Phytochemical and in vitro Anti-Diabetic Activity of Ethanolic Extract of Psidiium Guajava Linn

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ABSTRACT

Diabetes mellitus is a disease due to hyperglycemia. The body needs a special sugar called glucose as its main source of energy. The glucose is carried around the body in the blood and the glucose level is called glycaernia.Insulin is a hormone secreted by the pancrease, a gland that lies in the curve of the duodenum.Diabetes occurs due to deficiency ofinsulin,lower efficacy of produced insulin.Diabetes mellitus is classified into type1-juvenile onset diabetes,type2-deficiency of insulin diabetes. The anti diabetic are found naturally from the plant extracts and are used worldwide, Psidium guajava Linn. possesses useful medicinal benefits. It has been recognized as the medicinally essential phytoconstituents, such as pheno-lic, flavonoid and carotenoid. Numerous pharmacological investigations have confirmed that the ability of this plant is to exhibit antimicrobial, antidiabetic, cardioprotective, neuroprotective, hepatoprotective, antioxidant and anticancer activities. This is a comprehension of the phytoconstituents and pharmacological benefits. The study of ethanolic leaf extracts of *psidium quajavalinn* in loweing the blood glucose level shows the effect mediated through inhibiting alpha-glucosidase and alpha- amylase. The phytochemical screening shows the presence of several bioactive compounds like alkaloid, flavones, tannins and phenols which could be responsible for versatile medicinal properties of this plant. The technique used for the extraction process is by soxhlet apparatus which gives the percentage yield of 10.15%. The phytochemical constituents alkaloids, saponins, carbohydrate, tannins, flavonoids, steroids are done and confirmatory tests are done.