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Salak — the Indonesian Snake Fruit

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Abstract

To maintain the biodiversity of food crops is one of the most important tasks for ecological research in the tropics and subtropics. Fruit science may play a major role in this context.

Indonesia is a rich source for plant species used for human nutrition. Most of the indigenous fruit species are unknown in Europe, but have been used as food source on the Indonesian islands for a long time. The peculiar salak or snake fruit (*Salacca* spp.) is a typical example for fruit species which are presently available only on local markets. The name “snake fruit” reminds on the fruit skin, which is very similar to a reptil’s skin in structure and colour. The fruit derive from small, spiny palm trees, growing as understory plants in the tropical rain forests of the lowlands. The female plants of this dioecious species develop fruits of the size of a fig, whose edible portion is sweet and aromatic.

In Indonesia, salak is widely used as fresh fruit. The species *Salacca zalacca* is known to produce the best fruit quality. There are some local selections such as “pondoh” or “bali”.

Since the knowledge on salak is still incomplete, a bilateral project between the Centre for Plant Conservation, Bogor Botanical Garden (Indonesia) and the Fruit Science Department of Humboldt University Berlin is aimed at evaluating ecophysiological characteristics of different salak genotypes as well as fruit quality properties. The purpose of this study is to broaden the knowledge on the needs of this promising fruit species and to promote its production in Indonesia. This paper will present preliminary results on the effect of different water supply on growth, leaf gas exchange and leaf water potential. The experiments have been carried out in the greenhouses of the Fruit Science Department in Berlin.

Keywords: Indonesia, physiology, salak, snake fruit