

Selected Ethnomedicinal Plants of Northern Surigao Del Sur: Their Antioxidant Activities in Terms of Total Phenolics, ABTS Radical Cation Decolorization Power, and Ferric Reducing Ability

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Abstract : Plants can contain a wide variety of substances with antioxidative properties which are associated to important health benefits. These positive health effects are of great importance at a time when the environment is laden with many toxic substances. Five selected herbal plants namely, *Mimosa pudica*, *Phyllanthus niruri*, *Ceiba pentandra*, *Eleusine polydactyla* and *Trema amboinensis*, were chosen for the experiment to investigate their total phenolics content and antioxidant activities using ABTS radical cation decolorization power, and ferric reducing antioxidant power. The total phenolic content of each herbal plants ranges from 0.84 to 42.59 mg gallic acid equivalent/g. The antioxidant activity in the ABTS radical cation decolorization power varies from 0.005 to 0.362 mg trolox equivalent/g and the FRAP ranges from 0.30 to 28.42 mg gallic acid equivalent/g. Among the five medicinal plants, *Mimosa pudica* has been an excellent performer in terms of the 3 parameters measured; it is followed by *Phyllanthus niruri*. The five herbal plants do not have equivalent antioxidant power. The relative high values for *M. pudica* and *P. niruri* supports the medicinal value of both plants. The total phenolics, ABTS and FRAP correlate strongly with one another.

Keywords : ABTS, FRAP, Leaf extracts, phenol

Conference Title : ICNFS 2015 : International Conference on Nutrition and Food Sciences

Conference Location : Singapore, Singapore

Conference Dates : September 10-11, 2015