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## Free radical scavenging activity of the Malaysian Leech Saliva extract, Hirudinaria manillensis

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A ntioxidants from natural sources have been arisen as prophylacticand therapeutical agentsin many life-threatening disorders such as cancer and cardiovascular diseases. Leech therapy has been used since the extreme old ages in a variety of abnormalities. We aimed from the current study to examine the antioxidant activity of the salivary gland secretion of the medicinal Malaysian leech using DPPH free radical scavenging activity method. Leech saliva extract (LSE) was collected from starved leeches after feeding them on the phagostimulatory solution of 0.001M arginine in 0.15M sodium chloride. Total protein concentration was 78.753 $\pm$ 2.406µg/ml. A series of different dilutions of LSE were mixed with DPPH in a methanolic medium and the changes in absorbance were measured at 516nm. Results showed that LSE expressed a free radical scavenging activity with IC<sub>50</sub> of 7.282µg/ml compared with 5.803µg/ml of L-ascorbic acid as apositive control. Therefore, this study revealed that the proteomic contents of LSE are promising natural antioxidants.

## Key words:

Antioxidants, DPPH, free radical, leech, leech saliva.

## Biography

Abbas Mohammad Ghawi has completed his MSc by 1978 from Cairo University, Egypt and Ph.D by 1985 from University Brisbane, Australia. He has a wide experience, many publications and scientific activities in the field of natural products, traditional medicine, therapy, academic teaching, etc. He is currently a Prof. of Pathology in Department of Basic Medical Science, International Islamic University.

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