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Review Article

ETHNO-MEDICO-BOTANY OF MOODABIDRI RANGE WITH REFERENCE TO RESPIRATORY DISORDERS

Subrahmanya Padyana[1]*, Ravi Rao S[2], Soumya Saraswathi[3]

*[1]Professor and Head, [2]Professor, Department of PG Studies in Dravyaguna, Alva's Ayurveda Medical College, Moodabidri, Karnataka.

[3]Associate Professor, Department of PG studies in Ayurveda Samhita and Siddhanta, Alva's Ayurveda Medical College, Moodabidri, Karnataka.

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***Address for correspondence**
Dr Subrahmanya Padyana
Professor and Head, Department of PG Studies in Dravyaguna, Alva's Ayurveda Medical College, Moodabidri.
Email: drsp28@gmail.com
M: 9448327156

ABSTRACT

The study of Indian medicinal plants was first started in the early part of 20th century. The rarely available plants or drugs can be included in their day to day practice. The traditional system of medicine is very effective in many ailments, one among them is common respiratory diseases. Considering these factors, an ethno-medico-botanical survey of Moodabidri range of Dakshina Kanada district of Karnataka state was carried out.

Twenty six villages in and around Moodabdiri were identified and planned for the present study. The team local members visited each village to gather information regarding folklore practitioners and medicinal plants. A detailed proforma was prepared containing information about folklore practitioners and regarding the medicinal plants.

Information thus gathered were verified and crosschecked by making use of available classical and current literature such as Bhavaprakasha Nighantu, Raja Nighantu, Flora of Udupi, Flora of South Canara, Flora of Shimog Flora of Madras presidency, Flora of British India and also by consulting expert herbalists. About 28 plants belonging to 17 families are used as herbal remedies in respiratory disorders which was observed during the survey are listed. Local communities not only use these plants in different respiratory ailments, apart from this it was observed that they take good care for their conservation and protection.

INTRODUCTION

The use of medicinal plants for maintaining health and curing diseases in human beings and animals is in practice since time immemorial. The people of rural area are still depending on the folklore herbal food and medicines for their healthy life. The study of Indian medicinal plants was first started in the early part of 20th century[1] and it was then a lot of work was done by many herbalistss. Further, an increasing effort on the documentation of ethno-medico-botanical knowledge at different areas and various communities were carried out. Finding the new medical claims of the plants helps us to give broad choice for the physicians to select the herbal drugs in different diseases, so that the rarely available plants or drugs can be excluded in their day to day practice.[2]

Respiratory disease is a medical term that encompasses pathological conditions affecting the organs and tissues that make gas exchange possible in higher organisms, and it includes conditions of the upper respiratory tract, trachea, bronchi, bronchioles, alveoli, pleura and pleural cavity[3]. The common respiratory diseases are cough, cold, asthma, rhinitis etc. The traditional system of medicine is very effective in these common respiratory diseases. Considering these factors, an ethno-medico-botanical survey of Moodabidri range

of Dakshina Kannada district of Karnataka state was carried out.

The Moodabidri Range is having diverse types of flora and also the folklore practitioners. People of Moodabidri Range represent a combination of rich cultural and ethnic diversity. We can find tribal and non-tribal folks as well as of all religions. Among tribal's in habitated in this range are Naika, Parava, Pambada and Nalike where as non-tribals are Jains, Billava, Bunta, Kulaala, Konkani, Brahmana, Gowda, Christians and Muslims. The range covers 26 villages of Moodabidri Talluk and reaches to foothills of Western Ghats.

