

Published on: 1st May 2012



WILD MEDICINAL PLANTS OF KAPPAT HILLS, GADAG DISTRICT, KARNATAKA PART-II

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ABSTRACT:

The present paper deals with the herbal remedy to cure various ailments in and around the area of Kappat hills, Gadag district, Karnataka. The survey was carried out during 2009-2010 in view of documenting traditional knowledge. The Kappat hill is blessed with rich diversity of herbal medicinal plants and well known for the number of deity's namely Kappateshwar temple, Nandiveerimath and Goulgerimath. In an ethno-botanical exploration of this area methods of herbal preparation, parts used and local names are discussed with the herbal healers (Medicine-men) and documented the same 27 species of medicinal plants belonging to 25 genera and 17 families have been recorded.

KEY WORD: *Ailments, Herbal remedies, Kappat hills, Medicine-men.*

INTRODUCTION:

India has one of the oldest and richest and most diverse cultural traditions associated with the use of medicinal plants (Udayan and Indira, 2009). One of the oldest treaties in the world is Rig-ved (4500 BC-1000 BC) where healing properties of some herbs are mentioned in the form of sonnets, later on special faculty was developed known as Ayurveda mostly dealing with the human philosophy of health including utilization of medicinal plants for restoring normal physical fitness (Joshi, 2000). Over 90% of the medicinal plants traded in the country are collected from the wild and only few are obtained from the cultivated sources (Udayan and Indira, 2009).

METHODOLOGY:

The study area is located between 15° 16' & 16° 55' North latitude and 75° 10' & 75° 55' East longitude. Extensive survey work was conducted in and around the villages of Kappat hills namely Doni, Harogeri, Kadkol, Goulgerimath, Shingatalur area. The local name, parts used, method of preparation, dosage and duration was documented through interaction with the herbal healer (Medicine-men). The collected specimen were identified with the aid of floras (Cooke, 1903; Gamble 1935; Saldanha, 1984; Saldanha,

1996). The herbarium specimens were deposited in the dept of Botany, Karnatak Science College, Dharwad.

RESULTS AND DISCUSSION:

The present investigation on wild medicinal plants in and around Kappat hills resulted about 27 species belongs to 25 genera and 17 families have been documented as potential medicinal plants. Species names are arranged in alphabetically followed by the family name, local name, uses and method of preparation (Table 1). These plants are helpful to treat around 23 types of ailments. Among them 8 plants were herbs, 10 shrubs, 5 trees and 4 climbers.

Most of the species from Mimosaceae family (14.8%), Caesalpiniaceae (11.11%) Acanthaceae, Amaranthaceae, Asclepiadaceae, Rubiaceae, Solanaceae (7.40%), the remaining families Apocynaceae, Aristolochiaceae, Asteraceae, Capparaceae, Cucurbitaceae, Euphorbiaceae, Lamiaceae, Meliaceae, Vitaceae and Zygophyllaceae (3.70%). In most of the cases leaves were used predominantly (34.78%) for drug preparation followed by whole plant (30.43%), seeds (19.56%), Fruits (8.69%) and roots (6.52%).

Among the drug formulations powder (67.88%), juice (21.42%) were frequently used, paste (10.71%) are less in use. The literature reveals that some uses of the medicinal plants were not reported by the earlier workers for such a purpose (Kirtikar and Basu, 1933; Anonymous, 1992; Anonymous, 1994). They are *Peristrophe paniculata* (leaf powder) along with seed powder *Trachyspermum ammi* and *Cuminum cyminum* with water is used to treat bone fever. Leaf powder of *Rhinacanthus nasutus* and *Peristrophe paniculata* to treat fever. Leaf paste of *Achyranthes aspera* with salt is used to cure tonsils. The plant powder of *Alternanthera pungens* with seed powder of *Piper nigrum* and fruit powder of *Syzygium aromaticum* and *Allium cepa* is used to cure ulcers. Leaf powder of *Wrightia tinctoria* is used as aphrodisiac, leaf paste of *Calotropis procera* is used for snake bite. Leaf juice of *Tridax procumbens* is used to treat asthma. The seed powder of *Caesalpinia bonduc* is used to treat stomachache. Leaf powder of *Securinega virosa* with seed powder of *Cuminum cyminum* sugar is used to treat burning sensation in stomach. The leaf powder of *Ocimum tenuiflorum* with banana in used to treat piles. The fruit powder of *Acacia chundra* is used for cold and cough. The roots of *Mimosa hamata* is used to treat jaundice. The leaf paste of *Prosopis chilensis* is used to treat rabies and fruits were used as aphrodisiac. The leaf juice of *Canthium parviflorum* used to cat bite & dog bite .The plant powder of *Solanum trilobatum*, *Cassia italica*, *Ocimum tenuiflorum* along with seed powder *syzygium aromaticum* is used to treat asthma. The plant powder of *Tribulus terrestris* with milk is used to treat leucorrhoea.

