



## Assessment of ethno-medicinal plants from Harangi hill: Madikeri District

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### ABSTRACT

*A survey in Harangi hill in Madikeri district has been done for investigations of Ethano-medicinal plants. About 34 plants have reported in this preliminary study which is used for various diseases. This manuscript is very useful for those who working with herbal plants especially doctors and researchers those who are practicing Indian medicine system.*

**Keywords :** Harangi hill, ethno-medicinal, Ayurveda

### Introduction

India holds rich variety of flora that no other country can boast of India covers more than 45,000 species of flora, out of which there are several species that are not found anywhere else. Since ancient times, use of plants as a source of medicines has been the inherent part of life in India. It has been estimated that out of 17,000 plant species occurring in India, 9,000 are commonly useful of which 7,500 are medicinal 3,900 are culturally important, 525 are used for fiber, 400 are for fodder, 300 for pesticides and insecticides 300 for gums and resin and 10 for perfumes Duthie (1960). There are more than officially documented plants in India that holds great medicinal potential. India comprises of seven percent of world's flora. Even today, the world health organization estimates that up to 70 percent of the people depend on the traditional medicines. Ethno-medicinal plants come under traditional medicine Jain & Rao (1967). Right now they are playing very important role in the Indian medicinal system called Ayurveda. In the present study we have assessed the presence of the medicinal plants in Harangi hill, which is located near Kushal nagar.

Harangi hill situated between 9°36'N latitude and 69°35'N E longitude is 9 km away from Kushal Nagar city. It is a small mountain with an altitude of 800 m from the base of the hill with scrubby forest spread all around. This hill is border to the Western Ghats which is situated in one of the hottest spot of Biodiversity. The temperature ranges from 17°C to 30°C and relative humidity varies from 19% to 80%. To study the medicinal plants diversity and variability collections were made in Harangi hill once a month from February 2008 to January 2009. It was an uninhabited area thirty years ago with a small temple at the hilltop which has now become a famous tourist spot with no human population.

### Materials and Methods

During the course of exploration we have collected all plants which are easily seen in the hill. Some are found in the deep scrubby forest recognized by Ayurvedic doctors who is second author of this paper during our visit to the hill. The

collected plants specimen was deposited in the department of biology, A E T College, Kushal Nagar. The Botanical names are arranged alphabetically followed by family, plant parts used and medicinal uses are listed in table 1.

### Observation and Results

Plant species belonging to 22 genera and 34 species of families are documented in the table 1. This reflected the diversity of the medicinal plants present in Chamundi hill, Mysore. Scrutiny of table 1 also shows which parts of plants are used for medical purpose and for which treatment. According to our collection the Ceasalpiniaceae is common and abundant family present in the hill compare to other species

From earlier times people made use of plants for their basic needs medicare and live hood. Some plants used by people are cultivated, while others grow in wild conditions. The tribal depends predominantly on plants for food, clothing, medicine, oil agricultural implements, art, craft, huts and for other requirements. Plants used to prevent abortion, achieve easy delivery, respiratory gastric problems, antidote for snake and scorpion bites, fever toothache, cough, jaundice, and sexual power (Pandey, Patel & Shivani (1998), Singh (1987), Singh & Maheswari (1989), Singh (1991), Singh & Singh (2001), Shukla (1991), Kalpana Singh, Sweetey Gupta & Mathur (2010)

### Discussion

Majority of plants species belong to families Ceasalpiniaceae, Moraceae, Piperaceae, Euphoraceae, Asteraceae, Brassiacaeeae etc. Among these 34 plants collected belonging to dicots and to monocots. Out of which 55% are trees, 10% shrubs, 15% herbs, and 20% creepers. The percentage of Plants parts used is as follows- fruits 23%, leaves 41%, Root 10%, seeds 8%, stem 08%, whole plant 08%, oil 5%, and latex 5%. The percentage study adds to the earlier knowledge regarding use of plants in the treatment of common diseases.

