Objective of the work:

Nephroprotective agents are the substances which possess protective activity against nephrotoxicity. Medicinal plants have protective properties or curative properties due to the presence of various complex chemical substances. Ancient literature has prescribed various herbs for the cure of kidney disease. Co-administration of various medicinal plants possessing nephroprotective activity along with different nephrotoxicity agents may attenuate its toxicity. *Ficus racemosa* Linn (Moraceae) is a popular medicinal plant in India, which has long been used in ayurveda, the ancient system of Indian medicine for various diseases/disorders including diabetes, liver disorders, diarrhoea, inflammatory conditions, and hemorrhoids, respiratory and urinary diseases. It was observed that the plant *Ficus racemosa* Linn is grown widely and abundantly. In addition, a native practitioner has claimed that this plant is very useful nephroprotective agent. The stem bark and fruits are used in India for the treatment of various diseases. Methanol extracts of *Ficus racemosa* contained relatively higher levels of total phenolics than the other extract (Baby Joseph, Justin Raj. 2010). Keeping all these facts in view the present study is aimed at giving a scientific basis for the native claims and traditional knowledge. The antidiuretic activity of *Ficus racemosa* was reported. Desmopressin is the synthetic analog of ADH, used in the treatment of nephrogenic diabetes insipidus. However there are no primary drugs for the treatment of nephrogenic diabetes insipidus. There are no reports of this plant for its possible nephroprotective activities in drug induced nephrotoxicity and in lithium induced nephrogenic diabetes insipidus. Hence this plant is selected in this study.

The main objective of this study is the evaluation of nephroprotective role of the bark extracts of *Ficus racemosa* in gentamicin and cisplatin induced nephrotoxicity in experimental animals and to find the efficacy of *Ficus racemosa* in treating lithium induced nephrogenic diabetes insipidus in animal models.