Available online at www.elixirpublishers.com (Elixir International Journal)

Environment and Forestry

Elixir Environ. & Forestry 89 (2015) 37049-37051

ISSN: 2229-712X

Wild Medicinal Plants and Uncultivated Foods Used by Kaani Tribes of Pechiparai and Perunchani Hills, Kanyakumari, Tamilnadu, India

M.Velvizhi and Jemima Beryl Mohankumar

PSG College of Arts and Science, Coimbatore, Tamil Nadu, India.

ARTICLE INFO

Article history:

Received: 14 October 2015;

Received in revised form:

7 December 2015;

Accepted: 18 December 2015;

Keywords

Kaani Tribes,

Uncultivated Foods,

Medicinal plants,

Traditional Plants.

ABSTRACT

Tribal communities have rich knowledge about medicinal plants and its uses. The traditional livelihood system of tribal people (also known as Adivasis) has been based on shifting cultivation and collection of edible forest produce. The area is hilly and has dam and innumerable number of streams which swell up during rainy season. An ethno botanical survey particularly the uncultivated plant used by them other than medicinal purposes was carried out among the Kaani tribes in various tribal villages of Kanyakumari district, South Western Ghats of Tamil Nadu. Forests in the study area hold thousands of medicinal plants which are used by the tribal people for primary healthcare needs. The medicinal plants were mostly used to cure asthma, rheumatoid arthritis, cold, cough, fever, headache, stomachache, diarrhoea, dysentery, skin diseases, poison bites, cut/ wounds, diabetes. Medicinal plants used by Kaani have been listed along with plant parts used with its ethno medicinal significance.

Introduction

Indian tribal people account for 8.14% of the total population of the country, numbering 84.51 million, according to the 2011 census. Indian tribals' primarily reside in various ecological and geo-climatic conditions ranging from plains, forests, hills and inaccessible areas, scattered throughout India (TSN, 2011).

Tamil Nadu occupies 1.05% of the total state population and 0.77% of the total tribal population of the country with 36 types of tribal communities. The major tribes in TamilNadu are Toda, Kurumba, Paniya, Irular, Kattunayakkan, Kaani, Palliyan, Sholagar, Kadar, and Veddar. Tribes are found in all the districts but their major concentration is in the north, central, and southern and western regions of the state. Majority of the tribal population in Tamil Nadu live in hilly ranges viz, Eastern Ghats and Western Ghats. Kaanikkars are also known as Kaanikkaran or Kaani. The general name for tribes in Kanyakumari area is 'Kaani' the oldest groups of the branch of ethnic people in South India. The word *Kaikar* means hereditary proprietor of land. The term 'Kaan' meaning Kaatu (forest) becomes the root of the word and so this shows that Kaani are people who live in forest .This has been evolved to get the term Kaani (Thurston 1909).

Kaani economy mainly depends on agricultural pursuits and collection of minor forest produce. Kaani tribes living in and around forests have strong ties with the forest and traditionally have acquired skill to identify hundreds of medicinal herbs and their uses. Kaani tribe is an ethinic group that has a common cultural tradition, living in deep forest or on hills. In Tamilnadu the Kannikkars live in Kanyakumari and Tirunelveli district. Kaanikkars, in the Western Ghats of South Tamil Nadu seem to have a rich knowledge of herbs and they depend on the forest resources to meet their livelihood and health care needs (Divya *et al* 2013).

Materials and Method

Study Area

Kanyakumari District is the southernmost district of Tamil Nadu. The district lies between 77^0 15 and 77^0 36 of the eastern longitudes and 8^0 03 and 8^0 35' of the northern latitudes. The district is bounded by Tirunelveli District on the north-east. Its south-eastern boundary is the Gulf of Mannar. On the south and the west, the boundaries are the Indian Ocean and the Arabian Sea. Thiruvananthapuram District of Kerala is its northern boundary. In the present study, the survey was carried out in the Kaani inhabited villages of Kanyakumari district such as Pechiparai and Perunchani (Fig.1).

