

## **Development of dehydrated raw mango (*Mangifera Indica*) powder**

***Gunarathne W.T.K,<sup>1</sup> Thilakarathne., B.M.K.S.<sup>2</sup>, Jayawardene., N.W.I.A<sup>1</sup>. (2010) Development of dehydrated raw mango (*Mangifera Indica*) powder. Research Symposium, University of Rajarata***

*1. Department of Agricultural Systems, Faculty of Agriculture, University of Rajarata, Puliyanlulama, Anuradhapura.*

*2. Institute of Post Harvest Technology, Research and Development Centre, Jayanthi Mawatha, Anuradhapura.*

***Thilakerathne., B.M.K.S., Gunarathna., W.T.K., and Jayawardana., N.W.I.A., (2012) Development of dehydrated raw mango (*Mangifera Indica*) powder., Proceedings of the Research Symposium on "Post harvest Technology for food Security", pp64, Abstract***

It is important to adopt suitable preservative technique to reduce losses that occur in raw mango fruit. This study was carried out to develop dehydrated raw mango powder from varieties of *Kartha colomban, Ratamba, Polamba* and *Kohuamba*. Preliminary experiments were conducted to select the best slice thickness drying method and temperature and pre-treatment. Mango slices of 0.5cm thickness were pre-treated with Sodium Meta bisulphate solution for 5 minutes and oven dried at 55°C for 48 hrs. The dried product were ground using laboratory grinder and the moisture content, water activity, total ash, crude fat, crude fibre, and crude protein contents were determined. Sensory evaluation was conducted to select best variety for the development of dehydrated raw mango powder. The selected dehydrated product was packaged in triple laminated Aluminum foil, Polypropylene (gauge 150) and (gauge 300) and stored at ambient conditions (29±2°C). Samples were withdrawn at one month interval and tested for moisture content, water activity, colour and micro biological quality to find out the best packaging material.

Acceptability of the product was determined by comparing mango sauce prepared from dehydrated raw mango powder and fresh mango pulp using a sensory evaluation. Results were revealed that there was no significant difference ( $\alpha > 0.05$ ) between the samples in terms of colour, odour, taste, consistency and overall acceptability. During the mango season, lot of fruits which have not good market demand go at waste. These fruits can be promoted to prepare raw mango powder and it can be used during the off season to prepare mango sauce and etc.