

Assessment of Some Biological Activities of Methanolic Crude Extract from *Polygonum maritimum* L.

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Abstract : Much attention has been paid to the antioxidants, which are expected to prevent food and living systems from peroxidative damage. Incorporation of synthetic antioxidants in food products is under strict regulation due to the potential health hazards caused by such compounds. The use of plants as traditional health remedies is very popular and important for 80% of the world's population in African, Asian, Latin America and Middle Eastern Countries. Their use is reported to have minimal side effects. In recent years, pharmaceutical companies have spent considerable time and money in developing therapeutics based upon natural products extracted from plants. In other part, due to the continuous emergence of antibiotic-resistant strains there is continual demand for new antibiotics. Chemical compounds from medicinal plant especially are targeted by many researches. In this light, genus *Polygonum* (*Polygonaceae*), comprising about 45 genera (300 species), is distributed worldwide, mostly in north temperate regions. They have been reported to have uses in traditional medicine, such as anti-inflammation, promoting blood circulation, dysentery, diuretic, haemorrhage and many other uses. In our study, *Polygonum maritimum* (from Algerian coast) was extracted with 80% methanol to obtain a crude extract. *P. maritimum* extract (PME) had a very high content of total phenol, which was 352.49 ± 18.03 mg/g dry weight, expressed as gallic acid equivalent. PME exhibited excellent antioxidant activity, as measured using DPPH and H₂O₂ scavenging assays. It also showed a high antibacterial activity against gram positive bacterial strains: *Bacillus cereus*, *Bacillus subtilis* and *Staphylococcus aureus* with an MIC 0,12 mg/mL.

Keywords : *Polygonum maritimum*, crude extract, antioxidant activity, antibacterial activity

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020