

## **Evaluation the suitability of the IPHT multi crop dryer for production of black lime.**

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Lime (*Citrus aurantifolia*) is a plant belongs to family Rutaceae. Black lime (Dried Lime) made out of fresh lime. The performance of multi crop dryer which was introduced by Institute of Post Harvest Technology, Anuradhapura was evaluated for the production of black lime made out of fresh lime in terms of capacity of the machine, cost of processing, rate of black lime production, rate of paddy husk consumption and quality of the black lime produced. The physical characteristics of fresh lime and dried lime were determined during the study. The result showed that the capacity was approximately 500kg of fresh lime per batch. Optimum operational conditions were 100 °C drying temperature and 53.29% relative humidity. The drying time taken to reduce the moisture of fresh lime from 88.68% to 13.12% (wb) was 32 hours. The consumption of paddy husk per batch was 480 kg and average feeding rate of husk is 15 kg/hr. The cost of processing was calculated as Rs. 30.14 per kg.

There are huge post harvest losses of lime in the season due to decreasing price of wholesale market and increasing production amount, but still no special programs were followed with regard to minimize the losses. Production of black lime is a one of solution to minimize the post harvest losses of fresh lime, and also it is the best option to utilize production surplus. Thereby, it brings foreign exchange to country and same time increase income of farmers. Determination of physical properties of lime is important for those who are engaging in design and development machinery, dryers. The technology is disseminated by extension mechanism of Institute of Post Harvest Technology and also through consultancy and training. Apart from that, technology is disseminated to farmers through other governmental and non-governmental organization who are working on postharvest technology field.