Introduction
Evolution of human life and culture has directly or indirectly been associated with the surrounding environment. Rural and tribal people live closely associated with nature and chiefly depend on it for their survival. Their dependence on plants made them to acquire the knowledge of economic and medicinal properties of many plants by methods of trial and error. Human beings have been using plants and their products for food, shelter, fiber medicine etc., since times immemorial. The use of natural products, with therapeutic properties is as ancient as human civilization. For a long time plant and animal products were the main sources of drugs. The application of plants in the field of medicine is prodigious and sometimes it is astonished. The earth is enriched by a variety of flora; in that, it contains large scale of medicinal and aromatic plants. This is due to the inclusive diversity of climatic conditions in the world ranging from deserts to swamplands.

Over three-quarters of the world population relies mainly on plants and plant products for health care. More than 30% of the entire plant species, at one time or other, were used for medicinal purposes. It has been estimated that in developed countries, like United States, plant drugs constitute as much as 25% of the total drugs, while in fast developing countries, such as, China and India, the contribution is as much as 80%. Thus, the economic importance of medicinal plants is much more to these countries than to rest of the world. These countries provide two third of the plants used in modern system of medicine and the health care system of rural population, depend on indigenous systems of medicine.
In India, numerous types of plants have been well documented and catalogued by botanists from the high ranges of the Himalayan tract up to the sea-shore of Kanyakumari. This extensive flora has been greatly utilized as a source of many drugs in the Indian traditional system of medicine. India’s diversity is unmatched due to the presence of 16 different agro zones, 10 vegetation zones, 25 biotic provinces and 426 biomes.

Of the 250,000 higher plant species on earth, more than 80,000 are medicinal. India is one of the world’s 12 biodiversity centers, with the presence of over 45,000 different plant species; about 15,000-20,000 plants have good medicinal value. However, only around 7,000 species are used for their medicinal values by traditional communities. Of these, only about 6% have been screened for biologic activity and a reported 15% have been evaluated phytochemically (Verpoorte, 2000). One might expect any bioactive compounds, obtained from such plants to have low human toxicity. In addition, chemical diversity of secondary plant metabolites, which result from plant evolution, may be equal or superior to that found in synthetic combinatorial chemical libraries. In India, drugs of plants origin have been used in traditional systems of medicines since from ancient times. The drugs are derived either from the whole plant or from different organs, like leaves, stem, bark, root, flower, seed, etc. Some drugs are prepared from excretory plant products such as gum, resins and latex.

Green plants are the indispensable storehouse of many chemical metabolites, which are grouped into two categories, namely: primary and secondary metabolites. The most important primary nutrients present in the plants are carbohydrates, oils, proteins, minerals, ascorbic acid and the antioxidant phenols. Other than nutrients, plants have secondary metabolites like alkaloids, glycosides, flavonoids, essential oils, phenols,
saponins, gums, resins and latex. These constituents are usually produced in different parts of the plants like, leaves, roots, fruits, bark and other parts of the plants. Secondary metabolites are the substances, produced by plants as defense chemicals.

Medicinal and aromatic plants have played an important role in the socio-cultural, spiritual and health-care needs of rural and tribal people of the emerging and developing countries. In many developing countries like India, a large section of the population still relies on traditional systems of medicine to meet their health-care needs. Further, more and more people in the developed countries have turned to alternative therapies and herbal medicines, resulting in many fold increase in the demand of medicinal plants and their products in all parts of the world. In recent years, there has been growing interest in alternative therapies and the therapeutic use of natural products, especially those derived from plants (Goldfrank et al., 1982; Vulto and Smet, 1988).

The abundance of plants on the earth's surface has led to an increasing interest in the investigation of different extracts obtained from traditional medicinal plants, as potential source of new antimicrobial agents (Rojas et al., 2003). Hence, researchers are increasingly turning their attention to folk medicine, looking for new drug leads to develop better drugs against microbial infections. Local plant uses have been studied extensively in India by various researchers (Grover et al., 2002; Ayyanar and Ignacimuthu, 2005; Muthu et al., 2006). Approximately 1500 species of vascular plants are used for medicinal proposes by tribal and ethnic groups in India (Handa, 1998). Preservation of traditional plant knowledge as a part of the global heritage has been championed by several authors (Lambert et al., 1997; Ayyanar and Ignacimuthu, 2005). In the developing world, traditional medicinal uses of plants are often the only or primary
healthcare available to people and are of extreme importance (Sheldon et al., 1997). The Western Ghats of India and Sri Lanka together comprise a biodiversity hotspot and have more than 2000 endemic vascular plant species (Myers et al., 2000).

The Western Ghats region is well known for its biological diversity and has always been a "Biological paradise". Its diversified land forms and environmental conditions support an array of forest types. The gigantic Western Ghats of peninsular India are one among the 35 hotspots in the world identified for biodiversity conservation. The Western Ghats of India covers an area of 1,60,000 sq. km. which is one among the ecologically richest regions and considered as one of the eight 'hottest' biodiversity hotspots of the 34 identified biodiversity hotspots worldwide. Of the 15,000 plant species recorded so far, 4,000 are endemic to this region. Approximately, 450 angiosperm families are used by humans. However, a handful of these families are exceedingly vital for human existence.

Family Euphorbiaceae is one among the large flowering plant families, consisting of wide variety of vegetative forms, some of which are plants of great importance. The family is very diverse in range, composed of all sorts of plants, ranging from large woody trees through climbing lianas to simple weeds, which grow prostrate to the ground. Members are widely distributed all around the world constituting both old world and new world plants, some of which are yet to be identified, possibly because of the wide variety of chemical composition of its members, many of which are poisonous but useful.

Enthnomedicine of Euphorbiaceae is very diverse. According to Seigler (1994), the diversity is due to the presence of a wide range of unusual secondary metabolites, that makes most of the members poisonous. The family hosts one of the most poisonous
substances of plant origin, that is, ricin, which is a protein found in *Ricinus communis* (Palatnick and Tenenbein, 2000), whereas, other species like *Jatropha curcas* are reported to be comparatively poisonous (Mampane et al., 1987).

*Epiprinus mallotiformis* Muell. belongs to the family Euphorbiaceae. The plant can be described as – Tree in height 10 m. Leaf alternate, blade 7-14 × 3.5 cm, oblong, entire or toothed, elliptic. Flowers sometimes irregular, calyx 4-8 lobed, valvate, equal or unequal; petals 0; disc 0; stamens as many as calyx lobes, surrounding a column pistillode, anthers dorsifixed, glandular at base; ovary-3 celled ovules 1 per locule; style trifid and again branching into 6 stigmatic arms, fruit schizocarpic and seed globose.

The plant distributed throughout the Western Ghats (evergreen forest) of Karnataka. The plant has been traditionally used to treat the diuretic, digestive problems, dysentery, external wounds, antimicrobial, laxative, remedy for vesicle calculi, piles, diuretic, remedy for urinary discharges, syphilis ulcers, gonorrhea (Gowda 2004). The present study carried out to identify the active phytochemical composition and pharmacological properties of *Epiprinus mallotiformis* as a medicinal plant.
References