Materials & Methods

Twenty six villages in and around Moodabdiri were identified and planned for the present study. Principal investigator, Co Principal investigator, Technical assistant and local members visited each village in regular intervals to gather the information regarding folklore practitioners and medicinal plants. A detailed proforma was prepared containing information about folklore practitioners and medicinal plants such as source of plant, local name, taxonomic identification of the plant, parts used, means of collection of plant material and part(s) used, ingredients to be added in case of multi-herbal formulations, process of preparation of the medicine and mode of application, name, sign(s) and symptom(s) of the disease(s) treated, dosage and duration of treatment, therapeutic uses, dietary restriction(s) during the treatment and food values of the plants etc. Information gathered were verified and crosschecked for its earlier documentation and authentification of plant identity by making use of available classical and current literature such as Bhavaprakasha Nighantu[4], Raja Nighantu[5], Flora of Udupi[6], Flora of South Canara[7], Flora of Shimoga[8] Flora of Madras presidency[9], Flora of British India[10] and also by consulting expert herbalists. Herbarium specimens and Photography of the rare medicinal plants with proper information were also documented.

Observations and Results

In the present study the results are arranged in alphabetical order of the botanical names of the plants. Data on each species are arranged in the following sequence: Botanical Name-Family/Habit/Vernacular name(s) in Kannada)/ Vernacular name(s) in Sanskrit (if available)/ Part(s) used and Medicinal uses. These medicinal uses include information on method(s) of preparation and administration, dosage and duration, extra ingredients added etc. About 28 plants belonging to 17 families are used as herbal remedies in respiratory disorders which was observed during the survey are listed out here.

***Acalypha indica* Linn.-Euphorbiaceae** /Herb/ Kuppegida/Harita Manjari/Whole plant, roots, leaves.

- Leaf juice is given for wheezing, cough, bronchitis, pneumonia and asthma.

***Adhatoda vasica* Nees-Acanthaceae**/Shrub/ Adusoge/ Vasa/Leaves, Roots and Flowers.

- The leaf juice with ginger juice and honey is given internally in all sorts of cough, cold and fever.
- The decoction of the roots or leaves is given in fever and respiratory disorders.

***Alseodaphne semicarpifolia* Nees.-**Lauraceae/ Tree/Muja/Bark, leaves.

- The decoction of the leaves is given in Respiratory disorders.

***Areca catechu* L.-**Arecaceae (Palmae)/Tree/ Adikemara/ Puga/ Nuts, Fruits.

- Nuts made in to a powder is taken internally with betel leaf as an anthelmentic and expectorant.

***Atalantia monophylla* DC.-Rutaceae**/Tree/ Kadunimbe/ Aranya nimbuka/ Fruits.

Juice of the fruit with honey is useful in cough, cold and asthma.

***Averrhoea carambola* L-Oxalidaceae**/Tree/ Darehuli/ Karmarang/ Fruits.

- The deotion or syrup or leha prepared out of the fruit is useful in cough and rhinitis.

***Butea monosperma* (Lam.) Taub.-Fabaceae** /Tree/ Palasha / Seeds, bark, gum, flowers.

- Decoction of the bark with black pepper and jaggery is given for cold, cough and asthma.

***Capsicum frutescens* Linn.- Solanaceae** /Under shrub/ Gandhari menasu, Jeerigemenasu/ Fruits.

- The decoction of the fruits are mixed with ginger powder given internally in cough , cold and asthma.

***Citrus acida* Roxb.-Rutaceae**/ Shrub/ Nimbe huli/ Nimbuka/ Fruit.

- Syrup prepared from the fruit is useful in cough.

***Coleus amboinicus* Lour. Lamiaceae (Labiatae)**/ Herb/ Sambrani/ Parnayavani/ Leaves.

- Leaf juice is a common home remedy for infantile cough, cold and fever.

***Datura metel* Linn.-Solanaceae** /Under shrub/Ummatta/Kanaka/ Leaves.

- Dried leaves are smoked in case of asthma and respiratory disorders.

***Melastoma malabathricum* Linn.-Melastomaceae** /Under shrub/ Nekkarika / Leaves.

- The fresh juice or decoction of the leaves is used as expectorant in cough and asthma.