Ethno botanical and uncultivated foods survey

Field investigations were conducted in several Tribal villages of Kanyakumari. There were 40 informants between the ages of 26 to 82 year. The information was gathered from the indigenous people were consulted on the medicinal plants and uncultivated foods used by them. The information was collected through questionnaire, interviews and discussions among the elders in their local language (Tamil). Questions were also asked about each plant prescribed, such as part of the plant used, medical uses, detailed information about mode of preparation.

Result and Discussion

The present study identified 14 medicinal plants family used in folklore formulations with there local names, parts of the plants used and mode of preparation for the treatment of various ailments/disorder which has been tabulated in (Table 1). This is consistent with other general observations which have been reported earlier in relation to medicinal plants studies by the Indian system of medicines like Siddha, Ayurvedha and Unani (Kirtikar and Basu 1999).

Tele:

E-mail addresses: velvizhi.nima@gmail.com

Table 1. Ethnomedicinal plant species and plant parts used by Kaani tribes, Kanyakumari, India

Botanical Name of the plant and Family Name	Vernacular name	Disorder	Part(s) Used & Mode of Preparation
Adhatoda zeylanica Medicus. Acanthaceae	Adathoda	Bronchitis, asthma and vomiting	Roots, flowers, fruits and leaves Extract
Aloe vera Tourn. ex Linn. Lilliaceae	Kataru vazha	Expel worms	Leaf, Jelly mass
Amomum zerumbet (L.) Zingiberaceae	Kattu Chenthi	Digestive problems.	Roots, Juice
Acalypha indica (L. Euphorbiaceae	Kuppameni	Fever and cough.	Leaf, Decoction
Achyranthus aspera (L.) Amaranthaceae	Nayuruvi	Digestive problems	Leaf, seed and root
Aegle marmelos Rutaceae	Vilvam	Diabetes	Leaves, Leaves are dried and powdered
Centella asiatica Apiaceae Apiaceae	Vallarai	Gas trouble	Whole plant dried, powdered
Leucas aspera Lamiaceae	Thumba	Cough and cold	Leaves, boiled and vapours inhaled
melia azedarach Meliaceae	Malaivembu	Stomach pain	Bark, Juice
Leucas aspera (L.) Lamiaceae	Thumba	Cough cold and fever.	Decoction of flowers
Murraya koenigii (L.) Rutaceae	Kariveppilai	Skin eruptions.	Bark, root and leaves, juice, paste
Ocimum sanctum (L.) Lamiaceae	Krishna thulsi	Severe cold.	Leaf, juice
Vitex negundo (L.) Verbenaceae	Nochi	Rheumatism and eye diseases.	Leaves, Decoction
Vetiveria zizanioides (L.) Poaceae	Vetiver, Ramacham	Swellings	Roots, powder

Table 2. Wild Edible plant (Uncultivated foods) species used by Kaani tribes, Kanyakamari, India

Botanical Name and Family	Vernacular Name	Form of uses	Photograph of specimen
Dioscorea oppositifolia, L. Dioscoreaceae	Kattukilangu	Tubers are cooked	
Dioscorea alata, L. Dioscoreaceae	Kavalakizhangu	Tubers are cooked	
Marantaarundinacea Dioscoreaceae	Kuvaikilangu	Tubers are cooked	
Anacardium occidentale , Anacardiaceae	Kattumundhri	Ripen fruits	
Colocasia esculenta, Schott Araceae	perum Sembu	Roots used for curries	
Avverhoa bilimbi Oxalidaceae	Seemai Pulichikkai	Fruits are eaten raw are in ripen	

Fig 1. Location Map of Study Area

The tribes prepare medicinal plant paste mainly by mixing honey, coconut milk, cow's milk and water. Similar findings were reported by Uma, (2012). Medicinal plants species are used for various medicinal benefits, evaluating their nutritional significance that help to understand the worth of these plant species (Pandy *et al*; 2006). Fresh leaf extracts are used for many diseases and they are either consumed or applied as such or mixed with milk, honey or rice soup water. For skin infections, they mainly use coconut oil. Medicinal plants are dried and stored for long periods.

