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Characterization of mucilaginous polysaccharide of fresh leaves of *Neolitsea cassia*

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Neolitsea cassia is a native plant in Sri Lanka which is a most common material used to extract mucilaginous material for centuries for domestic food applications. Hence identification of physiochemical properties of this mucilaginous material is important to promote it as a potential local source as a food additive in terms of mucilaginous gum. The mucilaginous material was extracted manually in 1% citric acid solution, filtered using activated carbon filtration followed by centrifugation, precipitated with 95% ethanol, and the precipitate was dried using dehumidified cold air-drying. Results revealed that the extractability of the mucilaginous material was 2.85% w/w. According to phytochemical analysis carbohydrate, monosaccharide, tannins, flavonoids and alkaloids were present in the dried mucilaginous material. Organoleptic propertiesof the dried mucilaginous material consist of a slightly cinnamaldehyde odor, a brownish color, a slightly harsh taste, and fine and irregular shape in texture. The solubility profile shows it was soluble in hot water and insoluble in organic solvents. It showed a good swelling index of 27.8%, due to the higher powder porosity and may perform as a well binder or matrixing agent. It was slightly acidic in nature (pH 6.15 ± 0.2) hence it may be less irritating to the gastrointestinal tract. Carr's index and Hausner's ratio showed its excellent flow property. The results obtained from this study revealed that fundamental characteristics of *Neolitsea cassia* mucilaginous materialmake it a potential food additive for the future food applications.

Acknowledgement : The authors thank the University of Sri Jayewardenepura, Sri Lanka for financial assistance (Grant No: ASP/01/RE/SCI/2016/19).

Keywords: Mucilaginous material, *Neolitsea cassia*, phytochemical analysis, plant polysaccharide.

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