

## Studies on shelf-life extension of Noni (*Morinda citrifolia* L.) fruits

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The impacts of methods of harvesting on physio-chemical changes in Noni (*Morinda citrifolia*) fruits during 0-9 days of post harvest were studied and parameters viz., physiological weight loss (%), ascorbic acid contents (mg/100g), fruit acidity, fruit TSS (°Brix) and percentage of fruit decay were analyzed. Green mature fruits had higher shelf life than white mature fruits as the white fruits ripen faster than the green ones. Both green and white mature fruits had 40-80% shelf life with the former had a shelf life upto 20 days post harvest while the latter had could be stored for 15 days post harvest. Further, analyses revealed that the fruits harvested with full stalk and shoulder stalk had higher shelf life compared to fruits without stalk. The colors of fruits changed from green to greenish white, whitish, creamy, translucent then brown during the storage period and progressively tend to soften as the storage period increased. Since the islands are located in an isolation of more than 1200 km away from mainland India, efficient postharvest management and packaging for successful marketing are imperative. A successful protocol to minimize the transportation loss and mean time maintaining the optimum quality and physiochemical properties of noni fruits by retaining the ascorbic acid content developed at Central Agricultural Research Institute is discussed in the paper.

### Biography

D. R. Singh, Head and Principal Scientist, Division of Horticulture & Forestry, Central Agricultural Research Institute, Port Blair. His major research area is Island horticultural biodiversity. He pioneered the domestication and research achievements on *Morinda* in Islands. With his efforts on this crop, the ICAR, New Delhi awarded him the prestigious Dr. Fakhruddin Ali Ahmed Award (2011), Noni Scientist 2010 by World Noni Research Foundation, Chennai and Fellow of Horticultural Society of India and Confederation of Horticulture Association of India.

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