***Naregamia alata* Wight & Arn.-Meliaceae** /Herb/ Nela Naringa/ Whole plant.

- Decoction of the whole herb with jaggery is given internally is usefull in cough and asthma.

***Ocimum sanctum* Linn.- Lamiaceae (Labiatae)**/ Herb/ Tulasi/ Tulasi/Leaves.

- Leaf juice is a common household remedy in fevers and respiratory disorders.

***Osbeckia muralis* Naudin-Melastomaceae/** Herb/ Nela nekkarika/Leaves

- The fresh juice or decoction of the leaves is useful in cough and asthma.

***Peperomia pellucida* (L.) Humb.Bon. & Kunth-Piperaceae**/Herb/Kappe Menasu/ Whole plant.

- Fresh juice expressed from whole plant is dropped into the nostrils in nasal congestion, nasal discharges, sneezing, cold, asthma, heaviness in the head and disorders of the nasal cavity and sinus.

***Phyllanthus emblica* L.-Euphorbiaceae**/Tree/ Nelli / Amalaki/ Fruits, leaves, root, bark.

- The decoctiobn of the fruits with honey is beneficial in chronic cough and asthma.

***Solanum americanum* Mill.-Solanaceae**/Herb /Chavi Soppu/ Kakamachi/ Leaf, fruits.

- Leaf juice with honey is given for cough and cold in children.

***Solanum anguivi* Linn.-Solanaceae**/Under shrub/ Chetrate/ Brihati/ Roots, fruits.

- Root decoction is usefull in cough and asthma.

***Solanum melongena* L. var. *insanum* (L.) Prain-Solanaceae**/Under shrub/ Kudane/ Brihati/ Fruits, roots.

- Decoction of the roots and fruits along with ginger is beneficial in cough, rhinitis and asthma.

***Tabernaemontana heyneana* (wall.)Cooke.-Apocynaceae**e/Maddarasa / Leaves, bark.

- Rice cooked with the decoction of the bark is eaten in case of chronic asthma in children.

***Tragia hispida* Willd.-Euphorbiaceae**/Twinning herb/ Ballituruche/ Dusparsha/ Whole plant.

- A decoction prepared from whole plant is given for fevers, dry cough, asthma, piles and scanty micturition.

***Tylophora indica* (Burm.f.) Merr.-Asclelpiadaceae**/Twinning shrub/Adu Muttada Balli/ Leaves

- Leaf powder with honey in small doses given in cough and asthma.

***Vitex altissima* L.f.-Verbanaceae**/ Tree/ Naviladi/ Bark.

- Decoction of the bark is given internally for asthma.

***Wattakaka volubilis* (L.f.) Stapf- Asclelpiadaceae** /Twinning shrub/Hegalu Balli/Jeevanthi bheda/ roots.

- Roots rubbed with lime juice into a paste are applied to the throat in case of sore throat and other affections of the throat.

***Zanonia indica* Linn.-Cucurbitaceae**/Climbing herb/Kandadiballi/ Stem.

- The steamed juice with sugar candy in the dose of 15-20 ml twice daily is given internally in case of chronic asthma.

***Zanthoxylum rhetsa* (Roxb.)DC.-Rutaceae**/ Tree/Kavate/Tumburu/ Bark, fruits.

- Decoction of the fresh bark with jaggery in the dose of 25-30ml given internally in case of chronic asthma.

