OBJECTIVES

Medicinal plants and their extracts are natural resources of compounds used for ethnomedical and phytotherapy. They are also a source of natural product used in the new related compounds and drugs for conventional medicine. The increasing treatments interest herbal medicines requires a comprehensive assessment of research data in this field to held focus future efforts.

Liver is a soft, dark, highly vascular organ. It is the largest gland of our body. The weight range of liver is 1.4-1.8 kg in adult male and 1.2 kg in adult female. The liver involved in the metabolism of various drugs i.e. first pass metabolism. Thus liver is one of the important organ of the body.

The liver is key organ regulating the homeostasis of the body. Liver disorder is among the important disorder affecting mankind. If any disorder occurs in the liver, it is of grave implication to the affected person.

There are many substances and chemical which damages the liver, like carbon tetrachloride, alcohol, apart from this there are number of allopathic medicine which causes the liver damage for example, Tetracycline, Paracetamol, INH (isoniazide), Erythomycin etc.

Alcohol in the form of Country- Made Liquor (CML). Containing 28.5%v/v ethanol content is commonly consumed in India. The consumption of alcohol beverage is a common part of modern way of life. It has been reported that there is a correlation between CML consumption and hepatic disorders. Hence this can be used as experimental model of liver injury.

There are no good allopathic medicines to cure or to protect the liver. Therefore, extensive study going on this field to find the effective herbal drugs for curing and protecting the liver.

Infectious diseases are a major cause of morbidity and mortality worldwide. The number of multi-drugs resistant microbial strains and appearance of strains with reduced susceptibility to antibiotics are continuously increasing.

Synthetic drugs are not only expensive and inadequate for the treatment of infection but are also often have side effects like hypersensitive reaction. Therefore, there is a need to find herbal antimicrobial agents to control microbial infection.

Apart from the infectious diseases, the micro organism also play important role in spoiling foods. Growth of micro organism in food may cause food borne disease.

Synthetic additives have been widely used. The use of the synthetic additives is not accepted by the consumer because of the side effects. Consequently, search for natural
additives, especially of plant origin, has increased in recent years. Therefore, uses of natural antimicrobial agents especially in meat products to prolong their storage, self life and potential for preventing food diseases.

_Berberis tinctoria_ Lesch. and _Mahonia leschenultia_ Takeda. Mostly grown in Nilgiris and Pulney hills of Western Ghats above 5000ft. The local people used the different parts of these two plants for various ailments for example for fever, for skin diseases and jaundice etc.

The literature survey reveals that much work was not done on these two plants (_Berberis tinctoria_ Lesch. and _Mahonia leschenultia_ Takeda.) and based on this and careful study of the above points, I felt it will be worth full to do extensive study (Hepatoprotective and Antimicrobial study) on these two plants.