



ELSEVIER

Contents lists available at ScienceDirect

Journal of Ethnopharmacology

journal homepage: www.elsevier.com/locate/jep

Observation on the traditional phytotherapy among the Malayali tribes in Eastern Ghats of Tamil Nadu, South India



Thangaraj Francis Xavier*, Moorthy Kannan, Anthonysamy Auxilia

Centre for Ethnopharmacological Research, Department of Botany, St. Joseph's College, Tiruchirappalli 620 002, Tamil Nadu, India

ARTICLE INFO

Article history:

Received 12 November 2014

Received in revised form

20 February 2015

Accepted 21 February 2015

Available online 2 March 2015

Keywords:

Traditional healers

Novelty index

Antidiabetic

New claims

Hepatoprotective

Herbal drugs

ABSTRACT

Ethnopharmacological relevance: Traditional medicine remained as the most affordable and easily accessible source of treatment for many ailments. The Malayali tribes living in the Kolli hills region of Eastern Ghats of Tamil Nadu has long history of ethnomedicinal knowledge has been remained unexplored hitherto. Hence, this study was initiated with an aim to record the ethnomedicinal plants of Malayali tribes and to document and analyse the local knowledge on phytotherapy before environmental and cultural changes deplete the resources.

Methods: In order to document the phytotherapeutic knowledge, a field study was carried out between August 2012 and February 2014. The ethnomedicinal knowledge was recorded through interviews among the Malayali tribes, and traditional healers. In addition a semi structure questionnaire was used to collect information on the local name of the plant, plant part used for curing, method of preparation in phytoremedies and any other plants/agents used as ingredients. Factor of informant consensus (F_{ic}), use value (UV), fidelity level (FL), relative importance (RI) and novelty index were employed in data analysis.

Results: Current research work reports total of 86 medicinal plant species belonging to 76 genera of 46 different families. Herbs constituted the largest growth habit (48 species, 56%) followed by trees (13 species, 15%) and shrubs (9 species, 11%) etc. Leaf 43 (46%) is the plant part widely used followed by whole plant 9 (10%), seeds and fruits 9 (10%) and root 7 (8%). Paste was the most common preparation method used in herbal recipes. These plants were used to treat various human diseases and ailments grouped under 19 disease categories with the highest number of species (31) being used for dermatological infections/diseases followed by gastro-intestinal ailments (28) and general health (15). *Asystasia chelonoides* (UV of 2.76) and *Piper nigrum* (UV of 2.12) are the most frequently and popularly used medicinal plant species in the study area.

Conclusion: The result of the study revealed that there was high diversity of medicinal plants and traditional knowledge about the use, preparation, and application of which is still maintained in the study area. However, the knowledge of herbal medicine was held by elders. The decline in the use of plants by the younger generation may gradually lead to the fading away of indigenous knowledge associated with the plants.

© 2015 Elsevier Ireland Ltd. All rights reserved.

1. Introduction

Plants are the important source of therapeutic drugs and play a significant role in the survival of the many tribal and ethnic communities. The tribal people are the ecosystem people who live in harmony with the nature and maintain a close link between man and environment. According to World Health Organization (WHO) some 80% of the developing countries rely on the traditional medicines and in which 85% use plants or their extracts as active

principles as plant drugs for their healthcare need (Sheldon et al., 1998; Senthilkumar et al., 2013). India is one among the developing countries with medico-cultural diversity where the medicinal plant sector is part of a time honored tradition which possesses an ancient system of healthcare based chiefly medicinal plants of diverse nature, ranging from higher plants to microorganisms from which more than 80% of therapeutic products are derived have been used for 6000–7000 years (Balakrishnan et al., 2009). Many studies have stated that tribal population in remote area, not only depend on plant based resources for medicines, food, forage, and fuel, but also play a vital role in the management of natural resources (Ignacimuthu et al., 2006; Ragupathy et al., 2008). In this way, the studies on the tribal's indigenous knowledge about various

* Corresponding author.

E-mail address: mycofrancis@yahoo.co.in (T. Francis Xavier).

