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A Study on the Phytochemical Properties and Antioxidant Activity of *Moringa oleifera* (PKM-1) Seed Extract

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Keywords Moringa oleifera; Seed Extract; Anti-Oxidant; Metals. **ABSTRACT:** A laboratory incubation experiment was conducted to evaluate phytochemical properties of common edible seed species, *Moringa oleifera* (PKM-1), representing family *Moringaceae*. Extraction was done in a specially designed apparatus called Soxhlet apparatus. The oil obtained was then analyzed through different analytical techniques. Distinct susceptibility characteristics were observed when seed and pod extract were analysed respectively, for phytochemicals. Alkaloids and proteins were found in the seed extracts while tannins and flavonoids were qualitatively analyzed in leaf extract. Metal ions like iron, copper, lead, sodium and potassium were present in the range between 0.017 - 10 ppm. In addition, potential anti-oxidant activity was also determined, which turned out to be significant in the range of $25 - 100 \mu g/ml$ (pod less) and $100 - 500 \mu g/ml$ (with pod), with maximum activity at 100 and 500 $\mu g/ml$. Future work will entail understanding the use of seed extract as an antioxidant as well as for skin applications. © 2016 iGlobal Research and Publishing Foundation. All rights reserved.

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