Moringa olifeira underutilized tree source of macronutrients for human health

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Macronutrient malnutrition knows no political nor economic boundary, it is present in developed countries as well as developing ones due to lack of knowledge of the great amount of nutrient sources provided by animals or plants widely distributed worldwide. Moringa olifeira tree native the north west India is also indigenous to other countries of Africa, Asia and Latin America. Although researchers have shown interest in the composition of Moringa olifeira seeds and the extracted oil, little is known about the use of leaves, flowers, fruits, seedpods and roots as source of nutrients for human health. The objective of this study was to investigate macronutrients composition of Moringa olifeira leaves, flowers, fruits, seedpods and seeds to find out nutritional and functional properties of those notconventional products. Macronutrients of Moringa olifeira products collected at a cultivar from Michoacan State were analyzed according AOAC (1995) techniques. Analytical findings of this study are: Moisture, and proximate composition of macronutrients on dry basis. Moisture leaves 1) 5.99%; flowers 2) 6.98%; seedpods 3) 90.86%; seed 4) 3.11%. Crude protein 1) 22.75%; 2) 24.53%; 3) 12.36%; 4) 32.19%. Fiber 1) 7.92%; 2) 5.07%; 3) 22.57%; 4) 15.87%. Lipids 1) 4.65%; 2) 6.01%; 3) 0.94%; 4) 32.4%. Minerals 1) 13.02%; 2) 6.21%; 3) 13.4%; 4) 3.58%. Soluble carbohydrates 1) 51.66%; 2) 58.08%; 3) 50.73%; 4) 15.96%. The results of this research show that Moringa olifeira tree products as potentially valuable source of nutrients neglected up to the present time, however intake of these products will benefit nutrition and human health.

Key words: Moringa olifeira products, nutrition, human health