Kaani tribes use wild edible plants (uncultivated foods). The tribes collect tubers and leafy edible plants during harvesting. List of wild edible plants are given in (Table 2).

Wild edible plants are much important than is generally assumed in the food supplies of many countries some wild foods are used as staples or as basic components of substantial meals. Many plants used in industrialized countries today were originally identified and developed through indigenous knowledge (Alagesaboopathi *et al* 1996).

The leaves of Seemai Pulichikkai (*Avverhoa bilimbi)* are made into paste and applied externally for skin itches and scabies (Ariharan *et al,* 2012). Roots and Tubers are the most important foods for Kaani tribes. Wild edible tuber species are an important source of energy. These wild edible plants grow in organic rich soil and in pollution free area. Rekka and Kumar, (2014) reported that consumption of these wild edible plants made the tribal people less prone to diseases and they had more strength when compared to people in plains.

Conclusion

Hence we may conclude that Kaani tribes in the forest area have access to medicinal plants which grow wild and are uncultivated. Their health benefits have been reported by several authors. Change in food habits of those tribes who have moved away from the forest and the lower use of medicinal plants may influence their health. The present study revealed that traditional medicines used by Kaani tribal communities are still common. The traditional knowledge about the medicinal plants is declining due to lack of interest by the next generation. However, still they are engaged in harvesting of wild edible foods (Uncultivated foods). Finally, the attention of phytochemist may be drawn to analyze the antioxidants and nutritional composition of medicinal plants and uncultivated foods in the region of Kanyakumari district, Tamil Nadu, India.

Reference

Pandy,M., Abidi, A.B, Singh S and Singh, R.P., 2006. Nutritional evaluation of leafy vegetables .J. Hum Ecol., 19: Pp 155-156.

Divya, V. V., Karthick, N. and Umamaheswari, S., 2013. Ethno pharmacological Studies on the Medicinal Plants Used by Kaani Tribes of Thachamalai hill, Kanyakumari, Tamilnadu, India.International Journal of Advance Biologicl Research, Vol. 3(3) 2013: Pp 384-393.

Alagesaboopathi C, Balu S, Dwarakan., 1996. Edible fruit yielding plants of Shevaroy Hills in Tamil Nadu. Ancient Sciences of life; 16(2): Pp 148-151.

Ariharan V.N, K. Kalirajan, V. N. Meena Devi and P. Nagendra Prasad., 2012, An Exotic Fruit Which Forms The New Natural Source For Vitamin-C. Rasayan Journal of chemist Vol. 5 No.3 Pp 356-359.

Rekka.R, and Kumar,S.S., 2014. Ethno botanical notes on wild edible plants used by Malayali tribals of Yercaud Hills, Eastern Ghats, Salem District, Tamil Nadu**.** International Journal of Herbal Medicine 2014; 2 (1): Pp 39-42.

Udhayan PS, Satheesh George, KV Tushar and Indira Balachandran., 2007. Ethno medicine of Malapandaram Tribes of Achankovil Forest of Kollam District, Kerala, Indian Journal of Traditional Knowledge Vol.6 Pp 567-573.

Kritikar K.R., Basu B. D., 1999. Indian Medicinal Plants I - IV Vols. International Book Distributors Booksellers and Publishers, Dehra Dun.

Thurston.E.Edger, 2007, Thurston- Castes and tribes of Southern India 1909. Cosmos Publication, Vol III. Pp - 1209.

Tamil Nadu Stastical Book.., 2011.

Usha, M. 2012. Ethnomedicines used by the Kaani tribels of Pechipparai hills, Southern Western Ghats of Tamilnadu, India. Plant Sciences Feed 2 (1): 5- 10.