B-67 Technological aspects of cinnamon processing for future mechanization

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Cinnamon verum (Syn. *C. zeylanicum*) belonging to order Lauraceae, is used as a spice or condiment. In Sri Lanka processing technology of cinnamon is still in a primitive stage. Thus only a particular group of people is engaged in cinnamon processing. Shortcomings of the existing cinnamon processing are: less efficiency and high labour cost.

This paper describes the technological parameters involved in cinnamon processing, which will be needed for future mechanization.

Objectives of the study was to assess the maximum load and number of strokes required for scraping and rubbing of cinnamon, labour involvement, and efficiency of the existing technology.

It was revealed that the average number of strokes (average stroke length - 150 mm) required per stick for scraping and rubbing was 325 and 164 respectively. Time required for scraping was 146 sec. Average power consumption for scraping was 8.36 W per stick and the average time requirement for rubbing was around 77 sec. Power consumption for rubbing was observed as 14.45 W per stick. Average load for scraping and rubbing per stick per stroke was 25 N and 45 N respectively.

Preliminary observations and tests for cinnamon processing indicated that mechanization helps to ease the labour involvement in scraping and rubbing thereby increasing the efficiency. In order to develop appropriate machinery for cinnamon processing, it is suggested to introduce a circular device which has an ability to exert a maximum required load per stroke (while a cinnamon stick was driven through this circular device) for scraping and rubbing respectively.