Evaluation of Nutritional, Physiochemical and Technological Properties of Flour Made from Canistel Fruit (*Pouteria campechiana*)

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Fruits are important in human diet as they provide essential nutrients such as vitamin, minerals and fibers. Most of fruits are seasonal and highly perishable. Therefore, various preservation techniques are used to prolong their shelf life. Canistel fruit is a seasonal, perishable and underutilized fruit and it can be a cheap source of macro and micro nutrients as protein, fiber, niacin, carotene (pro-vitamin A) and ascorbic acid. Further, various health benefits are also reported due to the presence of functional compounds in it. Therefore, this study was focused on developing a flour from Canistel fruit and checking the possibility of utilizing it as a food ingredient particularly in bakery industry. According to the previous study, oven drying method ($60^0$for hours) was practiced for flour preparation. Wheat flour is major flour use in bakery industry. Therefore, wheat flour was used as the control. Physiochemical and technological properties including swelling capacity, water absorption capacity, oil absorption capacity, emulsion activity, emulsion stability, foam capacity, foam stability, gelatinization temperature, least gelation concentration, bulk density and proximate composition were determined. Results showed that Canistel fruit flour having appropriate gelation properties (Least gelatinization concentration was 4% and Gelatinization temperature was67^0C), swelling capacity (13ml), water absorption capacity (119%), oil absorption capacity (198%).Cake and cookies were made by using canistel fruit flour.

Keywords: Bakery industry, Canistel fruit flour, Wheat flour, Physiochemical properties, Gelation