Value added products from pumpkin (*Cucurbita maxima*) to reduce post harvest losses and increase farmer income

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Abstract

Pumpkin is a very nutritious major vegetable widely grown in Sri Lanka. Due to surplus in the season, farmers face a severe problem in selling pumpkins as price becomes very low. Hence a big amount of harvest is wasted causing a big issue in agriculture sector every year. To solve this problem it is very important to develop technologies to preserve pumpkin, to minimize loss during the season and use them during off season. Further, introducing value added products to popularize pumpkin and increase the consumption is needed. Therefore, this study was aimed to develop technologies to preserve pumpkin and introduce naval delicious value added products to enhance farmer income and reduce post harvest losses. Dehydration of pumpkin was done using hot-air dryer (Phoenix, Japan). Washed, peeled and grated pumpkin was pre-treated and dehydrated at 55 ^{0}C for 8 hours. Then half of dehydrated product was ground and sieved to make flour and other half was incorporated to in foods as unground form. Further flour and unground dehydrated pumpkin were packed in clean sterilized glass jars and in 300 gauge polypropylene respectively and tested for keeping quality. Physico-chemical parameters including color and moisture percentage were measured. Pumpkin flour was tested in bread, bun and biscuit making for possible introduction to bakery industry. Use of unground form in noodles industry, fried rice and other food items was tested. Fresh pumpkin was used to prepare fresh juice, ready to serve drinks, chutney, candy and incorporated in to rotti, pittu, fried rice, noodles, kottu and etc. Sensory attributes of all food products were highly acceptable when tested. Therefore, use of dehydrated and fresh pumpkin in various value added products can boost selling of pumpkin, reduce post harvest loss and enhance farmer income.

Key words: Dehydration, Pumpkin, Value added products

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