

Analyzing the Efficiency of Several Gum Extraction Tapping Systems for Wood Apple Trees

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Abstract : Wood apple (*Limonia acidissima* L.) trees are native to Sri Lanka and India. Wood apple gum is widely used in the food, coating, and pharmaceutical industries. Wood apple gum was a major component in ancient Sri Lankan coating technology as well. It is also used as a suspending agent in liquid syrups and food ingredients such as sauces, emulsifiers, and stabilizers. Industrial applications include adhesives for labeling and packaging, as well as paint binder. It is also used in the production of paper and cosmetics. Extraction of wood apple gum is an important step in ensuring maximum benefits for various uses. It is apparent that an abundance of untapped potential lies in wood apple gum if people are able to mass produce them. Hence, the current study uses a two-factor factorial design with two major variables and four replications to investigate the best gum-extracting tapping system for Wood apple gum. This study's findings will be useful to Wood apple cultivators, researchers, and gum-based industries alike.

Keywords : wood apple gum, *limonia acidissima* l., tapping, tapping cuts

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