All documented species have therapeutic activity, but combination of medicinal plants help full to cure chronic disease. The herbal healers (medicine-man) in the study area used their plants in combination to treat human ailments. Leaves of *Peristrophe paniculata* seed of *Cuminum cyminum*, *Trachyspermum ammi* is used to cure bone fever. For ulcers the plant powder of *Alternanthera pungens* with seed powder

of *Piper nigrum*, fruit powder of *Syzygium aromaticum* and bulbs of *Alium cepa* are used. For diabetes the plant powder of *Gymnema sylvestre*, *Cassia auriculata* and *Cassia italica* were used. While in asthma treatment the whole plant powder of *Solanum trilobatum*, *Cassia italica*, *Ocimum tenuiflorum* and seed powder of *Piper nigrum* and fruit powder of *Syzygium aromaticum* were used.

The medicinal uses of herbal drugs and method of preparation are different from one region to another region in Karnataka. For example *Ocimum tenuiflorum* was used for skin diseases by kunabi tribes of Karnataka (Harsha *et al.*, 2002), In Bhadravati taluk, the same plant used for eczema (Shivanna and Rajkumar, 2010). However the local herbal healers (Medicine-men) of Kappath hills were used to treat piles. *Cassia fistula* used to treat body swelling and dropsy by Siddis of Uttar Kannada district (Bhandary *et al.*, 1995). The same plant *Cassia fistula* is used for herpes (Parinitha *et al.*, 2004). Nevertheless, the local herbal healers in Kappat hills used to treat this plant for burning wounds.

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Table 1: Enumeration of plant species, their local names, diseases and method of preparation.

Sr. No	Plant name / Family	Local name	Diseases	Method of preparation
1	<i>Peristrophe paniculata</i> (Forsk) Burmit. Acanthaceae	Eluvusandaka	Bone fever	Leaf powder (3-5 g) with seed powder (3-4 g) of <i>Cuminum cyminum</i> and <i>Trachyspermum ammi</i> with a cup of water (60-70 ml) twice in a day for about 3-4 days.
2	<i>Rhinacanthus nasutus</i> (L.) Kurz Acanthaceae	Vishamadhari	Fever	The whole plant powder of (3-5 g) and <i>Peristrophe paniculata</i> with a cup of water (60-70 ml) twice in a day for about 3 days.
3	<i>Achyranthus aspera</i> L. Amaranthaceae	Uttarani	Tonsils	The paste of young shoots (10-15 g) with salt is given, twice in a day for about 2-3 days.
4	<i>Alternanthera pungens</i> Humboldt. Amaranthaceae	Hadargitti mullu	Ulcers	The whole plant powder (4-5 g) with seed powder of <i>Piper nigrum</i> , <i>Syzygium aromaticum</i> and <i>Allium cepa</i> is given with a cap of water (60- 70 ml) given twice a day for about one week.
5	<i>Wrightia tinctoria</i> R.Br Apocynaceae	Halaglatti	Aphrodisiac	Leaf powder (3-5g) given once in a day for about a week.
6	<i>Aristolochia bracteolata</i> Lam Aristolochiaceae	Kattegiruba	Ring worms	Root juice (5-6 ml) with leaf juice (5-6 ml) of <i>Tridax procumbens</i> and <i>Acalypha indica</i> is externally applied twice in day for about six months
7	<i>Gymnema sylvestre</i> (Retz.) R.Br. Asclepiadaceae	Karjagenballi	Diabetes	The whole plant powder (3-5g) with the powder of <i>Andrographis paniculata</i> and <i>Cassia italica</i> is given twice in a day for about six months.
8	<i>Calotropis procera</i> (Ait) R.Br. Asclepiadaceae	Yakki gida	Snakebite	Leaf paste (10-15 g) is given once in a day.
9	<i>Tridax procumbens</i> L. Asteraceae	Tiki kasa	Asthma, burning sensation in stomach	Leaf juice (20-25 ml) given twice a day about a week. The plant powder (5-6 g) given twice a day for about 2-3 days.
10	<i>Caesalpinia bonduc</i> (L.) Roxb. Caesalpiniaceae	Gajjuga	Stomachache	The burnt seed powder (3-5 g) is given with cup of water (50-60 ml) twice a day for about 2-3 days.
11	<i>Cassia fistula</i> L. Caesalpiniaceae	Kakke	Burning wounds	The burnt fruit powder is mixed with coconut oil is externally applied until cured.
12	<i>Cassia italica</i> (Miller) Lam. Caesalpiniaceae	Nelavari	Anorexia	The whole plant powder (3-5 g) with a cup of milk (50-60 ml) given once in a day for about 5-6 days.

