INTRODUCTION

In the Indian culture and Indian healthcare, plants are source of medicine for thousands of years. Herbs and herbal products use is increasing day by day in both developing and developed countries for the treatment of various disorders or diseases has increased in recent years.

According to the WHO more than 80% of population depends on various plants or their products as primary source to treat various diseases. Among the 21,000 plants identified with medicinal property according to WHO, 2500 species are from India, and 150 species are already in use on commercial large scale. India is considered as botanical garden of the world, has it is largest producer of medicinal plants and herbs (Abdul Azeez, et.al. 2016).

Indian ayurvedic medical system is a time-tested system of medicine in India. It has an edge-over than other system of healthcare, management systems (P.H. Rajasree et.al. 2012). Herbal medication also called botanical treatment or phytomedicine, in which parts of plants like seeds, barriers, roots, leaves, flowers, barks etc., are used for medicinal purpose, by the people who live in rural areas as first line treatment (Kamarapu. P, et.al., 2015). This interest stems primarily from the belief that the green medicine as safe and dependable and it is essential to intensify the studies on medicinal plants to place them in folklore (P.H. Rajasree, et.al., 2012).

Polyherbal Extracts:

More often the plant medicines are used in combinations rather than in a single to maximize the benefit from their combined strength (Sunil Mistry, et.al. 2012). It is even clear in allopathic medicines also that use of some drugs in combination gives rise to increase the desired therapeutic activity or to decrease the adverse effects of the drugs. Usually the potentiating effect produced by one drug on other drug is called synergetic effect (C.S.Barik, et.al., 2015).

Inflammation:

It is a condition associated with many disease states. It is considered as response of the tissues to irritation, infection, injury or entry of foreign body. It is a part of first line immune response and becomes too great it may be far worse than the disease itself and may become fatal in some conditions. Most of the drugs used to treat inflammation are drugs that inhibit the production of COX (cyclooxygenase) enzymes COX-1 and COX-2, which synthesis prostaglandins and thromboxane and NSAID’s(Non-steroidal anti inflammatory drugs). But
in long-term use of these causes gastric erosions, ulcers, perforation and GI bleeding (K Kanagasanthosh, 2015).

**Arthritis:**

It is most common inflammatory joint disease characterized by synovial joint inflammation, i.e. inflammation of synovial membrane, pain and restricted movement of joints (Pearson, et.al., 1956). Rheumatic arthritis (RA), one of the common disorders of immunity, and is a chronic, progressive, systemic inflammatory disorder leads to destruction of joint, responsible for deformity and disability. The morbidity and mortality of consequences of it has substantial socio-economical Impact (Buuch, et.al. 2002).

Indian continent population has 1.5-2% prevalence of RA with sex ratio of 3:1 for female: male and 1% of world population are affected with it.

The plants selected for the present study are

5. Thespesia populnea (Mani Vasudevan, et al, 2007)