Use of under-utilized, wild edible yam and tuber crops for improved nutrition and livelihood strategies

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Sri Lanka owns to over 93 species/varieties of yam and tuber crops, despite the abundance its use has been diminishing over the past decades. However, successful efforts have been put in by various organizations to revive the use of these highly nutritious crops. The Community Development Centre (CDC) has been successful in revitalizing cultivation, creating awareness, production of value-added products and to increase livelihood of farmers while achieving food security through popularization of local yam and tuber crops. Colocasia spp. and Alocasia spp. are been used to produce a range of value added products which would better appeal the preferences of the present generation. Several food products including chips, cake, and toffee using these under-utilized wild edibles have been introduced by CDC. Processing and preparation of the recipes were optimized, and consumer preference surveys carried out. The nutritional value of these value-added products were evaluated using AOAC standardized analytical methods for protein, total fat, carbohydrate, sugar and sodium, percent by mass. The results from the analysis of local tuber toffee highlighted the protein content 2.4 and the excellent source of carbohydrate provided 71%. Market for these value-added products exhibited high demand. The study highlighted that processing of the tubers creates high demand and preferred by consumers. In-addition it promoted the cultivation of local root and tuber crops amongst the farmer community where high market prices were established; thereby creating an excellent livelihood strategy for the farmers to engage in as well as a platform for promoting the effective and sustainable use of the under-utilized wild edible yams and tuber crops.

Keywords: nutrition, carbohydrate, tuber, values-added products, market demand.