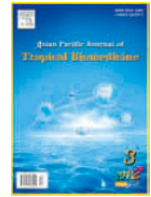




Contents lists available at ScienceDirect

## Asian Pacific Journal of Tropical Biomedicine

journal homepage: [www.elsevier.com/locate/apjtb](http://www.elsevier.com/locate/apjtb)

Document heading

doi:

© 2012 by the Asian Pacific Journal of Tropical Biomedicine. All rights reserved.

## Ethnoveterinary practices of aborigine tribes in Odisha, India

Bikram K. Mallik<sup>1</sup>, Tribhuban Panda<sup>2</sup>, Rabindra N. Padhy<sup>3\*</sup><sup>1</sup> Department of Botany, Govt. Junior College, Bhawanipatna 766001, Kalahandi District, Odisha, India<sup>2</sup> Kalahandi Institute for Tribology and Ethnobiology, Jilingdar, Dedar 766014, Kalahandi District, Odisha, India<sup>3</sup> Department of Botany & Biotechnology, B. J. B. Autonomous College, Bhubaneswar 751014, Odisha, India

## ARTICLE INFO

## Article history:

Received 25 August 2012

Received in revised form 18 September 2012

Accepted 9 December 2012

Available online 28 December 2012

## Keywords:

Ethnoveterinary information

Kalahandi district

India

73 plants

## ABSTRACT

**Objective:** To record ethnoveterinary information of numerous aboriginal tribes of Kalahandi district of Odisha state, India. **Methods:** A survey of about 20 hamlets in the district was done with a questioner and personal interviews using the snowball technique in survey and sampling. **Results:** Seventy-three plants belonging to 41 families (Acanthaceae, Alangiaceae, Amaranthaceae, Amaryllidaceae, Anacardiaceae, Annonaceae, Araceae, Arecaceae, Asclepiadaceae, Asteraceae, Bombaceae, Brassicaceae, Caesalpiniaceae, Cucurbitaceae, Combretaceae, Convolvulaceae, Ebenaceae, Euphorbiaceae, Fabaceae, Lamiaceae, Lecythidaceae, Loganiaceae, Malvaceae, Meliaceae, Menispermaceae, Mimosaceae, Moraceae, Moringaceae, Musaceae, Myrtaceae, Piperaceae, Plumbaginaceae, Poaceae, Ranunculaceae, Rubiaceae, Rutaceae, Solanaceae, Umbelliferae, Verbenaceae, Vitaceae and Zingiberaceae) are used by aborigine tribes of Kalahandi district, Odisha, India, for treating ailments of domestic animals. **Conclusion:** Aborigine tribes of Kalahandi district use about 73 plants for treating ailments of animals.

## 1. Introduction

Upland agriculture, which is managed without any mechanization, is the backbone of sustenance of hill-dwelling aborigine tribes in Odisha, India. For the purpose of ploughing of strip and contour farm patches, and threshing of rice-paddy, tribals depend on domesticated castrated cattle. Demands for milk and meat are the associated essential corollary of cattle rearing. Specifically, goat rearing has become a part of utilization of green forest that can be called as a part of 'exploitation of ecosystem for economy' or 'ecotechnology', in a crude way. Piggery is a less well adapted practice in Indian tribal society. So to sum up, these three groups of animals along with wild chicks, grown by default, are the animals domesticated by aborigine tribes. Dogs are less often domesticated by tribals and are wild.

Wounds, abscess, warts and inflamed skin lesions are the ones, which are to be addressed with cattle linked to rice cultivation and milk production. Myiasis is a problem in

animal farms and causes severe economic losses through poor hide quality, reduced weight gain, loss of fertility and reduction in the production of milk [1]. Animals die from infections from lesions. The tribals are as for themselves never depend on the distant government veterinary hospitals for the obvious economic reasons or the limitation of resources, and lean to the traditional herbal remedial measures for animals. This paper is an account of such herbal practices in animal health care system followed up by about 12 or 13 numerically important aborigine tribes of the district Kalahandi, Odisha.

The Odishan part of Indian Eastern-Ghat range of mountains, at which Kalahandi district is situated, has rich vegetations compared to other isolated hilly areas of the state, and around a 40% population of the district is a group of aborigines living at or near the forest. They depend on the forest for all their needs; for example, the use of phytodiversity for house construction [2], and raw wild food [3] are described for an numerically important aborigine, the Kandha tribe, who have many commonality (in living) with other aborigine tribes of other hilly zones. Their cultural practices are typically archaic since down the centuries, and they live with a minimum intervention of modernity. Ethnomedicinal reports for human ailments from the state are limited [4–6].

\*Corresponding author: Dr. R. N. Padhy, Department of Botany & Biotechnology, B. J. B. Autonomous College, Bhubaneswar-751014, Orissa, India;

Present address: Central Research Laboratory, IMS & Sum Hospital, S 'O' A University, Bhubaneswar – 751003.

