

# CHARACTERIZATION OF MUCILAGINOUS MATERIAL OF *Neolitsea cassia* OBTAINED FROM DIFFERENT EXTRACTION AND DRYING METHODS

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## Abstract

*Neolitsea cassia* is a plant native to Sri Lanka which is the most common material used to extract mucilaginous material for centuries for domestic food applications. This study describes the extraction, drying of mucilage material and characterization of mucilage in terms of phytochemical analysis and physiochemical tests. The extractability of the mucilaginous material of *Neolitsea cassia* was recorded as 2.85% w/w and extraction method of mucilaginous material was improved using pre-soaking and blanching techniques that resulted in increasing the extraction yield. Pigment removal of the extraction was done using activated carbon filtration followed by centrifugation. Selected dehydration method for mucilaginous materials was dehumidified air drying. According to phytochemical analysis carbohydrate, monosaccharide, tannins, flavonoids and alkaloids were present in the dried mucilaginous material. Odour, colour and taste mucilaginous material of *Neolitsea cassia* imparts a slight cinnamaldehyde, brownish color and fine with irregular shape in texture a little harsh brownish and irregular shape in texture respectively. Solubility profile shows it is soluble in hot water and insoluble in organic solvents. The mucilaginous material showed a good swelling index of 27.8%, and was acidic in nature. The results obtained from this study revealed that fundamental characteristics of *Neolitsea cassia* mucilaginous material are a potential gum source for future food applications.

**Keywords:** mucilaginous material, *neolitsea cassia*, plant polysaccharide, phytochemical