

Cowpea leaf powder : A cheap nutritional supplement for the vulnerable population

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Cowpea leaves are a good source of some amino acids, vitamins, minerals and proteins. Beside this cowpea leaves are known to be rich in iron, calcium and vitamin C. Their content in cowpea leaves is 20.1 mg, 290 mg and 410 mg, respectively per 100 g. The leaves thus have a potential to be used to combat anemia in cowpea growing areas. Cowpea is cultivated on 12.5 million hectares of land worldwide and has a production of 3 million tones. Cowpea leaves are consumed in 18 countries in Africa, 7 countries in Asia and the pacific. India is the largest cowpea producer in Asia. Products have already been formulated to some extent in India by some researchers. The present work attempts to take this work further. For this purpose leaves of four cowpea varieties (Pant Lobia 1, Pant Lobia 2, Pant Lobia 3, Pant Lobia 4 and PGCP 12) were taken up for the study. Cowpea Leaf concentrates have been developed by cleaning washing and oven drying the leaves at 45- 50°C. The concentrate have been evaluated for their nutritional content. The analysis revealed the moisture content to range from 6 per cent to 12 per cent. For fat it ranges from 0.5 per cent to 4.5 per cent. For fibre the values range from 9.22 per cent to 13.6 per cent. Mean total ash content was found to be 10.82 per cent in the present study, highest being 11.21 per cent in Pant Lobia 3 and lowest being 9.88 per cent in PGCP 12. For total carbohydrates the values ranges from 46.35 per cent to 30.05 per cent. physiological energy ranged from 283.3 kcal/100g to 304.78 Kcal/100 g. cow pea leaf varieties were found to be nutritionally rich in protein, fibre, total ash, physiological energy and less in fat and therefore can be used for combating and reducing the Protein energy malnutrition (PEM), lifestyle related disease, heart related diseases. Among all the varieties PGCP 12 appears to be the nutritionally rich in most of nutrients therefore may be used to develop nutritionally rich food supplements.

Key Words : Cowpea leaves, Genotypes, Nutritional supplement

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