

In vitro antioxidative activity of Azadirachta indica and Melia azedarach Leaves by DPPH scavenging assay

Antioxidant activity, Azadirachta indica, Melia azedarach.

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Abstract :

Medicinal plants are a major source of raw material for the traditional system like Ayurveda, Siddha &

Unani. Even the modern system of medicine has more than 25 percent of drugs in use, which are either plant based or plant derived. Although several trees possess various medicinal properties, they have been ignored by indigenous & modern systems of medicine. Among them Azadirachta indica & Melia azedarach belonging to the family Meliaceae play a vital role in day to day usage of different indigenous communities due to their sacred and medicinal value. Recently there has been an upsurge of interest in the therapeutic potential of medicinal plants as antioxidants. In the course of finding potential antioxidants from plant sources, two medicinal tree species belonging to the family Meliaceae have been selected. Leaves were dried and extracted with different solvent systems namely water, ethanol & methanol. Antioxidant activity using DPPH radical scavenging assay of six extracts from two genera of the family Meliaceae is reported & a comparison of the free radical scavenging ability of the extracts is emphasized. The result of the present study showed that the extract of Melia azedarach, which contains the highest amount of phenolic compounds exhibited the greatest anti-oxidant activity in comparison to Azadirachta indica. The high scavenging property may be due to hydroxyl groups existing in the phenolic compounds' chemical structure that can provide the necessary components as a radical scavenger. [Nature and Science 2010; 8(4):22-28]. (ISSN: 1545-0740).

Key Word :

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