Abstract:

Introduction: Natural antioxidants like fruits, vegetables and medicinal plant play an important role in human healthy via their ability to inhibit free radicals. Oxidative stresses originated from free radicals are cause of many diseases such as a variety of cancers, heart disease Alzheimer and Parkinson diseases. We studied here the antioxidant effects of methanol and ethyl acetate extracts of Stachys Lavanduliflia as natural antioxidants.

Materials and Methods: Methanol extracts (by three methods: maceration, ultrasonic, soxhlet) as well as ethyl acetate extract (by maceration method) was prepared. Total phenol compounds, was determined by the Folin Ciocalteu method and the total flavonoid content, by AlCl₃ method. Fe²⁺ chelating ability and 1, 1-diphenyl-2-picrylhydrazyl radical (DPPH) were used to evaluate antioxidant activities.

Results: The highest content of phenol and flavonoid was obtained in ethyl acetate extract. The maximum IC₅₀ for DPPH radical-scavenging activity was obtained in methanolic extract (soxhlet). The maximum Fe²⁺ chelating ability was obtained extract of ethyl acetate (64.5%). Results showed the antioxidant activity related to total phenol and total flavonoid content (r²= 0.76 and r²= 0.43 respectively).

Conclusion: Phenols and polyphenolic compounds, such as flavonoids, are widely found in food products derived from plant sources, and they have been shown to possess significant antioxidant activities. Studies have shown that increasing level of Phenols and flavonoids in the diet could decrease certain human diseases.

Stachys Lavanduliflia, antioxidant activity, Methanol extract and ethyl acetate extract

Presentation: Poster