

Processing of curry leaves powder

Source

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Dehydration of curry leaves in cabinet drier at 50° C for 3 hours and 30 minutes was found to be more suitable than drying in shade, sun and solar drier for the preparation of curry leaves powder. The optimum pretreatment to retain the green colour in the processed curry leaves powder was standardized. Curry leaves dipped in the cold solution containing magnesium oxide, potassium meta bisulphite and sodium bicarbonate was found to be the best pretreatment. The nutrient content of the fresh and processed curry leaves powder was analyzed. Fresh curry leaves contained moisture - 63.54 per cent, ash -3.50 per cent, fibre - 8.97 per cent, ascorbic acid - 307.28 mg/100g, β - carotene - 8.16 mg/100g, calcium - 267.65 mg/100g, iron -15.43mg /100g, magnesium -356.41 mg/100g, total antioxidant activity - 3mg/g, colour values - L- 51.78, a - - 6.97, b - 10.99 total chlorophyll - 0.46 mg/g tissue and water activity - 0.997aw.

The processed curry leaf powder had moisture - 3.78 per cent, ash - 9.42 per cent, fibre -16.97 per cent, ascorbic acid -359.75 mg/100g, β - carotene -17.80 mg/100g, calcium - 598.57 mg/100g, iron - 23.95mg /100g, magnesium - 816.40 mg/100g, total antioxidant activity - 18.5mg/g, colour values - L- 71.42, a - - 3.93, b - 8.67, total chlorophyll - 1.96 mg/g tissue and water activity - 0.549aw. Storage stability of the curry leaves powder was studied by packing individually in three different packaging materials such as 300 gauge thickness polyethylene bags without vacuum(P₁),300 gauge thickness polyethylene bags with vacuum(P₂) and MPP(P₃)and stored at room (R₁) and refrigerated conditions(R₂).Quality characteristics of the

stored curry leaves powder was influenced by packaging materials, storage temperature and storage period. The sample packed in MPP and stored at low temperature (7 ± 1) was found to be good for higher retention of nutrients during the storage period (six months).



A gradual increase in moisture content and water activity (*aw*) and a significant reduction in the contents of β - carotene, ascorbic acid, total chlorophyll, total antioxidant activity and colour intensity were observed in all the samples throughout the storage period of 180 days in room and refrigerated temperature. Negligible changes in crude fibre, total ash and minerals were noted during the study period in the stored samples. Value added products viz., cookies, bread, *paruppupodi*, and *adaimix* were formulated by incorporating curry leaves powder at different combinations. Results showed that curry leaves powder incorporated at a level of 4.0, 4.0, 25 and 15 per cent respectively in cookies, bread, *paruppupodi* and *adai* mix was found to be highly acceptable by the judges and the score card ranged between 8.0 and 9.0. For 100 kg of fresh curry leaves yielded 19.0 kg of powder. The cost of the prepared curry leaves powder was Rs. 21 per 100 gram.

