



Evaluation of linoleic acid oxidation in roots of *Astragalus glaucacanthus*

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Abstract : Astragalus genus is from Fabaceae family contains 3000 species in worldwide and it has hepatoprotective, immunestimulant, antiperspirant, tonic and diuretic properties and the dried roots of this genus have a long history of medicinal use in traditional Chinese medicine. Linoleic acid is the wild world polyunsaturated fatty acid and antioxidants are compounds that can inhibit lipid oxidation. The target of this study was evaluation of linoleic acid oxidation in roots of *Astragalus glaucacanthus* and also its phenolic content was evaluated. The total phenolic content in the methanol and dichloromethane extracts of *Astragalus glaucacanthus* was determined using Folin-Ciocalteu reagent and antioxidant activity of them was evaluated by betacaroten-Linoleic acid method. The results showed methanol extract had highest amount of phenolic content and at a concentration of 2 mg/ml; BHT, methanol and dichloromethane extracts of plant were shown to exhibit antioxidant activity levels of 87.8%, 16.2% and 3.0% respectively and there was a Significant differences ($P \leq 0.01$) in total phenolic content and antioxidant activity between methanol and dichloromethane extracts. In conclusion we can conclude *Astragalus glaucacanthus* isn't a good antioxidant plant.

Keyword: *Astragalus glaucacanthus*, antioxidant, linoleic acid oxidation, phenolic content.

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