OBJECTIVES OF THE STUDY:

Liver cirrhosis and drug induced liver injury accounting ninth leading cause of death in western and developing countries. Therapies developed along the principles of western medicine are often limited in efficacy, carry the risk of adverse effects, and are often too costly, especially for the developing world. Therefore, treating liver diseases with plant-derived compounds which are accessible and do not require laborious pharmaceutical synthesis seems highly attractive.

Modern therapeutic alternatives for the hepatoprotective activity are providing symptomatic control and offering many side effects to the liver which in turn can make damage to liver more pronounced. The drugs in the modern medicine are not able to provide protection to the liver in multifacet activity as by antioxidant activity, hepatocyte regenerative activity etc. These are some of the limitations of the modern therapeutics to solve the problem of hepatotoxicity.

Since time immemorial, mankind has made the use of plants in the treatment of various ailments. The Indian Traditional Medicine like Ayurveda, Siddha and Unani are predominantly based on the use of plant materials. Herbal drugs have gained importance and popularity in recent years because of their safety, efficacy and cost effectiveness. The association of medical plants with other plants in their habitat also influences their medicinal values in some cases. One of the important and well-documented uses of plant-products is their use as hepatoprotective agents. Hence, there is an ever-increasing need for safe hepatoprotective agent (Babu et al., 2001).

Herbal-based therapeutics for liver disorders has been in use in India for a long time and has been popularized world over by leading pharmaceuticals. Despite the significant popularity of several herbal medicines in general, and for liver diseases in particular, they are still unacceptable treatment modalities for liver diseases. The limiting factors that contribute to this eventuality are (i) lack of standardization of the herbal drugs; (ii) lack of identification of active ingredient(s)/principles(s); (iii) lack of randomized controlled clinical trials (RCTs), and (iv) lack of toxicological evaluation (Radha et al., 2005). The use of natural remedies for the treatment of liver diseases has a long history, starting with the Ayurvedic treatment, and extending to the Chinese, European and other systems of traditional medicines. The 21st century has seen a paradigm shift towards therapeutic evaluation of herbal products in liver
disease models by carefully synergizing the strengths of the traditional systems of medicine with that of the modern concept of evidence-based medicinal evaluation, standardization and randomized placebo controlled clinical trials to support clinical efficacy (Thyagarajan et al., 2002).

*Mimusops elengi*, (ME) commonly called ‘Bakul’ is a medicinally important plant of family sapotaceae. All parts of the tree have medicinal properties. *Mimusops elengi*, commonly called as ‘Bakul’, is a medicinal plant belonging to family Sapotaceae. It has many medicinal properties as antiulcer, wound healing, antioxidant etc (Chopra et al., 2000). ME is reported in Ayurveda for providing the hepatoprotection. ME is enriched with saponins and rich source to antioxidants such as tannins etc (Jahan et al., 2001).

Taking into consideration that development of an alternative to conventional treatment for hepatoprotection and propensity of herbal drugs towards the activity is pressing need of times to discover newer herbal agents with traditional claims and proven scientific abilities to achieve better therapeutic success in the management of liver related disorders. ME can be a better lead. Present study aims at substantiating the traditional claim of ME for hepatoprotective activity by using various preclinical experiments and isolating the moiety responsible for the hepatoprotective activity of ME. Formulation of the active principals of ME could be future scope for the present investigation.