Sr. No	Plant name / Family	Local name	Diseases	Method of preparation
13	<i>Cadaba fruticosa</i> (L) Druce. Capparaceae.	Sihiguduchi	Bonesetting	The plant powder (5-6 g) with leaf powder of <i>Blepharis repens</i> (3-4 g) is given twice in a day about a week.
14	<i>Momordica charantiya</i> L. Cucurbitaceae	Haagal balli	Stomachache	Leaf juice (20-25 ml) is given orally twice in a day for about 2-3 days.
15	<i>Securinega virosa</i> (Willd) Baillon. Euphorbiaceae	Gandulli	Burning sensation in stomach	Leaf powder (3-5 g) with seed powder <i>Cuminum cyminum</i> (1-2 g) and sugar (1-2 g) along with cup of milk (50-60 ml) given once in a day for about a week.
16	<i>Ocimum tenuiflorum</i> L. Lamiaceae	Tulasi	Piles	Leaf powder (5-6 g) is filled within banana is given orally once in day about a week.
17	<i>Azadirachta indica</i> A. Juss. Meliaceae	Bevu	Scorpion sting	The leaf juice (5-10ml) with salt is dropped in to both the ears
18	<i>Acacia chundra</i> (Rottler) Willd Mimosaceae	Tered	Leucorrhoea	The leaf powder (5-6g) is given with milk cream once in a day for about 41 days.
19	<i>Acacia latronum</i> Willd Mimosaceae	Hodijaali	Cold and cough	The fruit powder (4-5g) given with cup of water (50-60ml) orally, twice in a day for about 4-5 days.
20	<i>Mimosa hamata</i> Willd Mimosaceae		Jaundice	The roots are tide to the arm and keep it wet with water.
21	<i>Prosopis chilensis</i> (Molina) Stuntze Mimosaceae	Jaali gida	Rabis, aphrodisiac	The leaf paste (15-20g) is given with water (50-60 ml) twice in a day for about a week The fruit powder (5-6g) is orally given with honey (10-15ml) twice in a day for about a week.
22	<i>Canthium parviflorum</i> Lam. Rubiaceae		Dog and cat bite	The leaf juice (15-20 ml) given orally once in a day about 3 days.
23	<i>Morinda pubescens</i> Smith Rubiaceae	Malaga	Cuts and wounds	The leaf powder is mixed with coconut oil to apply externally.
24	<i>Solanum trilobatum</i> L Solanaceae	Mullu sondi	Asthma	The plant powder paste <i>Cassia italica</i> , <i>Ocimum tenuiflorum</i> and is mixed with seed powder of <i>Piper nigrum</i> , fruit powder of <i>Syzygium aromaticum</i> given orally with cup of milk (50-60 ml), twice in a day for about 41 days
25	<i>Withania somnifera</i> (L.) Dunal	Ashwagandhi	Leucorrhoea	The root powder (5-6 g) given orally with goat milk (50-60ml) twice in a day for about a week

Sr. No	Plant name / Family	Local name	Diseases	Method of preparation
	Solanaceae			
26	<i>Cissus pallida</i> (Wight & Arn.) Steudel Vitaceae	Hondagumbala	Rheumatism	The juice of plant is applied externally
27	<i>Tribulus terrestris</i> L Zygophyllaceae	Neggilmullu	Leucorrhoea	The plant powder (5-6g) is given with a cup of milk (50-60ml) twice in a day for about a week.