

Ethnobotanical study of local root and tuber crops in Aranayaka, Sri Lanka in relatedness to food and indigenous medicinal value

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Aranayaka a village located interior of the Kegalle district, covering the low country wet and intermediate zones in Sri Lanka, is a village where yam and tuber crops have been an important component of their diet in the past also owing to preserved farming practices and traditional knowledge in regard to local yam and tuber crops. Despite the generational lapses trends and preferences, the village still processes the traditions and the use of yam and tuber crops has been further increased through interventions by the Community Development Centre. The organization has been successful in revitalizing cultivation, creating awareness and popularizing use in diets, production of value added products and to increase livelihood of farmers while achieving food security. In this study traditional and local knowledge on diversity and use of yam and tuber species in the Aranayaka area were documented. Characterization of biodiversity and ethnobotanical data were collected through semi-structured interviews, questioners, field visits and participatory observations aimed at the older generation in the society, of age 65-105 years and farmer community leaders. Out of the 93 species/varieties of yam and tuber crops found in Sri Lanka, 56 species/varieties have been recorded in the study area. Through the study indigenous medical value and preparation methods of a number of yam and tuber crops including *Marantà arundinacea*, *Canna indica*, *Colocasia esculenta*, *Alocasia spp.* and several *Dioscorea spp.* were identified, which process remedies for certain ailments including relieving blood pressure, hypertension, detoxification, relieving constipation etc. Proper taxonomic identification through the study has led to the successful conservation and effective utilization of these local yam and tuber spp. in the community with popularization of value added products; creating awareness through trainings and workshops for dissemination of the traditional knowledge; as well as creating marketing channels for sale of the nutritionally rich and diverse yam and tuber crops.

Keywords: *Dioscorea spp.*, traditional knowledge, indigenous medical value, morphological characterization