

People's knowledge on medicinal plants in Sringeri taluk, Karnataka

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The present paper reports therapeutic uses of eleven medicinal plants used by the indigenous people for curing many of the skin diseases. For ringworms, eczema and scabies, the species of *Lobelia*, *Vitex*, *Asparagus*, *Leucas* and *Ocimum* are used, during prickly heat, itching and measles, species of *Ocimum*, *Asparagus*, *Adhatoda*, and *Leucas* are used, while during small pox, species of *Hibiscus* and *Vitex* are extensively used. Indigenous people depend upon these plants for curing the skin disorders rather going for modern medicine. Documentation of such knowledge is important to evaluate culture and protection of people's exert on local biodiversity, since these aspects have implications in conservation and management of local resources.

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The use of various parts of several plant drugs as indigenous medicine to cure specific ailments has been in vogue from ancient times. We have rich heritage of knowledge about medicinal plants with tribals gathered through experience of generations in the form of folk medicine. But in the last few decades, there is an unprecedented depletion of biodiversity, its habitat and knowledge world over. This raised a global concern, as these three factors have been fundamental natural resources for human development. So far, the full potential of the folklore knowledge has not been scientifically explored.

The present work is an effort to document and explore the common people's knowledge about some plants of Sringeri taluk of Karnataka. Some ethnomedicinal research work from various parts of the country has been reported¹⁻⁷. Documentation of people's knowledge and perceptions about biodiversity and conservation through People's Biodiversity Register in various taluks of Karnataka has been done⁸⁻¹⁴. There is also report on medicinal plants of Sringeri taluk¹⁵.

Methodology

Sringeri is a small taluk situated in Chikmagalur district, which is a part of one of the globally

recognized biodiversity hot spot, western Ghats, rich in flora and fauna. The most of the vegetation found here are of evergreen type, consisting of many medicinal rare and endangered species. In the study area, five villages, Kavadi, Kuthugodu, Nemmaru, Kigga and Hulugaru were selected in the five different directions, taking Sringeri town at the center (Fig. 1).

Regular field visits are undertaken to the study area once a month during September 2001-January 2002. Information pertaining to the plants selected was collected by both individual and household interviews and recorded in a questionnaire. The questionnaire was prepared according to the WHO's questionnaire model, which included almost all the aspects regarding the plants such as habit, habitat, usage form, medicinal uses, etc. Almost all the types of people were interviewed. To make effective communication, interviews were taken in the local Kannada language.

Results

As a result of survey, many interesting and useful information about the plants were identified. More than 53 house owners were surveyed for collecting the medicinal properties of 11 plants. Information gathered from the indigenous people during the survey giving botanical name, family, vernacular name(s), therapeutic uses, uses for the domestics and other economic uses are enumerated as follows:

