InDiaMed – A comprehensive database for diabetes researchers

Kumudini Tota¹, Nihar Rayabarapu¹, Venu Talla¹, Srinivasa Rao²
¹National Institute of Pharmaceutical Education and Research, Hyderabad, India
²Indian Institute of Biotechnology Pvt. Ltd, Hyderabad, India

Diabetes mellitus is a serious growing global threat to health of mankind. According to International Diabetes Federation (IDF), India has 62.4 million people with diabetes and by 2030 it is predicted that the number shoots to 100 million. Present therapeutic options for Diabetes, like dietary modification, oral hypoglycaemic, and insulin have limitations of their own. Therefore, there is a need for safe, effective and adjuvant treatment for diabetes. Many Indian plants are being examined for their beneficial use in diabetes and reports occur in numerous scientific journals. In present study we compiled a database (InDiaMed) of all medicinal plants to provide a comprehensive literature about the conventional medicinal plants used for the treatment of diabetes. Use of these plants may delay the development of diabetic complications and can correct the metabolic abnormalities through various mechanisms. We undertook a literature survey in various scientific search engines and compiled the information of 424 medicinal plants with 20 fields for each plant. This database will be an open access and public domain website. The novelty of this database is inclusive mechanism of action of all the medicinal plants using biochemical pathways and ranking these plants based on the quantum of work done on the plant. Apart from that, this database also features chemical, taxonomical, pharmacological and biochemical information of the plants. This will stimulate new research and proper compilation for the scientific evaluation of each plants beneficial role in the treatment of diabetes.

Biography

Kumudini Tota is M.S. Pharm final year student doing her dissertation at National Institute of Pharmaceutical Education and Research (NIPER) Hyderabad in collaboration with Indian Institute of biotechnology (IIBT) under the guidance of Dr. T Venu and Dr. K. Srinivasa Rao.

kumudini.tota@gmail.com