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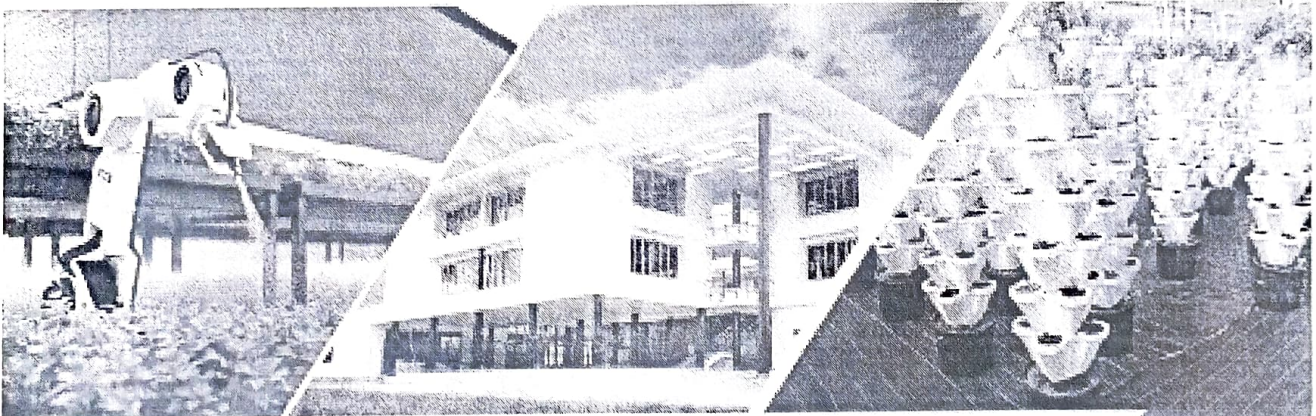
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Editors:

Dr. Paresh P. Baviskar

Dr. Mohit Bharadwaj

Dr. DPS Badwal

Dr. Utkarsha P. Gaware

Dr. G. Bhupal Raj

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Process development of Drumstick (*Moringa oleifera* L.) Whey Beverage

Dr. S. M. Khupse¹, Dr.K. D. Chavan² and Dr. K. D. More³

Department of Animal Husbandry and Dairy Science, Mahatma Phule Krishi Vidyapeeth, Rahuri-413 722, Dist. Ahmednagar, Maharashtra, India

Present investigation entitled Process development of Drumstick (*Moringa oleifera* L.) whey based beverage was undertaken with view to standardize the levels of drumstick pod powder in the whey beverage and to study the shelf life of developed product. Initially, pre-experimental trials were conducted to decide the different levels of addition of drumstick pod powder to prepare acceptable whey. On the basis of results of preliminary trials the most acceptable three levels of drumstick pod powder were chosen for experimental trials (0.5%, 1.0 % and 1.5%). The experimental whey beverage prepared with and without drumstick pod powder were (control) (T₀), 0.5 % (T₁), 1 % (T₂) and 1.5 % (T₃), and 8 per cent sugar. All the experimental drumstick whey beverage samples were stored at 5±1°C temperature up to storage period of 18 days. The experimental samples were analyzed for sensory, physico-chemical and microbiological qualities at 6 days interval. The standard methods of analysis were followed and the experimental result was statistically analyzed. The chemical quality of whey beverage samples also significantly (P<0.05) influenced during storage. The fat, protein, total sugar, reducing sugar, total solids, total fibre, ash, lactic acidity (% LA), pH, Viscosity, β-carotene , Vit-C of drumstick whey beverage values ranged from 0.38 to 0.72 per cent, 0.61 to 0.99 per cent, 12.32 to 13.43 per cent, 4.38 to 4.39 per cent, 13.90 to 15.97 per cent, 0.05 to 0.15 per cent, 0.30 to 0.46 % LA, 4.22 to 5.24, 0.59 to 0.83 per cent, 3.58 to 3.89 mPa.s, 0.54 to 1.66 µg/100 gm, 1.125 to 3.605 mg /100g, respectively upto 18 days of storage period. The SPC of drumstick whey beverage increased from 5.60 cfu/ml x 10² to 18.40 cfu/ml x 10⁴ during storage period up to 18th day. The SPC count of whey beverage samples significantly (P<0.05) increased during storage of 18th day.

Keyword: Beverage, Drumstick pod powder, Whey, RTS, Physico-chemical quality, sensory, microbial count