

# 2<sup>nd</sup> International Conference and Exhibition on Traditional & Alternative Medicine

August 25-26, 2014 DoubleTree by Hilton Beijing, China

## Preliminary phytochemical and antibacterial studies of *Polygonum maritimum* and *Olea europaea* plants extracts

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*Polygonum maritimum* and *Olea europaea* are the useful plants used in folk medicines for the treatment of various diseases. The present study was conducted to examine preliminary phytochemicals screening of aqueous and ethanolic leaves extracts and antibacterial activity of ethanolic extracts of both plants. The qualitative phytochemical studies of aqueous and ethanolic extracts of the plants leaves were carried out using standard testing procedures for metabolites viz. tannins, saponins, phlobatanins, flavonoids, terpenoids, cardiac glycosides and alkaloids. The aqueous and ethanolic extracts of *Polygonum maritimum* showed the presence of tannins, saponins, flavonoids, terpenoids and cardiac glycosides metabolites, however, the aqueous and ethanolic extracts of *Olea europaea* exhibited the presence of tannins, saponins, phlobatanins, terpenoids and cardiac glycosides metabolites. The antibacterial activity of ethanolic leaves extract of both plants was tested using Gram positive bacterial strains (*Staphylococcus epidermidis*, *Staphylococcus saprophyticus*) and Gram negative bacterial strains (*Proteus vulgaris*, *Eschericia coli*, *Citrobactor freundii*). In general, the extracts of both plants exhibited considerable activity on the bacterial species. Both plants extracts selectively inhibited the growth of both gram positive and gram negative bacteria with zones of inhibition ranging from 8 mm to 11 mm at concentrations of 50 mg/ml. Present findings suggest that *Polygonum* and Olive leaves extracts exhibit antibacterial effect against both gram positive and gram negative bacteria and these plants seems to be considered for detailed investigation in an attempt to find out the chemical entities combating against pathogenic microorganisms.

### Biography

Salem M Edrah has completed his PhD at the age of 39 years from Faculty of Chemical Technology, Pardubice University, Czech Republic and postdoctoral studies from the same university. He is Ass. Prof. at Department of Chemistry, Faculty of Science, Almergab University, Libya.

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