

TRADITIONAL PHYTOTHERAPY OF ANIMAL DISEASES IN BALRAMPUR DISTRICT (U.P.) INDIA

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ABSTRACT

This paper documents the traditional knowledge of medicinal plants that are in use by the Tharu tribes residing in Gaisari and Pachpedwa blocks of Balrampur district of Devipatan division of north-eastern Uttar Pradesh, India. Altogether 20 types of animal ailments have been reported to be cured by using 25 medicinal plant species. The informations during study period (2008-09) were collected through questionnaire and personal interviews of local traditional healers.

Key words— Traditional, Phytotherapy, Animal; Diseases.

INTRDOCUTION

The cure of diseases and preservation of health are as old as life itself. All indigenous remedies, whether traditional or modern, have originated directly or indirectly from folklore, rituals, magic and superstitions. In other words, the therapeutic hints or measures hold key to the treasures of knowledge in folk medicine and native-medico-botany. Native phytomedicine is kind of systematised and analysed traditional knowledge of folk healing in its own way. A large number of ancient medicines are still being valued for the same action and properties, the basic principles and practices surviving through ages, handed over from generation to generation, may be with or without modification (Mitra, 1989).

Traditional uses of medicinal plants have been continuing since Vedic period and still a large population is dependent on these plants but no authentic record is available for the treatment of cattle by plants (Pandey *et al.*, 1999). However, the commendable efforts of botanists in the direction of studies on traditional phytotherapy cannot be overlook. Sundarsanam *et al.* (1995), Geetha *et al.* (1996), Rajan and Sethuraman

(1997), Reddy *et al.* (1998), Ali (1999) and Pandey *et al.* (1999) have shown their deep concern for the indigenous people and their medicinal knowledge system and how this knowledge could be develop for the welfare of our domesticated animals.

Although the contributions of aforesaid workers have enriched our knowledge on traditional phytotherapy of animal diseases, however, there is still an urgent need of studies on ethno phytoveterinary wealth of our country specially in the remote areas like Balrampur district of north-eastern Uttar Pradesh.

The district Balrampur is a part of the remote Tarai belt of north-eastern U.P. It lies in subtropical region with the total area of 3419.50 Km² having total population 1685000. The district falls between 27°08" N to 27°54" N latitude and 82.2°30" E to 82°49" E longitude. The district consists of very rich natural forests like Kuano, Janakpur, Jarwa, Beerpur-Semra etc. The Tharu tribes residing in isolated pockets of this district specially in Gaisari and Pachpedwa blocks. In Tharu areas (Tharuhat) mainly plant species are used are therapeutic agent for the treatment of

various animal ailments. Due to increasing veterinary facilities and depletion of indigenous culture, this knowledge is losing rapidly. It is therefore the present study is undertaken to explore and document folklores about phytoveterinary practices in this remote area of eastern Uttar Pradesh.

MATERIALS AND METHODS

An ethnobotanical survey was carried out during 2008-09 to collect information on the medicinal uses of plants for the treatment of various diseases and ailments of domesticated animals by Tharu tribes. Local traditional healers having practical knowledge of plants in medicine were interviewed in 20 villages of the Gaisari and Pachpedwa blocks of Balrampur district (Fig.1). During the course of ethnomedicinal exploration, method of Jain and Rao (1976) was followed. Information about the plants were recorded with regards to their vernacular names, plant part used, process of preparation of medicine either individually or in combination with other plant parts/material, mode of application and doses for the treatment of a particular disease or diseases. All the voucher specimens were identified using relevant literature (Singh, 1991; Jain, 2003). Out of informations collected, presented alphabetically according to their vernacular (local) names followed by botanical names and families.

RESULT AND DISCUSSION

The results of the present study are presented in Table (1). During survey of the study area, 25 phytoveterinary medicinal plant species belonging to 21 families were documented. For each species local name, botanical name, family, parts used, methods of preparation, administration and ailments treated are provided. Traditional healers are using these plants to cure diseases of domesticated animals related to skin problems, eye troubles, cold, fever, cough, diarrhoea, fertility problems, foot and mouth diseases, cuts and wounds, swelling of shoulders, worm infestation, physical weakness, lactation, appetite etc. problems.

Out of 25 plant species recorded, the monocots represented by only two species namely *Dendrocalmus strictus* and *Desmostachya bipinnata*. Herbs were found to be most used

plants followed by trees, shrubs, climber and an aquatic species *Nelumbo nucifera*. Among the families Solanaceae, Proaceae, Fabaceae, Caesalpiniaceae and Meliaceae are represented by two genera and their species whereas Convolvulaceae, Combretaceae, Ioranthaceae, verbenaceae, Asteraceae, Fabaceae, Lamiaceae, Moraceae, Nymphaeaceae, Oxalidaceae, Euphorbiaceae, Acanthaceae, Liliaceae, Bombacaceae and Aunnonaceae are represented by only one genus and their species (Table.1).

Among the different parts of plants used in the treatment of various ailments and diseases of domesticated animals by Tharu tribals, the leaves and whole plant were most common followed by stem bark, fruits and seeds. The methods of preparation fall into following categories; as paste, decoction, juice, powder, fresh plant parts, and crushed plant parts. Moreover a single plant is used for more than one disease.

The survey indicated that, the study area has plenty of medicinal plants to treat a wide spectrum of animal ailments. Earlier studies on traditional medicinal plants (Pandey *et al.*, 1999; Singh, 1991) also revealed that the local people (Tribals, Nomadics) of Tarai region of north-east U.P. prefer folk medicine due to low cost and more availability (Muthu *et al.*, 2006). It is evident from the study that the knowledge of phytoveterinary medicine is limited to traditional healers, herbalists and elderly persons, commonly known as 'Vaidya' of the study area. The survey also indicates that certain species of medicinal plants are being exploited by the local residents who are unaware of the importance of that plants in the treatment of various ailments and diseases of domesticated animals. Also the information recorded from the survey need a thorough phytochemical investigation including extraction and isolation of alkaloids along with certain clinical trials.

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