OBJECTIVES

- Screening and identification of different novel plants for antidiabetic principles as per the data collected from literature, publications and tribal folklore information.
- Development of STZ-induced diabetes, characterization and standardization of protocol suitable to the laboratory conditions.
- Identification of the potent antidiabetic plant and further characterization for localization of principal compound(s) in the plant *i.e Phragmites vallatoria*.
  - To evaluate the anti-diabetic activity of *Phragmites vallatoria* extract.
  - To find out wound healing activity of *Phragmites vallatoria* leaf ethanolic extract.
  - To investigate the antidiabetic activity of *Phragmites vallatoria* rhizomes.
- Isolation, purification and characterization of compound(s) from *Phragmites vallatoria*.
- Standardization, molecular docking process of ligand-receptor interactions and *in silico* analysis of active principles of *Phragmites vallatoria* rhizomes against enzymes responsible for elevation of diabetes.