



Evaluation of free radical scavenging capacity of gymnemic acid isolated from *Gymnema sylvestre* leaves.

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Abstract : The gymnemic acid fraction has various triterpenoids, terpenoidal glycosides and saponins has been receiving much attention for its free radical scavenging and antioxidant capacity. Free radical scavenging capacity of enriched gymnemic acid fractions were investigated by DPPH, β -carotene linoleic acid, hydroxyl and nitrates radicals inhibition properties. The results from DPPH reveals that gymnemic acid fraction showed efficient quenching of DPPH* the fractions thus contain free radical quenching compounds, with act as primary radical scavenging that react with DPPH* by providing a hydrogen atom or electron donating ability). The gymnemic acid fraction have shown the inhibition of the coupled oxidation of the linoleic acid and β -carotene in emulsified aqueous system. This may be explained by the radical scavenging capacity of fraction and its inhibitory action on nitric oxide and hydroxyl radicals may contribute to some extent to the β -carotene assay. The present data explain the multiple free radical scavenging capacity and antioxidant capacity of gymnemic acid fraction of *Gymnema sylvestre* leaves as compared with standard antioxidant Ascorbic acid. A further gymnemic acid fraction has shown good inhibition in scavenging nitrates which is generated in *in-vitro*.

Key words : Antioxidant, Gymnemic acid, DPPH, β -carotene, Ascorbic acid.

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