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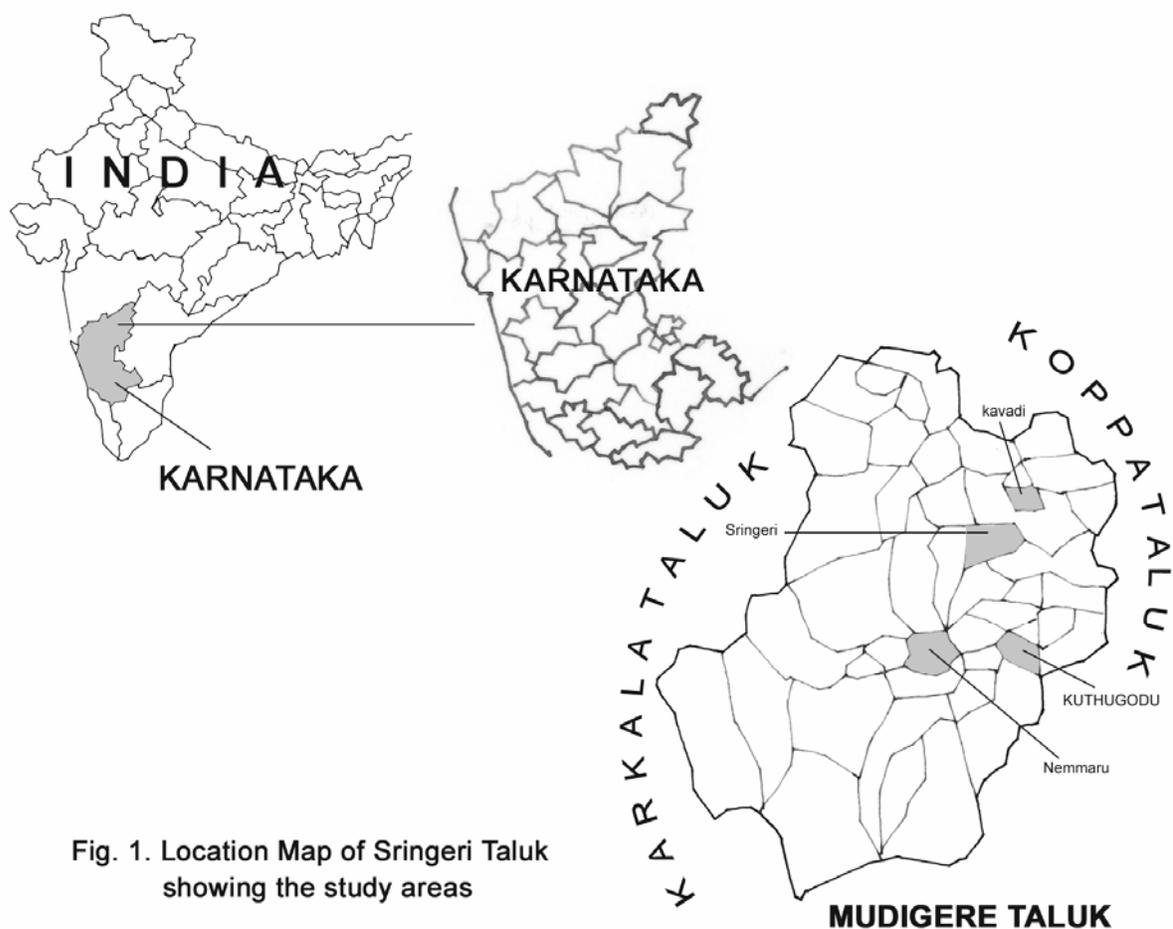


Fig. 1. Location Map of Sringeri Taluk showing the study areas

***Adhatoda vasica* Nees.** (Acanthaceae), Local name: *Aadusoge*

Therapeutic uses: Leaf extract mixed with honey is given to children during cough; *Kashaya* (leaf infusion) is given to the pregnant women for curing cough. Bath of leaves of the plant along with the tender leaves of *Vitex negundo* Linn. boiled in water is given to get rid of small pox, measles, chicken pox and scabies. This bath also removes skin scars caused by skin diseases. For stomachache, leaf infusion is administered. Leaf extract is also used for stomach abnormalities. Leaf ash is used to cure scabies and eczema. Plant leaves along with *Centella asiatica* Urban leaves grounded with milk is applied to cure herpes. The plant is also used in children's asthma, high fever, congestion, swellings and dysentery.

Uses for the domestic animals: Leaf extract is given to the cattle for curing swellings and fever.

Economic uses: The plant is burnt and the fumes are used as mosquito and pest repellents. The plant

has got wide use as a hedge plant and the leaves yield a good litter.

***Asparagus racemosus* Willd.** (Liliaceae), Local name: *Halavu makkala beru*

Therapeutic uses: Tuber infusion is given to ladies after parturition and children for good health. During seizure, mixture of dry tubers, grounded with milk is given to children. Tuber extract along with ginger is given as expectorant. Tubers are also used as tonic for tonsil and as a remedy for cold. During phlegm, plant leaves along with *Artemisia* tuber is used. Further, leaf extract is reported to be effective antidotes for snakebite.

Economic uses: Plant tubers are used to prepare *Chogaru*, a colourant to give colour to areca nut.

***Catharanthus roseus* G. Don** (Apocynaceae), Local names: *Sada pushpa*, *Nithya pushpa*

Therapeutic uses: Flowers along with *Tagetes erecta* Linn. flowers soaked in water for some time is

consumed for different ailments. Leaf extract is used in diabetes, cancer and blood pressure.

