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**Extraction of pectin from nutmeg (*Myristica fragrans* Houtt.) rind and determination of pectin content with the maturity of the fruit**

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Nutmeg tree (*Myristica fragrans* Houtt.) is unique among the spice plants as it produces two separate and distinct products namely, the seed or kernel and mace. But this edible part represents only 30% and the rest 70% of fruit is represented by the pericarp or rind, which is discarded during processing of nutmeg.

Pectin is a natural substance which is present in a great many vegetable foodstuffs, e.g. fruits and vegetables. It is a component of a great variety of products in the food industry, where it is used in the production of jams, confectionery articles, baked and dairy products etc.

Nutmeg fruits were selected and plucked in terms of monthly maturity level commencing from one month up to six months. 100 g of rind were taken with three replicates from each maturity and pectin was extracted by boiling in water for 30 min. The extract was filtered through a muslin cloth followed by filtration through Whatman no. 4 filter paper. The pectin was then precipitated as a gel from the resultant extract by adding 95% ethyl alcohol in 1:2 proportion. The pectin gel is then filtered and weighed after drying in an oven at 45 °C. The average value of pectin percentage was determined with the maturity status of nutmeg fruit.

Table 1: Percentage Pectin content with the maturity status of nutmeg fruit

Maturity status	1 month	2 months	3 months	4 months	5 months	6 months
% pectin content	0.17	0.23	0.23	0.33	0.39	0.43

The results indicate that 1 month old fruit contain very low amount of pectin and with the increment of maturity level pectin content is also increased. 6 months old fruit contains considerable amount of pectin. Therefore, the nutmeg rind thrown away can be used as a valuable raw material in production of pectin.

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