HOSTED BY

Contents lists available at ScienceDirect

# Journal of Traditional and Complementary Medicine

journal homepage: http://www.elsevier.com/locate/jtcme



## Short communication

# Ethnoveterinary medicine of the Shervaroy Hills of Eastern Ghats, India as alternative medicine for animals



Swaminathan Usha <sup>a</sup>, Chandrasekaran Rajasekaran <sup>b</sup>, Ramamoorthy Siva <sup>b, \*</sup>

- <sup>a</sup> School of Social Sciences and Languages, VIT University, Vellore 632014, Tamil Nadu, India
- <sup>b</sup> School of Biosciences and Technology, VIT University, Vellore 632014, Tamil Nadu, India

#### ARTICLE INFO

Article history:
Received 24 April 2014
Received in revised form
22 June 2014
Accepted 28 July 2014
Available online 30 January 2015

Keywords: Eastern Ghats ethnomedicine ethnoveterinary practice Shervaroy Hills traditional knowledge

#### ABSTRACT

The Eastern Ghats of India is well known for its wealth of natural vegetation and Shervaroy is a major hill range of the Eastern Ghats of Tamil Nadu. Ethnomedicinal studies in the Eastern Ghats of Tamil Nadu or the Shervaroy Hills have been carried out by various researchers. However, there is not much information available on ethnoveterinary medicine in the Eastern Ghats of India. The aim of this study was to examine the potential use of folk plants as alternative medicine for cattle to cure various diseases in the Shervaroy Hills of the Eastern Ghats. Based on interactions with traditional medicine practitioners, it has been observed that a total of 21 medicinal plants belonging to 16 families are used to cure various diseases such as mastitis, enteritis, arthritis, stomatitis, salivation from the mouth, wounding, and conjunctivitis in animals. It has been observed that the traditional knowledge of ethnoveterinary medicine is now confined only among the surviving older people and a few practitioners in the tribal communities of the Shervaroy Hills. Unfortunately, no serious attempts have been made to document and preserve this immense treasure of traditional knowledge.

Copyright © 2014, Center for Food and Biomolecules, National Taiwan University. Production and hosting by Elsevier Taiwan LLC. All rights reserved.

#### 1. Introduction

Ethnomedicine is a traditional medical practice that concerns the cultural interpretation of health, disease, and illness. The practice of ethnomedicine is a complex multidisciplinary system constituting the use of plants in a spiritual way in the natural environment and has been the source of healing for people for millennia. Many people use plants as alternative remedies in addition to visiting western health care practitioners. The extent of plant use differs with location—that is, it is area specific.

India is rich in plant diversity and possesses almost 7% of the world's flowering plants. The Eastern Ghats of India are endowed with an extensively rich variety of biological species, geological formations, and different ethnic tribes. Ethnomedicinal studies in the Eastern Ghats of Tamil Nadu have been carried out previously by a number of researchers. <sup>2,3</sup> However, there is not much information available on ethnoveterinary medicine in the Eastern Ghats of India. Ethnoveterinary medicine is a scientific term for

traditional animal health care that encompasses the knowledge,

Since time immemorial, plants have been used for curing various diseases in man and animals. Even today, in rural regions of India, where modern medicine is inaccessible, medicine based on folk plants is often used to treat humans and livestock. This knowledge has been developed through trial and error and also deliberate experimentation.

Keeping the aforesaid facts in view, the present study was undertaken to record the potential use of folk plants as prominent alternative medicine for cattle to cure various diseases in the Shervaroy Hills of the Eastern Ghats.

# 2. Materials and methods

# 2.1. Study area

The Shervaroy Hill range is situated 26 km north-east of Salem and forms a major point of the Eastern Ghats. The hill range lies

Peer review under responsibility of The Center for Food and Biomolecules, National Taiwan University.

skills, methods, practices, and beliefs about animal health care found among community members. It comprises community-based local or indigenous knowledge on methods of preparation and administration of medicinal plants for the caring, healing, and managing of livestock. It also includes social practices and the ways in which livestock are incorporated into farming systems. Since time immemorial, plants have been used for curing

<sup>\*</sup> Corresponding author. School of Bio Sciences and Technology, VIT University, Vellore 632014, Tamil Nadu, India.

