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"Exploiting the Resources for a Better Tomorrow"

ABSTRACTS



Trincomalee Campus, Eastern University, Sri Lanka.

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Abstracts

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Antioxidant activity in aqueous extracts of powder of *mathumeha chooranam* and its ingredients at room temperature by using ferric reduction method

Thilageswary K.1, Sivakanesan R2, Vasanthy A.3

¹Unit of Siddha medicine, Trincomalee Campus, Eastern university

²Department of Biochemistry, Faculty of Medicine, University of Peradeniya

³ Department of Biochemistry, Faculty of Medicine, University of Jaffna¹
¹tkumutharanjan@yahoo.com

²sivaskanda@gmail.com

3arva26arva@yahoo.com

Abstract — Medicinal plants play a key role in the human health care. About 80% of the world population's relay on the use of predominantly based on plant materials. The Aim of this study is to determine the Antioxidant activity of the aqueous extracts of ingredients of the Mathumeha chooranam By Ferric Reducing Power Assay. This 'chooranam' is widely used in North and Eastern Province Siddha Hospitals and Dispensaries of SriLanka for the treatment of Diabetic mellitus. Lowest and highest EC 50 values observed in cold and hot aqueous extracts of skin of the seeds of Terminalia chebula (15.35±4.2) (10.62±4.9) and Gymnema sylvestrae (1193.43±248.6) (1112.65±249.8) leaves respectively. Terminalia chebula possess highest amount of antioxidant capacity than other ingredients. The higher antioxidant activity of cold and hot extracts was in June respectively and the lower antioxidant activity of cold and hot extracts in December respectively. The values in descending order of Antioxidant activity was skin of the seeds of the Terminalia chebula, Fruit of the Phyllanthus embelica, Mathumeha chooranam, Leaves of the Murrya koenigii, and Gymnema sylvestrae. When compared with the cold extracts of ingredients mathumeha chooranam with hot extracts, hot extracts contained higher antioxidant activity than cold extracts. Among the ingredients of MMC Terminalia chebula, Phyllanthus embelica showed the highest antioxidant activity compared to the other plant parts. (Murrya keonigii, and Gymnema sylvestrae).

Keywords — Antioxidant activity, Diabetic mellitus, Ferric Reduction method, Mathumeha chooranam (MMC), Siddha Medicine