
The mean moisture contents as percent of fresh leaves were within the range 71.7 - 88.4. Mean crude protein, carbohydrate, lipid, ash and fiber contents (/100 g fresh matter) were 2.85 - 7.89, 6.08 - 14.96, 0.46 -2.45, 1.8 - 3.0 and 1.00 - 3.5, while the contents (g/100g dry matter) were 21.95 - 34.69, 46.94 - 61.53, 3.36 - 8.65, 10.5 - 19.3 and 8.79 - 15.75, respectively. Mean available carbohydrate contents were 0.45 - 1.94 and 3.28 - 13.66 g/100g fresh and dry matter, respectively. Soluble sugar compositions analysed by High Performance Chromatography (g/100g dry matter) were glucose (0.447 - 3.524), xylose (0.1025 - 0.6940) and sucrose (0.1467 - 1.427).

Fatty acid composition determined by Gas Liquid Chromatography and expressed as percent of total extracted lipids were tetradecanoic (0.1 - 0.3), hexadecanoic (0.5 - 2.8), 9-Z-hexadecenoic (0.2 - 2.1) octadecanoic (0.2 - 0.6), 9-Z-octadecenoic (0.1 - 0.6), 9-Z, 12-Z-octadecadienoic (0.4 - 3.5) and 9-Z, 12-Z, 15-Z- Octadecatrienoic (1.1 - 5.6) acids. Total detected fatty acids were within the range 3.1 - 13.8& of total extracted lipids.

Mean mineral elemental contents (mg/100g fresh matter) were Mg (19.69 - 248.6), Ca (74.18 - 348.4), inorganic P (31-03 - 139.2), K (267.3 - 812.7), Na (49.12 - 256.4), Cu (0.068 -0.359), Zn (0.373 - 3.283), Fe (1.575 - 28.31) and Mn (2.802 -47.40), whereas the contents (mg/100g dry matter) were Mg (138-6 - 1231), Ca (465.8 - 1967), inorganic P (164.2 - 856.9), K (1095 -5277), Na (184.7 - 1460), Cu (0.479 - 2.72), Zn (2.627 - 11.60), Fe (11.09 - 157.3) and Mn (2.802 - 47.40). Magnesium, Calcium, Iron, Manganese and Zinc were determined by Atomic Absorption Spectrophotometric method, whereas potassium and sodium were determined by Flame Photometric method. Inorganic phosphorus was determined by Colorimetric Spectrophotometric methods.

The gross energy contents determined by Bomb Calorimetric method were 202.9 -558.0 KJ/100g and 1512 - 1972 KJ/100g fresh and dry matter basis, respectively. The available energy contents by calculation using Bradbury's equation were 162.6 - 452.9 KJ/100g fresh matter. The calculated Protein: Energy ratios were 13.49 -19.61 mg protein/KJ and 13.50 -19-50 mg protein/KJ fresh and dry mater, respectively.

It was shown by statistical analysis that mean crude carbohydrate, crude protein, crude fiber, crude lipid and gross energy contents were significantly inversely correlated with the moisture contents for leaves of the ten plants species studied. Similarly, total macroelemental contents (Ca, P, Na, Mg and K) were significantly positively correlated with the respective crude ash contents, whereas total microelemental contents (Zn, Cu, Fe and Mn) were not positively significantly correlated with the respective crude ash contents.
Simple empirical equations which can be used to calculate crude protein and gross energy contents particularly in leaves of plants based on the inverse relationships between the two nutrient contents in leaves of the ten plants studied are proposed.

The relevance of the obtained nutritional data in leaves of the ten plants studied in relation of fish farming particularly of Tilapia species are also discussed.