E-mail address: rsiva77in@rediffmail.com (R. Siva).

between 11°48 and 78°11 E longitude<sup>6–8</sup> with an altitude of 1515 m above mean sea level. The Shervaroy Hills are blessed by nature with its diversified and rich flora. The native tribal people are called "Malayali" meaning "mountain man". The Malayali tribe is one of the 36 scheduled tribes of Tamil Nadu and they basically depend on agriculture and forest resources for their survival. The tribes belonging to the minor communities are among the least advanced socially and economically. However, they harbor a lot of knowledge on medicinal plants.

### 2.2. Investigating methods

Many extensive and intensive field trips were undertaken between 2011 and 2012 in different seasons for the collection of plants and associated ethnomedicinal information from the Shervaroy Hills.

The information gathered in this paper is based on a plant exploration study conducted at the Shervaroy Hills. A total of 1980 individuals of the Malayali tribe community were approached, and we found that 1519 of them possessed traditional medicinal knowledge. However, seven respondents were practicing as Vaidyars and a questionnaire was administrated to them. In addition, we collected data through direct observation of passersby in villages.

Mr Perumal (Fig. 1) of the Malayali tribe, who was one of the folk practitioners, showed and explained the medicinal uses of plants during the treatment of cattle. Each plant was taxonomically



**Fig. 1.** A local vaithiyar practicing Traditional Medicine in Shervaroy hills. We can see the medicinal Plant *Corallocarpus epigaeus*, locally known as "Garudan Kalangu" in both of his hands.

identified and representative samples were collected as voucher specimens at the School of Biosciences and Technology, VIT University, Vellore, India.

#### 3. Results

Based on the interaction with the traditional medicine practitioners (Fig. 2), it has been observed that plants in the Shervaroy Hills are used to cure various diseases such as mastitis, enteritis, arthritis, stomatitis, salivation from the mouth, wounding, and conjunctivitis in animals. Table 1 shows the details of the folk medicine, their uses, and modes of preparation. One of the cases that we came across during the field visit was the treatment of a cow's wound of a secretary organ, which generally occurs during sexual intercourse.

In addition, during our field trips we observed the following unique features of the Malayali tribe. (1) Local medicine practitioners and other tribes have knowledge on medicinal plants, their uses, and also practice the same worship of nature before they start the treatment (Fig. 3). (2) They know how to cure various diseases of cattle using traditional practices. An example is shown in Fig. 4. (3) After giving medicine, they chant hymns (locally known as "Paadam padithal") and use a towel on the animal with circular movement to improve the effectiveness of the remedy (Fig. 5). (4) Members of the tribe are staunch vegetarians and also avoid food that is considered gastric (locally known as "vayu"). (5) We observed that in the indigenous system of folk medicine practitioners do not use normal salt—instead they use rock salt. We believe that rock salt contains more potassium and less sodium, which could be useful for treatment.

## 4. Discussion

The plant species recorded in the present study are arranged in alphabetical order (Tables 1 and 2). The botanical name of each plant is followed by the family, voucher specimen number, local name, parts used, and mode of preparation. A total of 21 medicinal plants belonging to 16 families were recorded to be used by the Malayalis as ethnoveterinary medicine. Literature on phytoconstituents and pharmacological studies of plants recorded in the present survey was extensively searched and reviewed in Table 2. These ethnomedicinal plants have been reported by various researchers to treat various aliments (Table 2). We believe that



Fig. 2. Before using the traditional medicine they worship.

# Download English Version:

# https://daneshyari.com/en/article/3099735

Download Persian Version:

https://daneshyari.com/article/3099735

<u>Daneshyari.com</u>