INTRODUCTION
Many Indian Ayurvedic medicinal plants have been either screened for therapeutic activity or are investigated as preliminary studies by many Indian and Foreign Pharmacologists the world over. But this work is still not complete. It will take many years to only preliminarily screen the Ayurvedic, Indian, herbs and medicinal plants.

Only when such a preliminary pharmacological work is available then only the future development of therapeutical active drug molecule development is possible. This further work shall comprise of isolation and purification of the compounds and their cost effectiveness. Then testing these further in animals and then test them clinical and finally follow them up for their any possible long term toxicity as well as safety. This obviously means that there is a lot of scope for research in medicinal plants of India as well as, for that matter any country of the world.

The number of Ayurvedic medicinal plants is very large and the chemical fractions number is
still unbelievably very large. Therefore even the preliminary testing many fractions is not a single man or laboratory's job. It will require a big team of devoted Pharmacologists to carry out these initial tests and compile the data. From this data then only one can think of the promising plants, their active principles etc. for the further studies both in the animals and the hospitals through clinical pharmacology.

It goes without saying therefore, that the plants on which some such preliminary work has been carried out and that they are shown to be promising are selected for the study. Krushna Tulas (Ocimum sanctum) is one such promising plant on which a number of Indian and Foreign scientists have worked and generated data. Krushna Tulas has recently attracted the attention of the Medicinal as well as the Commercial community.

One of the reasons why Krushna Tulas (Ocimum sanctum) is selected for the present study is as stated above. This study is not extensive. It is limited and the author is aware that still a lot of work has to be done to understand the actions of this small plant on the living things. Therefore this thesis, contains only a limited pharmacological work which was thought useful and contributory to the development of drugs to be prepared from the plant Krushna Tulas (Ocimum sanctum).

In this country nowadays a lot of importance is given to the research on the naturally occurring substances and the plants from a large part of it. This is because India has a very large variety of naturally occurring substances in the form flora and fauna, minerals, marine
substances, geological substances like the minerals and the metals and a variety of the land animals.

India is a continental large country and it still cannot afford to develop drugs synthetically and on a large scale for their masses. The population of India has already touched 90 crores and by the end of the century it very likely that it will either touch or cross the Hundred Croes. To provide food, shelter and clothing is the main job and drug is the important need to preserve the health and ward off the infections and infectious diseases.

To develop the technical knowhow in the form of synthesis of therapeutically active compounds requires a large infra structure and knowledge about the Phyto and organic chemistry. This time consuming and costly in the beginning. On the other hand, pharmacological screen of the medicinal plants and selecting the promising plants or their products or the parts is comparatively easy, quick and cost effective and from the toxicological point of view more safe and harmless.

That is why as stated earlier, even the development of semisynthetic and therapeutically active simple plant derivatives is the need of the hour. Krushna Tulas (Ocimum sanctum) is one such important plant which grows quickly everywhere in India, is easy to cultivate, it is available all the year round. It is harmless yet effective and is easy to handle. It grows to its maturity within 3 to 4 months.

Krushna Tulas has many therapeutically active compounds such as Basil camphor, Eugenol, Methyl cinnamate, Two types of Citral, Linalool, Geraniol, Citranellol, Citranellal, Esters
of Geraniol and Citranellanol like Methyl heptanone, Citronelic acid, Methy chavicol,
Ocimine, Oleanolic acid, Ursolic acid, Thymol, Alpha pinine, Limonene, Terpenolene,
Carvacrol, Cineol, and Caryophyllene to name the few. Each of these agents may have some
specific and some non specific actions over the living systems of a living being.

But the sum total effect of all these known compounds is the action on the Respiratory
system, Gastrointestinal tract, Cosmetic action on the skin, Action over the gastric and the
intestinal glands, action over the intestinal parasites (round worms) etc.

Krushna Tulas so far is shown to be non-toxic to the host tissues and even on large doses
and on prolonged use it is well tolerated without any side effects or the untoward effects.
From all these angles and from its therapeutic range of activity, it is obvious that this small
plant is ideal for future studies. This was the reason why it was decided to undertake research
on Krushna Tulas as detailed pharmacological study.
STATEMENT OF PROBLEM
In the present study Krishna Tulas extracts are tested in Albino mice. Krishna Tulas is an Indian, Ayurvedic medicinal plant and has many properties which are useful in the therapeutics.

Two extracts shall be prepared, one aqueous extract and the Alcoholic extract. The aqueous extract is taken into consideration because in Ayurved always water is used for the extraction of the medicinal plants. The present day solvents were unknown. The Ayurvedic text has described the therapeutic effects only with the water extracts (aqueous extracts).

Alcoholic extract is also used because alcohol is cheap, readily available and has ability to extract many active ingredients from the plants body. Alcoholic extracts are polar i.e. water soluble and that makes it easy for dilution and making various concentrations. These in term are easy to administer.
Liver cirrhosis shall be induced in Albino mice with the help of Carbontetrachloride. This is a standard method and widely accepted in many countries. Carbon tetrachloride damage of the cell and cell organelles is non-specific and only general in nature. But the effects are vivid and conspicuous, making it easy to screen many drugs.

So far, to the best of the author's knowledge, there is no work reported on the Pharmacological effects of the aqueous and alcoholic extract of Ocimum sanctum (Krishna Tulas). Therefore, here an attempt is made to study the effects of these two extracts in Albino mice of both sexes.
PLAN OF WORK
Krishna Tulas plant shall be collected botanically identified from a qualified botanist and dried in a dust free shade till the moisture contents is less than 4%. The dried herb is then crudely pulverized and stored in a glass stoppered bottle for further use.

The dried powder of Krishna Tulas is then extracted with water and alcoholic solvents. Aqueous extract shall be prepared in a traditional way whereas alcoholic extract shall be prepared from the laboratory grade Ethanol (Alcohol of 95 purity - proof spirit). Alcohol shall be diluted with water to make a 50% alcoholic solution.

After extraction the solvents shall be recovered to fullest till not trace of the solvent remains in extract. For aqueous extract distilled water shall be employed. The water shall be evaporated in a shallow porcelain dish over a water bath. On the other hand alcoholic extract shall be prepared in a similar
manner. The dried powder which is weighed shall be placed at the bottom of a flat bottomed glass flask and to it either distilled water or 50% alcoholic solution shall be added. The flask is well shaken every day for 10 days and then the upper supernatant layer of the solution is decanted into previously cleaned and dried another flask. This procedure is repeated for both the extracts 5 to 7 times or till the colouring matter and aromatic substances are extractable. Heat was avoided for the purpose of extract as the heat can denature the active principles.