Evaluation of Selected Medicinal Plants to judge their Confirmation as Anti-Diabetic Using Mathematical and Statistical Techniques

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ABSTRACT

The present study based on the statistical and mathematical studies of three selected plant. Keeping in view the comprehensive statistical analysis of selected potential extracts were carried out to evaluate and statistically signify their efficacy data in the treatment of diabetes mellitus. The efficacy data of the selected medicinal plants were applied to critical statistical tools for their antioxidant, anti-diabetic and anti-hyperlipidemic activities. The statistical and mathematical analysis were carried out for the herbal antidiabetic selected medicinal plants. The given plants may exert their activity throughout different and sometimes combined pathways targeting most organ tissues implicated in the pathophysiology of diabetes mellitus such as pancreas, liver, intestine, kidney and peripheral tissues. These plants devotee special attention for their multi and unexpected mechanisms of action through the pharmacological studies with the help of statistical and mathematical tools. All the extract of all three plants were standardized with detailed pharmacological studies by various tools. All extract were found to be safe and useful in diabetes and its complication. This paper will enhance the possible mechanism of action of the phytoprinciples for their pharmacological response with help of statistical and mathematical tools. These tools will provide safety, efficacy and toxicity data for the selected medicinal plants and the rationale behind their use as anti-diabetic drugs. These tools will enhance their claim to be used as regular anti-diabetic drugs.

Keywords: medicinal plants, diabetes, mathematical tools, statistical tools, biological activity.

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