

Formulation of Instant Soup Mix Powder Using Uncooked Palmyrah (*Borassus flabellifer*) Tuber Flour and Locally Available Vegetables

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ABSTRACT

Vegetable and prawn added soup prepared with palmyrah tuber flour known as 'Odiyal Kool' is one of the popular and traditional food of Northern Sri Lankan population. This study was aimed at to develop dehydrated instant soup mix to reduce the difficulty in the preparation of soup. An instant dehydrated vegetable and prawn added soup mix were developed using uncooked palmyrah tuber flour as thickening agent and dried vegetables, salt, spice and tamarind paste as other ingredients. Initially the saponin content of the flour was removed by a pretreatment before adding to the soup. The ingredients such as manioc, long bean, carrot, moringa leaves, onion and garlic were dehydrated in an oven using established procedures. The optimum concentrations of uncooked palmyrah tuber flour, tamarind paste and garlic powder were determined by carrying out preliminary trials using five point hedonic scale sensory evaluation tests. Then optimum amount of prawn powder was incorporated into prawn added soup mix in addition to other ingredients used in the vegetable soup mix using similar trials. Soup mix: water ratio of 1: 12.5 was selected as the most preferable level for the reconstitution of the soup mix. Proximate analysis revealed that the final vegetable and prawn added soup mix respectively contained 3.24 & 4.76 moisture; 1.16 & 1.50 fat; 5.9 & 7.15 protein; 5.58 & 8.66 asH 4.8 & 5.1 fibre; 79.32 & 72.8 carbohydrate; and 5.56 & 6.52 pH. The total plate count of fresh vegetable and prawn added soup mix was 2.1×10^3 and 2.9×10^3 cfu/g respectively which was within the safe range. The result of the shelf life evaluation studies namely moisture content, sensory evaluation and microbial analysis revealed that both soup mixes could be stored for two months without affecting their quality. The results of the cost of production analysis revealed that the unit price for vegetable and prawn added soup mix were 30.11 and 51.06 rupees respectively.

Key words- Dehydrated vegetables, Soup mix, Uncooked palmyrah tuber flour