Preface

India enriched with traditional system of medicines applicable in the field of primary health care. According to world health organization, more than 80% of the world’s population relies on traditional medicines for their primary treatment. Even in modern times, plant-based systems continue to play an important role in health care and times interest towards plant based/herbal therapy is increased many fold. The knowledge of the phytoconstituents of these plants is desirable because such information will be valuable for the synthesis of complex chemical substances. The medicinal value of plants lies in some phytoconstituents that produce a definite physiologic action on the human body.

The focus of present work is to study the potential of plants supplementation with cyclophosphamid e (CPA) induced toxicity in mice. The thesis starts with introduction, literature review dealing with the work done earlier in this field, with aims and objectives of the present work. The adapted methodologies are presented in materials and methods. Whole work is divided into four chapters: In chapter I, we analyzed the phytochemicals in different plants extract by qualitative and gas chromatography- mass spectrometry (GC-MS) method. In chapter II, the study was conducted to evaluate the hepatoprotective activity of aqueous extract of Phyllanthus fraternus (AEPF) and Aegle marmelos (AEAM) against CPA-induced liver damage in mice. In chapter III, we evaluated the protective effect of AEPF and AEAM against CPA-induced renal toxicity in mice. In chapter IV, we studied the effect of AEPF and AEAM on CPA-induced changes in sperm characteristics and testicular oxidative damage in male mice. Summary and conclusion deals with salient findings of the work done. Bibliography cited for the entire thesis followed by publications of research articles from my thesis.