EFFECT OF DIFFERENT METHODS OF COOKING ON THE NUTRITIONAL COMPOSITION AND ORGANOLEPTIC QUALITIES OF AMARANTHUS

Green leafy vegetables are inexpensive sources of nutrients needed for growth and development. Application of heat is reported to affect the nutritional composition of the leaves. In the present experiment, twenty day old leaves from red and green Amaranthus tricolor varieties grown during rainy and summer seasons, were cooked by different methods viz., boiling in water, shallow drying, baking and steaming, using glass vessels. Known quantities of cooked samples analysed for protein (Hawk and Oser, 1965) ascorbic acid (AOAC, 1955), calcium, iron (Perkin-Elmer, 1982) and crude fibre (Chopra and Kanwar, 1978). The data collected were subjected to statistical analysis as per methods suggested by Panse and Sukhatme (1957).

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Among the different cooking methods tried, steamed samples were found to conserve more nutrients like calcium, iron and ascorbic acid compared to other cooking methods. Protein and fibre content of the two varieties of the amaranthus were not affected by cooking while calcium, iron and ascorbic acid content of the leaves of the two varieties at two seasons were significantly reduced during cooking.

The acceptability tests revealed that among different cooking methods, leaves cooked by boiling were the most acceptable one followed by shallow frying, baking and steaming, with reference to quality attributes such as tenderness, odour and taste.

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