

CURRENT STATUS AND CHALLENGES OF POSTHARVEST PRACTICES IN TRADITIONAL YAMS CULTIVATED IN KEGALLE AND RATHNAPURA DISTRICTS, SRI LANKA

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Traditional yams, of *Dioscorea* species, are highly nutritious. The supply chain of yams, from growers to consumers, comprises various actors, each implementing distinct postharvest management practices that substantially influence market price. This study aimed to evaluate the current status of postharvest management practices and the challenges associated with traditional yam production in Sri Lanka. A sample of 150 participants, including growers, collectors, wholesalers, retailers, and consumers, was randomly selected from yam-cultivating regions of *Kegalle* and *Rathnapura* and the consumer market in *Colombo*. Data collection was conducted through surveys using pre-tested questionnaires, key informant interviews, and secondary sources, and the data were analyzed using descriptive statistics. Observations revealed a predominance of home gardening in *Kegalle*, while more commercial cultivations were observed in *Rathnapura* district. The average land area dedicated to yam cultivation ranged from 0.5 acres in home gardens and to 1.4 acres in commercial cultivation. In *Kegalle* district, the most cultivated yam cultivars were *Rajala* (71%), *Dandila* (71%), and *Higurala* (29%), whereas in *Rathnapura* district, *Innala* (96%), *Rajala* (84%), and *Yapanayadam* (44%) were predominant. The results revealed that the traditional yam supply chain consists of growers, collectors, wholesalers, retailers, and consumers, with minor regional variations. Key postharvest practices included harvesting, sorting, grading, transport, and temporary storage, with the yellowing of veins serving as the primary maturity indicator. Postharvest loss of traditional yams amounted to 20.37%, with the highest losses occurring at the grower (6.20%) and collector (5.30%) stages. Common sales outlets include weekly fairs, fruit and vegetable markets, and roadside outlets, with 70% of consumers purchasing 1–2 kg of yams at a time. Major challenges identified in the supply chain encompassed insufficient storage facilities (45%), sprouting during storage (70%), physical damage during harvesting (35%), and inadequate knowledge of postharvest management (40%). Addressing these issues across the supply chain is essential for enhancing postharvest practices and reducing losses.

Keywords: *Dandila, Innala, Postharvest loss, Raja ala, Supply chain*