ABSTRACT

Edible wild fruits are nature's gift to mankind. Considering the growing need to identify alternative bio-nutritional sources, some underutilized species of Ficus sycomorus L. of the family Moraceae were evaluated as wild edible fruits to study its nutritive and mineral composition in order to prioritize its edibility for indigenous people. The concentration of macro (K, Ca and Mg) and trace (Fe, Mn, Zn and Cu) metals in sycamore fruit and seed samples was determined by using flame atomic absorption spectrophotometer (FAAS). Wet digestion procedure was evaluated using standard addition (spiking) method and an acceptable percentage recovery was obtained in the range of 81- 119 and 80-118 for the metals in fruit and seed samples respectively. 0.5 g of oven dried samples was digested using 10 mL of conc. HNO_3 and 5mL of H_2O_2 at 110 °C for 1hours. Significant amounts of both the major and trace elements were found in both the fruit and seed samples. The highest levels of macro essential metals such as Mg (400 ± 10), K (133 ± 3.291), and Ca (33 ± 0.404) all in mg/kg; and micro essential elements: Fe (5.7 ± 0.5, Zn (2.3 ± 0.55) and Cu (3.6 ± 0.15), all in mg/kg, were found in fruit of Ficus sycomorus L., but the concentration of essential metals in seed sample was Mg (333 ± 5.7), K (122 ± 1.6), Ca (31 ± 0.77) ,Fe (4.19 ± 0.87), Zn (2.06 ± 0.42) and Cu (3.38 ± 0.15) all in mg/kg. Mn (3.04 ± 0.16 mg/kg) was found in equal amount in both the seed and fruit of Ficus sycomorus L. In general, the concentration of macro and micro essential metals in Ficus sycomorus fruits were found; Mg > K > Ca and Fe> Cu> Zn respectively. Similarly, the concentration of macro and micro essential metals in Ficus sycomorus seeds were found; Mg > K > Ca and Fe> Cu> Zn respectively. The results were compared with values reported in the literature.