***Centella asiatica* Urban** (Apiaceae), Local name: *Ondelaga*

Therapeutic uses: Roots on consumption help in cleaning the tongue and mouth. Root extract is given during cough, and also given to children to avoid stumbling or mal speaking. Leaf oil is applied as cooling agent. Leaves grounded with pepper are given during nerves weakness. Sometimes, due to lack of iron content in the body, the joints pain occurs. To get rid of this pain, a preparation, *Tambali* made from the leaves are used. The whole plant is also used during jaundice as a diet, piles, fever, blood pressure, white bleeding and indigestion. Leaves are also reported to be effective in improving memory.

Economic Uses: The whole plant especially the leaves are used to prepare hair oil. Leaves are used to prepare *chutney*, *hasuvale*, *tambali* and *toddy*.

***Ervatamia heyneana* Cooke** (Apocynaceae), Local name: *Maddarasa*

Therapeutic uses: Leaf extract is applied externally on mumps. Bark juice along with oil, cumin and chilly, boiled and cooled is applied on wounds or cuts. The bark boiled with curcuma and oil is applied on wounds. Fresh bark extract boiled with *Carcoma* and cumin is applied on scabies. The latex is also applied on wounds, as an external applicant in case of tonsillitis and to get rid of congestion. Whenever, there is a pain in limbs, there is a formation of pimple like structures between the legs and hand, called *Ganale* in local language. To get rid of this, latex is applied externally.

Uses for domestic animals: Some times the cattle suffer from loss of hairs from the body and flaking of skin (a thin layer of skin starts getting out) takes place, at that time the bark along with the *Anacardium occidentale* Linn. bark added in the animal feed prepared from the rice, boiled water fed to the cattle was found to be effective against such skin diseases.

Economic uses: The latex is used as gum. Leaves are used for ripening of banana and other fruits.

***Hibiscus rosa-sinensis* Linn.** (Malvaceae), Local name: *Dasavala*

Therapeutic uses: Leaf and petal extract is used as shampoo, used against dandruff, for the healthy hair growth and blood purification. For smallpox and scabies, different dishes prepared from leaves and petals are given as diet.

Economic uses: Plant is used for culinary purposes; it is grown as hedge and ornamental plant.

***Leucas aspera* Spreng.** (Lamiaceae), Local name: *Gadde tumba*

Therapeutic uses: During toothache, root decoction is used as gargle. Root is also administered in tonsillitis. During prickly heat, a bath of *Leucas* leaves boiled in water is administered. Leaf extract is extensively applied during tonsillitis. During tonsillitis, leaf extract is used along with salt or with lemon juice. Leaf extract is also used for curing scabies, dry cough and as coagulant during bleeding.

Uses for the domestic animals: Leaf extract is given to cattle for consumption during stomach disorders. Half a cup of juice prepared from the plant leaves along with *Leucas* leaves and *Stephania japonica* roots is given for consumption during snakebite.

***Lobelia nicotianaefolia* Heyne** (Companulaceae), Local name: *Heddumbe*

Therapeutic uses: Root extract is given during tonsillitis and stomachache. The equal amount of leaf extract along with calcium carbonate mixed properly is applied externally as a liniment for tonsillitis. During toothache, mumps and tonsils, paste of *Leucas aspera* Spreng. root extract with lemon juice is applied externally. Leaf extract is also used in ringworm and eczema as an external liniment. Leaf juice is also applied externally on mumps. Dried powdered leaves are applied in case of scabies and wounds. During cold, cough and congestion, leaf extract with honey is given. Leaf extract is also used in ringworm and wounds. Apart from these, the plant is used during epilepsy and snakebite.

Uses for domestic animals: Mixture of leaf extract and little amount of soil is applied externally on wounds during bleeding in cattle limbs. When, the limbs of cattle and pigs especially the hoof part get infected with worms, leaf extract is applied. When, domestics get unconsciousness due to food poisoning, leaves or whole plant is rubbed near nose and mouth of the cattle to make them conscious.

Economic uses: The plant is used as an effective pesticide in paddy field. During early flowering, the panicles of the paddy plant are made beaten with fresh leaves and branches of the *Lobelia* plant to remove the worms from the field. Fresh leaves are inserted into the holes of the crabs to make the field free from crabs. Leaf extract is used against leach. The plant is

also cultivated as a hedge; leaf yields a good litter and the flowers are used for local decorations.

