The physico-chemical characteristics and some nutritional values of vegetable amaranth sold in Nairobi-Kenya

Twenty one major supermarkets and ten independent green grocers in the city of Nairobi were surveyed for types of vegetable amaranths sold and their post harvest handling. The nutrient composition of the vegetables was also analyzed. In addition, information on three other traditional leafy vegetables (TLVs) namely, Cleome gynandra, Solanum nigrum, and Vigna unguiculata was obtained. All the vegetables were sold in bundles of average weight 0.45 kg. The edible fraction per bundle averaged 38.9%. Chemical analys showed that vegetable amaranth had a moisture content of 85.5%, therefore a dry matter content of 14.5%. Expressed on dry matter basis, the mean total ash content was 19.2%, crude protein content 26.1% and the crude fiber content 14.7%. The mean ascorbic acid content was 627 mg/100 g, zinc content 5.5m g/100 g and iron content 18 mg/100 g. The men nitrate content was 732.5 mg/100 g, total oxalates 5830 mg/100 g and soluble oxalates 3650 mg/100 g, while the lead content averaged 1.03 mg/100 g. The study concludes that vegetable amaranth has potential as popular vegetable in the diets of Kenyans to significantly contribute to provision of micronutrients, particularly iron and zinc. KEYWORDS traditional vegetables, marketing, postharvest handling, nutrition, Nairobi-Kenya