Title Quality of five Thai mango cultivars (Mangifera indica L.) using a solar drying system

Author Isabell Pott, Stefanie Konrad, Reinhold Scherer, Pairoe Wiriyacharee and Werner Mühlbauer

Citation Published in Chiang Mai University Journal 3 (3): 189-198 (2003)

Keyword: mango; quality; solar drying

## **Abstract**

Solar drying is a simple but efficient method to preserve fruits even in remote areas where the lack of sufficient infrastructure constrains successful fresh marketing. Dried mangoes are a promising and healthy snack product for regional as well as export markets. The climatic conditions during the peak mango season in Thailand offer best opportunities for solar drying. Five untreated Thai mango cultivars, i.e., 'Kaew', 'Okrong', 'Chok Anan', 'Nam Dokmai' and 'Rad' were investigated for their suitability for solar drying. A solar tunnel dryer type 'Hohenheim' with photovoltaic-powered fans were used for the drying process which was finished within one sunny day. Nutritive and sensory quality aspects such as  $\beta$ -carotene content, provitamin A, colour, texture and flavour were evaluated. The cultivars 'Kaew' and 'Nam Dokmai' showed best results for all quality characteristics.