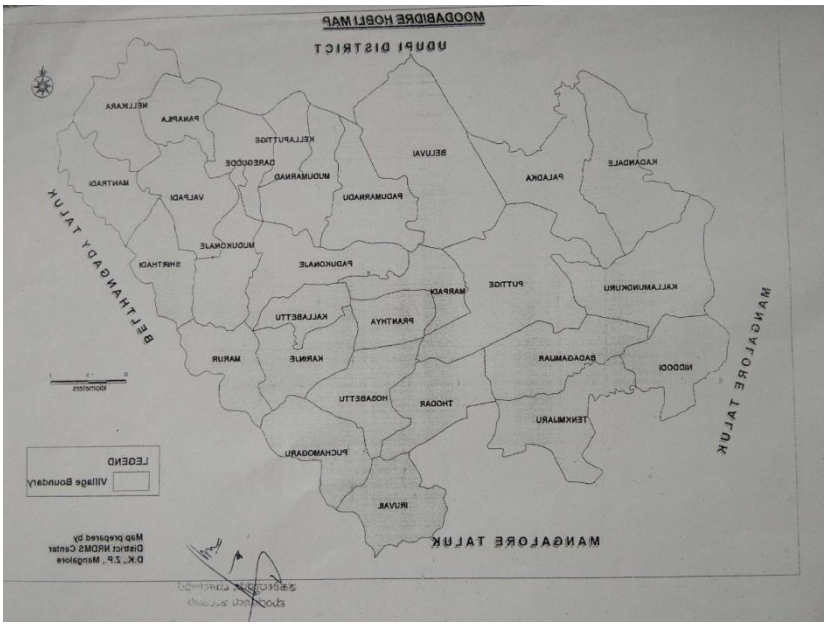
***Zingiber zerumbet* (L.) Smith-Zingiberaceae** /Herb /Kallu Shunthi/Rhizome.

- Decoction of the rhizome is given internally for respiratory disorders especially in cold, cough and asthma.

***Melastoma malabathricum* L.**

***Peperomia pelucida* (L.)**

***Capsicum frutescens* L.**



DISCUSSION

The present study reveals that, there are many such traditional medicines which are highly successful in common respiratory ailments. Due to the secrecy maintained by the folk informants, such a potent practices are fast eroding. But, in the present study, regular interaction with the folklore physicians and getting their confidence was highly benefitted to gather many such therapeutic secrets. In the present study, it was observed that folk remedies are frequently used in rural areas more than urban population successfully. Local communities not only use these plants in different respiratory ailments, apart from this it was observed that they take good care for their conservation and protection; thus contributing towards sustainable development.

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REFERENCES

1. Jain S.K. & R.Mitra, Ethnobotany in India: Retrospect and Prospect. In Jain S.K.(ed.), Contribution to Indian Ethnobotany, Scientific publishers , Jodhpur 1991. P.272-278.
2. Padyana Subrahmanya, Ethno-medico-botany of Kalanjimale range and clinical evaluation of non-documented plants with special reference to prevalent skin diseases; PhD Thesis; RGUHS, Bengaluru-2011.
3. Sengupta, Nandini, Sahidullah, Md. Saha, Goutam: “Lung sound classification using cepstral-based statistical features”. Computers in Biology and Medicine. 75(1): 118-129. doi: 1016/j. combiomed.2016.05.13

4. Chunekar K.C., Bhavaprakasha Nighantu of Bhavamishra, Chaukhamba Bharati Academy, Varanasi, 2006. P.408-420.
5. Indradeva Tripathi, Raja Nighantu of Narahari Pandith, Chaukhamba Krishnadas Academy, Varanasi, 2006. P.456-470.
6. Bhat K G, Flora of Udupi, Pub. Indian Naturalist, Udupi, Karnataka, 2003. P.870-903.
7. Bhat K G, Flora of South Kanara, Pub. "Madhuca" Udupi, Karnataka, 2014.
8. Ramaswamy S.N, Radhakrishna Rao. M., Govindappa DA, Flora of Shimoga District, Karnataka, Prasaranga University of Mysore, 2001. P.-380-395.
9. Gamble J.S., Flora of the Presidency of Madras, Bhishan Singh Mahendrapal Singh, Dehradun, Vol. I-III, 2004.
10. Hooker, JD (1872–1897). The Flora of British India. Allahabad: Vol. I–VIII, Lalit Mohan Basu.

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