2. Aim and Objectives

Herbs are staging a comeback and herbal renaissance is happening all over the globe. Herbal products today symbolise safety in contrast to the synthetics that are regarded as unsafe to human and environment. Although herbs had been priced for their medicinal, flavouring and aromatic qualities for centuries, the synthetic products of the modern age surpassed their importance, for a while. However, the blind dependence on synthetics is over and people are returning to the naturals with hope of safety and security.

Most of the herbal products do not have to drug regulatory approval to demonstrate their safety and efficacy. The habitual use can provide valuable clues for the selection, preparation and indication for the use of herbal formulation, as efficacy has been established by the common use. Historical use provides the source to study the specific plant species with potential to be used in a particular disease. A systemic approach through the experimental and clinical validation of efficacy is required for a plant identified for traditional medicine; animal toxicity studies also needed to establish the potential adverse effects.

It has been expressed that in developed countries such as United States, plant drugs constitute as much as 25% of the total drugs, while in fast developing countries such as China and India, the contribution is as much as 80%. Thus, the economic importance of medicinal plants is lot more to countries such as India than to rest of the world. These countries provide two third of the plants used in the modern system of medicine and the health care systems of the rural population depend on indigenous systems of medicine.

Aim

To assess pharmacognostic, pharmacological, phytochemical potentials of *M.indica* seed kernel.
**Objectives:** To fulfill the aim the objectives are to

- Collect, identify and authentify *Mangifera indica* seed kernel.
- Processing of the plant materials for extraction.
- Study the anatomical features of the plant material by macroscopy and microscopy.
- Evaluate the quality of plant material using standard pharmacognostic methods.
- Check the antibacterial activity of the plant extracts.
- Understand the antioxidant nature of the extract by *in-vivo* and *in-vitro* methods.
- Check the antidiarrhoeal properties of the phenolic extracts.
- Evaluate the effectiveness of the seed kernel phenolic extracts in preventing gastric ulcer experimentally by *in-vivo* method.
- Screen the ability of the extracts in preventing cancerous growth using cell lines.
- Screen the Phyto-constituents of the chosen plant.