S. No	Botanical name	Family	Plants parts	Medicinal use
1.	<i>Achyranthes aspera</i> L.	Amaranthaceae	Leaves, Fruits	Dysentery, Fever,
2.	<i>Argemone maxicana</i> L.	Papaveraceae	Leaf juice	Wounds
3.	<i>Azadirachta indica</i>	Meliaceae	Leaves, Stems	Tooth problem, skin diseases
4.	<i>Bacopa monnieri</i> L.	Scrophulariaceae	Whole Plant	To cure lymph gland
5.	<i>Brassica Compestris</i> L.	Brassicaceae	Seeds	Suffering from evil eyes
6.	<i>Bauhinia purpurea</i> L.	Caesalpinaceae	Fruit	To cure lymph gland
7.	<i>Calotropis gigantean</i> L.	Asclepidaceae	Leaves	Easy delivery
8.	<i>Calotropis procera</i> L.	Asclepidaceae	Latex	To reduce tooth ache
9.	<i>Cassia fistula</i> L.	Caesalpinaceae	Fruit	Skin disease fever
10.	<i>Cassia occidentalis</i> L.	Caesalpinaceae	Leaves juice	Tonsils treatment
11.	<i>Cassia tora</i> L.	Caesalpinaceae	Seeds	To cough
12.	<i>Centella asiatica</i> L.	Apiaceae	Stem, Leaves	Memory Bronchitis
13.	<i>Crotalaria burhia</i> L.	Fabaceae	Leaves juice	Remove kidney stones
14.	<i>Citrus lemon</i> L.	Rutaceae	Fruits	Acidity, sunstroke
15.	<i>Coccinia grandis</i> l.	Cucurbitaceae	Leaves	Reduce acidity
16.	<i>Datura meta</i> L.	Solanaceae	Seeds	Abortion
17.	<i>Emblia officinalis</i>	Eubhorbiaceae	Fruits	Short sightedness
18.	<i>Ficus benghalensis</i> L.	Moraceae	Leaf, Latex	Rheumatism
19.	<i>Ficus religiosa</i> L.	Moraceae	Fruits, Leaves	Male and female fertility, wounds
20.	<i>Lawsonia intermis</i> L.	Lythraceae	Leaves	Boils and Burns
21.	<i>Mangifera indica</i> L.	Anacardiaceae	Bark, seeds	Cough, Diarrhoea
22.	<i>Morus alba</i> L.	Moraceae	Leaves	Diarrhoea
23.	<i>Musca paradistica</i> L.	Musaceae	Fruits	Diarrhoea
24.	<i>Ocimum sactum</i> L.	Labiatae	Leaves	Cough, Cold
25.	<i>Parthenium hysteroporul.</i>	Piperaceae	Flower ,Leaf	Cuts Cold and wounds
26.	<i>Piper nigrum</i> L.	Piperaceae	Fruits	Juandice
27.	<i>Ricinus communis</i> L.	Euphoraceae	oils	Pneumonia, Body pain
28.	<i>Raphanus sativus</i> L.	Brassicaceae	Roots, Leaf	Acidity
29.	<i>Saraca asoca</i> L.	Caesalpinaceae	Bark	Anthelmintic, piles
30.	<i>Sida cordifolia</i> L.	malvaceae	Leaf, Roots	dysentery
31.	<i>Solanum indicum</i> L.	Solanaceae	Fruit, Roots	Bronchitis, Leprosy
32.	<i>Tinospora cordifolia</i>	Menispermaceae	Roots	Jaundice, snake bait
33.	<i>Tridex Procumbenus</i> L.	Asteraceae	Leaf	Wounds, burning wounds
34.	<i>Xanthium Strumarium</i>	Asteraceae	Leaf, Seeds	Malaria, Chronic

Table1. Shows the list of the plants which are collected at the Harangi hill during February 2008-January 2009

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