

Nutritional and biochemical properties of Malaysian okra variety

ABSTRACT

The nutritional and biochemical contents of Malaysian okra fruits and leaves were studied by analysing the nutritional contents in the fruits and leaves such as protein, carbohydrate, moisture, oil, ash and fibre, while the biochemical contents in the fruits and leaves such as chlorophyll, phenolics and flavonoids were also analysed. The result of the proximate analysis revealed a significant difference ($p < 0.05$) among the fruits and leaves with highest percentage of crude protein (4.81%) and ash (2.44%) were present in the leaf. Mature fruits contain highest percentage of fiber (2.44%), oil (0.4%) and carbohydrate (11.7%) respectively, while the young fruits showed highest moisture contents of 88.47%. The results of the biochemical analysis showed significant differences ($p < 0.05$) among the fruits and leaves with the highest total chlorophyll content in mature leaves (32.99 mg/1 g). The total highest phenolics content was found in young leaves (0.99 mgTNE/1 g) and the total flavonoid was highest in mature leaves (0.79 mgQE/1 g). This paper showed that nutritional and the biochemical contents of okra were higher in the leaves than in the fruits.

Keyword: Biochemical; Chlorophyll; Phenolics; Flavonoids; Nutritional