Proximate composition and selected mineral determination in organically grown red pitaya (Hylocereus sp.)

ABSTRACT

Hylocereus species has generated a lot of interest as a source of natural red colour for food colouring, cosmetic industry and health potential for improving eyesight and preventing hypertension and combating anaemia. This study was conducted to determine the proximate composition, carbohydrate, crude fibres and minerals content in red pitaya fruits (Hylocereus sp.) which were obtained from organically grown plantation. Results showed that the red pitaya proximate composition were 87.30% moisture, 0.70 g ash, 0.16 g protein, 0.23 g fat, 10.10 g crude fibre and 1.48 g carbohydrate. The mineral content in red pitaya was calcium (5.70 mg), phosphorus (23.0 mg), magnesium (28.30 mg), sodium (50.15 mg), potassium (56.96 mg), iron (3.40 mg), zinc (13.87 mg) and copper (0.031 mg). The results showed that red pitaya fruits could have potential health benefits in preventing risk factors of certain diseases such as cardiovascular disease, diabetes mellitus, preventing hypertension and hypercholesterolemia, preventing anaemia and improving eyesight.

Keyword: Proximate analysis; Minerals; Red pitaya