E-mail: [rmpadhy54@yahoo.com](mailto:rmpadhy54@yahoo.com)

A survey in developed countries indicated that 20% of annual growth of herbal medicinal plants has been recorded in 2001 [7] with an estimated 80% of world population living in developing countries rely on plants for healthcare. In the USA, the total number of visits to non-conventional healers was 425 million with an estimated cost of 13.7 billion US dollars in the non-conventional medicinal market [8]. In view of the prodigious use of plant medicines with man and their livestock led to declare recognition of implicit role of herbal drugs in the 'Alma Marta declaration of health', by the year 2002 [9].

## 2. Study area and people

Twenty villages of Langigarh Block, inhabiting the most backward aborigine tribes, were surveyed during 2008 to 2011. These villages are situated in Niyamagiri hill area of Kalahandi district, Odisha. Niyamagiri hill is situated at 19°.10' and 20°. 30' north latitude and 82°. 30' and 83°.50' east longitude. The elevation ranges from 400 to 1200 m; temperature varies from 2°C in winter to 46°C in summer and the district experiences an average rain fall of about 128

cm and a rich biodiversity, typical to a sub-tropical forest. Kalahandi has people of a total of 62 different ethnic groups with several socioeconomic categories of both backward castes (scheduled castes) and aborigine tribes (scheduled tribes) living together.

The common and numerically important scheduled castes were Chamar, Dom, Ganda, Ghasi, Dhoba, Mahar and Panik, and the scheduled tribes were Bhunja, Kandha, Gand, Banjara, Sabar, Bhattada and Dal. They were originally a nomadic community, but they are today living in several tribal hamlets, each consisting of 10–25 families disbursed in and around the forest. They have upland agriculture of rice, millet, corn and finger-millet (*Elusine coracana*). These people earn through selling non-timber forest products, honey, beeswax and a few more. Every tribal group has a tribal chief/head. During several visits to villages, interviews were undertaken and information recorded from headmen, traditional healers, priests, housewives and patients randomly irrespective of sex and castes or tribe. Selection of plants from Niyamagiri hills was based on interviews in hamlets with both schedule castes and schedule tribes. All the information on medicinal plants reported by them were collected by taking the help of traditional healers,

**Table 1**

Ethnomedicinal information for animals.

Sl no.	Plants, family and (local names)	Used part	Ailment	Modalities of uses
1.	<i>Abelmoschous esculentus</i> L. Malvaceae, (Bhendi)	Root	Blocked urination	Root juice is given thrice a day according to the age and size against blocked urination.
2.	<i>Acacia catechu</i> (L.f) Mimosaceae, (Khair)	Wood	Wound	Burnt heart wood is mixed with alum and vaseline to form an ointment and applied on the wound.
3.	<i>Acacia nilotica</i> L. Mimosaceae, (Bamur)	Spines	Colic pain	Decoction of spines is given to relieve colic pain.
4.	<i>Acalypha indica</i> L. Euphorbiaceae, (Indramaris)	Leaf	Scabies	Leaf paste is mixed with lemon juice and applied on scabies zone.
5.	<i>Achyranthes aspera</i> L. Amaranthaceae, (Kukurdanti, Apamara)	Root	Parturition and Bronchitis	1. Root is hung in tail for placental retention during parturition. 2. Root paste is mixed with leaves of <i>Ferula asafetida</i> (Umbelliferae) and two yellow leaves of <i>Calotropis procera</i> and given to cow against bronchitis.
6.	<i>Aegle marmelos</i> L. Rutaceae, (Bel)	Fruit	Internal fever	Ripened fruit pulp is given twice daily till the cure of internal fever.
7.	<i>Alangium salvifolium</i> (L.f)Wang Alangiaceae, (Ankul)	Root	Snake bite	Aliquot of 10 ml of root juice is given orally to cattle in case of snake bite.
8.	<i>Albizia lebbek</i> (L.)Benth Mimosaceae, (Sipo)	Stem bark	Wound of rat bite	Bark paste is applied around the wound of rat bite.
9.	<i>Allium cepa</i> L. Amaryllidaceae, (Piaj)	Bulb	Cough	Bulb paste is mixed with mustard oil and is given to cattle against cough, thrice a day, until cured.
10.	<i>Alocasia macrorrhiza</i> L. Araceae, (Saru)	Petiole	Throat swelling	A lukewarm paste is prepared from the rotted petiole and is applied to the swelling throat due to cold, twice a day for about 3 days.
11.	<i>Andrographis paniculata</i> (Burm f.) Acanthaceae, (Bhuinlim)	Stem Leaves	Fever, Mouth and Foot disease	1. Aerial part is dried, powdered, mixed with jaggery and a pinch of rock salt and applied for about 5–7 days against foot and mouth disease. 2. About 1 kg of stem cuttings and leaves are boiled in 5 l of water for 3–4 h and masked. Decoction is left as such overnight for fermentation. The decoction is filtered and stored; 2 cups of decoction is administered orally twice days in case of acute cases. In chronic cases the preparation is given for about 3–4 weeks.

Download English Version:

<https://daneshyari.com/en/article/2033654>

Download Persian Version:

<https://daneshyari.com/article/2033654>

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