

Chemical composition and nutritional value of leaves from two morphotypes of *Lippia multiflora* grown in Côte d'Ivoire

Fako KANE

Biocatalysis and Bioprocesses Laboratory, UFR STA, Nangui Abrogoua University, Abidjan, Cote d'Ivoire;

Email: kanefako@yahoo.fr

Young leaves of two morphotypes (broad leaf and long leaf) of *Lippia multiflora* cultivated in three localities of Côte d'Ivoire in particular, Bondoukou (North-East), Béoumi (Centre) and Korhogo (North) were analyzed, in order to know their therapeutic and nutritional values according to the plant origin. The proximate composition were: moisture (14.81-16.75 g.100g⁻¹), crude protein (18.02-26.73 g.100g⁻¹), ash (6.93-10.28 g.100g⁻¹), fat (6.21-8.30 g.100g⁻¹) and crude fiber (9.32-13.28 g.100g⁻¹). The rate crude protein and ash obtained were higher when compared with those in leaves of the most commonly herbals teas. The leaves of *Lippia multiflora* are also rich in caffeine (14.59-40.05 mg.100g⁻¹), catechins (06.21-59.51 mg.100g⁻¹), tannins (06.02-14.33 mg.100 g⁻¹) and flavanol (01.95-13.33 mg.100g⁻¹) and quercetin (0.23-1.06 mg.100g⁻¹) which are bioactive compounds. However, those from Béoumi and Korhogo gave the highest levels of these compounds. The analyzes also showed that the leaves are rich in essential minerals such as calcium (8231.17-14981.17 mg.Kg⁻¹), sodium (1046.76-1347.00 mg.Kg⁻¹), magnesium (4247.67-4731.00 mg.Kg⁻¹), potassium (2740.00-7949.87mg.Kg⁻¹), phosphorus (244.71-250.00 mg.Kg⁻¹), manganese (21, 67-89.63 mg.Kg⁻¹), zinc (30.17-51.33 mg.Kg⁻¹), copper (16.00-32.17 mg.Kg⁻¹), iron (62.50- 200.17 mg.Kg⁻¹). The presence of minerals and bioactive components in leaves of *Lippia multiflora* prove their therapeutic and nutritional importance. However, this properties vary from regions to other.

Key words: *Lippia multiflora*, leaves, biochemical components, nutritional value, Côte d'Ivoire