of *Candida* type. These results indicated that *Satureja hortensis* L. leaves essential oil could serve as a potential source for development of new agents with analgesic, anti-inflammatory and antimicrobial activities.

Biography

A P Manjikyan has graduated as Pharmacist in 2008 from Yerevan State Medical University. She is working in the Department of Pharmacy and doing PhD research under the supervision of Professor M G Balasanyan at YSMU, Armenia. Her research focuses on natural compounds anti-inflammatory and anti-nociceptive activities.

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