Nutritional profile and antioxidative properties of selected tropical wild vegetables

ABSTRACT

Five underutilized wild vegetables namely Limnophila aromaticoides, Ceratopetris thalictroides, Crassocephalum crepidioides, Etlingera elatoir and Monochoria vaginalis were analyzed for nutritional values, phenolic components and antioxidant activities. These wild greens were found to have high fibre (11.3-19.8 g/100g) and ash (13.0-17.6 g/100g) contents as compared to commercialized species, Brassica juncea. The iron content of Monochoria vaginalis is four times higher than Brassica juncea (33.1 mg/g dry weight). Crassocephalum crepidioides demonstrated remarkable lipid peroxidation inhibition (90.4%). The phenolic content of Etlingera elatoir is two times higher than Brassica juncea. Thus, it is of both great free radical scavenger and iron chelators with the lowest EC50 values of 1.8 mg/ml and 2.3 mg/ ml respectively. As a conclusion, these wild vegetables could be potentially used in alleviating micronutrients deficiency especially for the rural populace and as a potent source of natural antioxidants.