2. AIM AND OBJECTIVES

Plants belong to the genus Pueraria are mostly interlinked with the traditional culture of many community peoples for the purposes of cooking, decorating and treating various ailments. The tubers of the selected plants were used for the treatment of inflammation, sexual weakness, contraceptive agents and diuretic. Recent literatures revealed that the tubers of *P. tuberosa* possess several pharmacologically active constituents such as puerarin, tuberosin, genistein, daidzei and lupinoside. Against these backdrops, the aim of this present study were to study the phytochemical, pharmacological and toxicological properties of *P. tuberosa*.

The present study aims at following objectives:

- Collection and identification of *P. tuberosa*.
- To investigate various parts of *P. tuberosa* on the aspects of microscopical observations.
- To conduct phytochemical analysis of the tuber extracts of *P. tuberosa*.
- To study the antimicrobial properties of the tuber extracts of *P. tuberosa* against selected bacterial and fungal species.
- To study the antioxidant activity of *P. tuberosa* tuber extracts.
- To evaluate the anticancer potential of the *P. tuberosa* tuber extract against cancer cell lines (HepG2 and MCF-7).