***Ocimum sanctum* Linn.** (Labiatae), Local name: *Tulsi*

Therapeutic uses: Leaf extract is given during cold for consumption along with coconut oil. Leaf extract along with honey is administered in cold, cough, and congestion. Mixture of leaf extract and salt is applied on scabies, measles, itching and ringworms. Apart from these, leaf extract is used for fever, headache, stumbling voice, stomachache, gastric disorders, bodyache and toothache (with *tulsi* and clove leaves). The plant acts as antidyseric; it is also used against scabies and pimples.

***Rubia cordifolia* Linn.** (Rubiaceae), Local name: *Manjatte balli*

Therapeutic uses: Leaf extract is applied on scabies and ringworm. Leaf extract is used during cataract of eyes, conjunctivitis and also to clean the eyes. The plant is mainly used in curing some of the heart problems.

Uses for domestic animals: During or after parturition the leaves are fed to cattle to remove wastes from the body.

Economic use: The plant root is used in the preparation of *Chogaru*, a colourant used in processing of areca nuts.

***Vitex negundo* Linn.** (Verbenaceae), Local names: *Lakki, Bili lakki*

Therapeutic uses: Tender leaves along with *Cuminum* and *Adhatoda* leaves, clove and *Myristica* boiled in coconut oil are applied during scabies. Water boiled with leaves is used for bath (7-8 days) in scabies and small pox. Fresh leaves are used to give an air blow during small pox. *Khashaya* (leaf infusion) is used as cough remedy. Leaf ash is applied as a remedy during scabies, and on burns (with oil). During swellings and inflammations, a mixture prepared with the leaves, lemon juice and salt is warmed and applied to the affected area. Leaf extract is used during mumps to remove dust and sand particles from the wounds. The whole plant is burnt and the fumes coming from charcoal is inhaled to cure fever.

Uses for domestic animals: Leaf extract is used to apply whenever cattle suffer from limb pain, swellings, cracks and wounds.

Economic uses: The plant has got a traditional and spiritual use during festivals and religious

celebrations. The plant is used as an effective mosquito repellent. The plant is also used as a biopesticide in paddy fields and storehouses. Fresh leaves are spread over the floor of the cattle house to get rid of worms as a worm repellent.

Discussion

It was observed that most of the people are using both the traditional and modern systems of the medicine for their ailments. People who extensively and solely use these plants as medicine, found it to be effective without any side effects. Though some of the information already exists in literature, some have been documented for the first time during the survey. Among eleven medicinal plants studied, most of them were found to cure many of the skin diseases especially ring worms, eczema and scabies. Further, plants were found to be effective during mumps, tonsillitis epilepsy, blood pressure, diabetes, heart problems, asthma, cancer, fever, jaundice, dysentery, gastric and tuberculosis, toothache, as blood purifiers, against stomachache, stomach disorders and eye problems. Plants were also found to be used as effective antidotes, to improve memory power, as coagulant during bleeding, and as antidandruff agent.

Plants are also extensively used for different domestic purposes. Plants are used as hedge plants, as ornamentals and for religious value. Some plants were also used as an effective fruit-ripening agent, used in oil extraction, *toddy* preparation, in areca colourant preparation, as mosquito and vermin-repellents. The present study revealed that the folk medicine is a very important aspect of medical anthropology and is rightly attracting attention. Though the modern medicine system has made more spectacular strides during the last century, yet many people still follow native or Indigenous System of Medicine. The indigenous or folk medicine still remain alive as precious cultural heritage in different civilizations of the world and herbal medicine continue to cater to the medicinal needs of the third world countries, as it is considered to be almost free from side effects and cost effective.

Now, there is an increasing awareness about its usefulness. It is hoped that documentation of such information will play an important role in framing the health policies for the people in general and for those living in tribal dominated regions in particular. Moreover, there has been a renewed interest in herbal medicines as it is considered to be time tested and safer than synthetic drugs. It is therefore hoped that

greater interest shown in the system can be used in curing the illness and promoting & preserving the health of people in rural or semi urban areas.

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