During the past decade, traditional systems of medicine have become a topic of global importance. Current estimates suggest that, in many developing countries a large proportion of the population relies heavily on traditional practitioners and medicinal plants to meet primary health care needs. Although modern medicine may be available in these countries, herbal medicines have often maintained popularity for historical and cultural reasons. Concurrently, many people in developed countries have begun to turn to alternative or complimentary therapies, including medicinal herbs. Although, there are numerous traditional medicinal plants reported to have hypoglycemic and anti-diabetic properties, many of them proved to be not very effective in lowering glucose levels in severe diabetes. Further, most of the hypoglycemic agents used in allopathic medicine are reported to have side effects in the long run. Therefore, there is a need to search for effective and safe drugs for diabetes.

Diabetes mellitus ranks among top ten disorders causing mortality throughout the world. With the rapid advancement of medicine, treatments without the side for the long-term control of this disorder become important. Alternative therapies have also received attention recently. A growing public interest in herbal medication of diabetes has been in the raise around the world. Application of medicinal plants in the control of diabetes has renewed and the WHO expert committee on diabetes recommended this alternative treatment. The medicinal preparations in traditional medicines contain a variety of herbal and non-herbal ingredients that are thought to act on a variety of targets by various modes and mechanisms.

The aim of the research is to find out new drugs from indigenous plants, which are potent and nontoxic agents. Based upon the ethnopharmacological survey, present study deals with the phytochemical and pharmacological studies of *Amaranthus spinosus* (Leaves) *Strychnos potatorum* (Seeds) and *Saraca asoca* (Flowers) with special reference to anti-diabetic activity in experimental animal models.
The present study is planned to carry out with the following objectives:

- To collect and authenticate the selected plants.
- To evaluate the physicochemical parameters viz. foreign matter, moisture content, ash values, extractive values etc. of selected plants
- To perform the extraction of plant materials & preliminary phytochemical studies of plant extract
- To perform the chromatographic studies by HPTLC/HPLC
- To evaluate the pharmacological activity and histopathology of isolated organs