ABSTRACT

From the earliest times, herbs have been prized for their abilities in treatment of different ailments and today we still rely on the curative properties of plants in about 70% of our medicines. After nearly two centuries of inexorable decline in the use of herbal medicines; herbs, which have always been the principal form of medicine in developing countries, are once again gaining popularity throughout the developed world. Post 2005, with the new patent regime knocking the doors of the pharmaceutical industry, standardization of herbals will be a key issue. They are extensively used in the developing countries, where in many places they offer a more widely available and more affordable alternative to pharmaceutical drugs. For this reason herbal medicines have been virtually rediscovered in recent years.

The herbal drug industry is considered to be a high growth industry of the late 90s and looking at the growing demand, it is all set to flourish in the next century. The trend for the increasing popularity of medicinal herbs in countries like America, Australia Germany and China is well supported by statistical data. The global market of herbal medicinal products was estimated at US$70 billion in the year 2000, and it is expected to reach US$ 6 trillion by 2050. India’s share is only 2.5% of the global market.

- The growth rate of the market is estimated at 15% in Japan and 15% in India and Pakistan.
- Europe is followed by East Asian countries (US 2.3 billion), Japan (US $ 2.1 billion) and North America (US $ 1.3 billion).

Ayurveda is a potential source of indigenous drugs. It is the ancient Indian system of medicine strongly believes in polyherbal formulations and scientists of modern era often ask for scientific validation of herbal remedies, therefore there is a need for exhaustive study on the various herbal medicinal plants from Phytochemical and pharmacological point of view.
The medicinal herb is a biosynthetic laboratory as it contains number of chemical compounds like glycosides, alkaloids, resins etc. These compounds exert therapeutic effect and account for medicinal property of the medicinal herb. During the last 60 years, the workers engaged in the field of medicinal and aromatic plants have increased many folds and so also the output of research data on the subject. There has been increase in revival of interest in natural plant products as these are biologically more compatible with human systems.

Medicinal plants are also important for pharmacological research and drug development, not only when plant constituents are used directly as therapeutic agent, but also when they are used as basic materials for synthesis of drugs or as models for pharmacologically active compounds.

The present research work has been performed on *Cuscuta reflexa*, *Sapindus trifoliatus*, *Ficus racemosa* and *Leucas linifolia*. Different parts of these plants are reported in ayurvedic medicines for valuable treatment of variety of conditions like anti diabetic, expectorant, counter-irritant in rheumatism, migraine, and headache and anthelmintic. Efforts have been made to find out the possible antiasthmatic effect along with different constituents responsible for the activity of the hydro alcoholic extracts of *Leucas linifolia*, *Cuscuta reflexa*, *Ficus racemosa* and *Sapindus trifoliatus*.

It was found that all the plants have prominent antiasthmatic activity against different models.