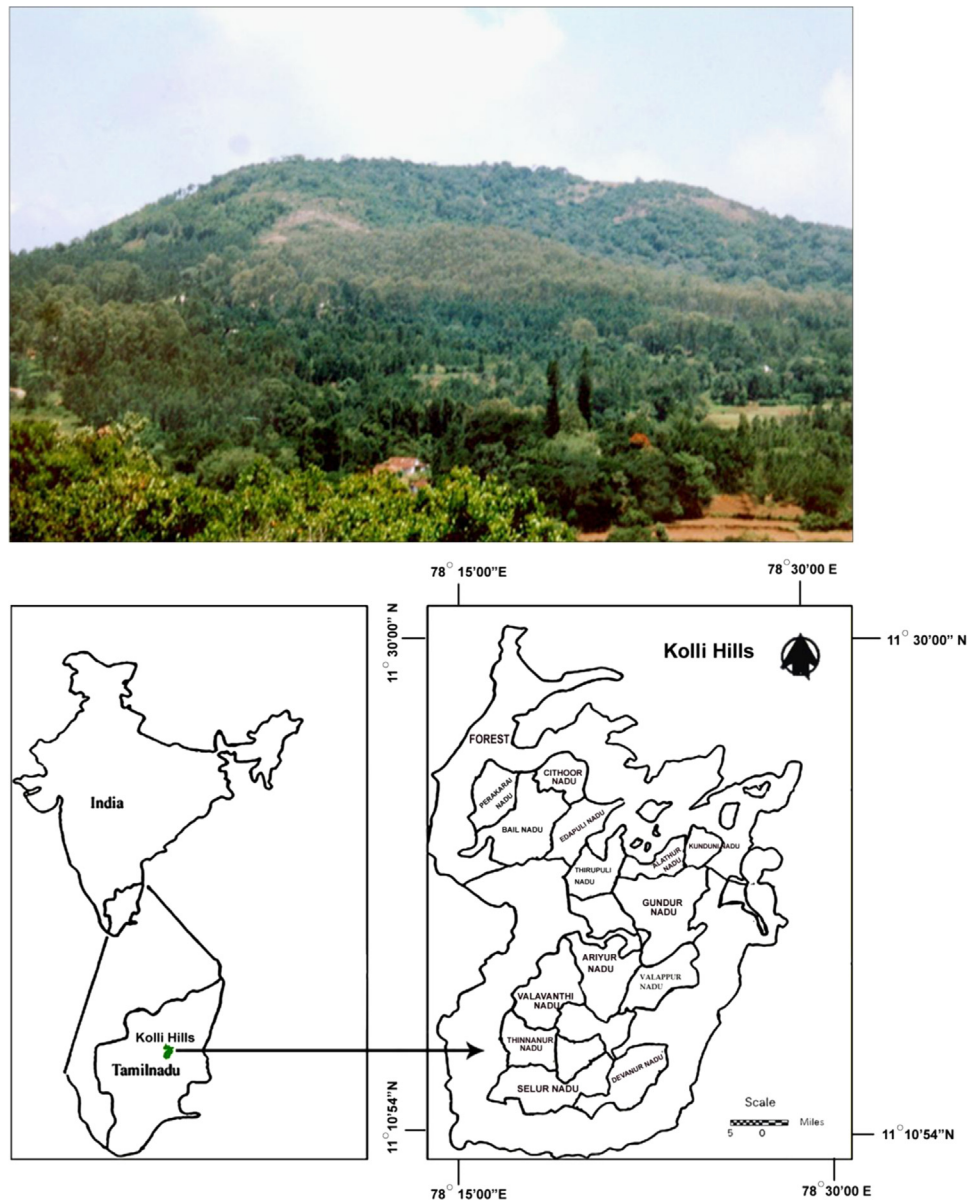


Fig. 1. Map showing the location of Kolli hills in Eastern Ghats of Tamil Nadu.

kinds of plants and their values constitute an important aspect on medicinal plants and their usages. Documentation of these local knowledge system concerning medicinal plants may have high impacts from a bio-economic point of view (Ghiselin and Landa, 2005).

Kolli hills, a part of Eastern Ghats of Tamil Nadu in South India is known for rich diversity of medicinal plants and is believed that the Sithars (ancient medicine and meditation men) were lived in the hills and they used to meditate and practice on various medicinal plants for many ailments and for the regular health care of human beings. The hill supports approximately 37,000 inhabitants living in 274 hamlets (Natarajan and Udhayakumar, 2013). The population is primarily Malayali, a cultural group that has been assigned Scheduled Tribe designation by the Government of India. About 780 tribal families in the Kolli hills depend on forest for their food, fodder, herbal medicines, fire wood and timber resources. They possess wealth of knowledge on the local utilization and conservation of food and medicinal plants. Traditionally, this treasure of knowledge has been passed on orally from generation to generation without any written document (Perumal Samy and Ignacimuthu, 2000) and

is still retained by various indigenous groups of people around the world. Tribal people provide considerable information about the use of many plants or plant parts as a medicine. Hence, the present work has been made to document the indigenous medicinal systems and plants used by the Malayali tribes of Kolli hills in Eastern Ghats against various diseases and human health disorders.

2. Methodology

2.1. Study area and people

Kolli hills, a part of Eastern Ghats of Tamil Nadu lies between $11^{\circ}10'54''$ – $11^{\circ}30'00''$ N latitude and $78^{\circ}15'00''$ – $78^{\circ}30'00''$ E longitude (Fig. 1). Physiologically it is hilly region located at an ever-so-pleasant altitude ranging from 1000 to 1300 m above mean sea level and mainly occupied by Malayali tribes (98.8%). Geologically, the study area is occupied by acid charnockite quartzite (Geological Survey of India, 1976). The mean annual rainfall is 1318 mm, which is received largely between May and December (2001–2005). Annual

Download English Version:

<https://daneshyari.com/en/article/2545070>

Download Persian Version:

<https://daneshyari.com/article/2545070>

[Daneshyari.com](https://daneshyari.com)