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Scope of Herbs as Potent Hypoglycemic Agents

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iabetes mellitus is a metabolic disorder of multiple aetiology characterized by chronic hyperglycemia with disturbances of carbohydrate, fat and protein metabolism resulting from defects in insulin secretion, its action or both. A diabetes epidemic is underway. The number of people with diabetes is increasing due to population growth, ageing, urbanization and increasing prevalence of obesity and physical inactivity. Crude drugs of vegetable origin have been utilized for the treatment of disease states, often of a chronic nature or to attain/maintain a condition of improved health. Pharmaceutical preparations are made by extracting herbs with various solvents to yield tinctures, extracts, fluid extracts or the like are known as 'phytomedicinals'. A large number of plants have been always used as folk herbs and secret recipe for different illnesses and hypoglycemic herbs are widely used as non-prescription treatment for diabetes. However, few herbal medicines have been well characterized and demonstrated the efficacy in systematic clinical trials as those of Western drugs. Some traditional medicines appear to be effective for both, control of blood glucose and the modification of the course of diabetic complications without side effects. Therefore, the present paper deals with diversity and distribution area of 250 herbs from 113 families having hypoglycemic potentials, their traditional and folk knowledge, phytochemical potentials, bioactive products and structures for specific bioefficacies, comparable to standards with specific references. This paper further briefly specifies the herbs and herbal combinations as hypoglycemic agents.

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