Ethnobotanical formulations for the treatment of jaundice by the Mech tribe in Duars of West Bengal

Ajita Sarkar & AP Das*

Taxonomy & Environmental Biology Laboratory, Department of Botany, University of North Bengal, Siliguri 734013, West Bengal
E-mail: apdas.nbu@gmail.com

Received 12 May 2007; revised 16 September 2008

Ethnomedicinal survey among the tribe Mech in the Duars region of West Bengal recorded 10 plant based formulations from the traditional healers to treat jaundice. While some of these formulations work nicely with high proportion of cure rate, others are of moderate or low efficiency.

Keywords: Ethnomedicine, Jaundice, Mech tribe, Duars, West Bengal

Duars is a Sub-Himalayan region of West Bengal situated on the eastern bank of the River Tista and located between 27°-26°16' N latitude and 89°53'-88°4' E longitude. The total area of Duars is approximately 6,227 sq km stretching between the rivers Tista and Sankosh. Duars is bounded by Darjeeling Himalaya and Bhutan in North, Coochbehar district of West Bengal and Bangladesh in South, Assam in the East and the plain region of Darjeeling district and small part of Bangladesh lies to the West. Temperature and precipitation of the area varies in each season. However, the temperature fluctuates between 37.5°C during summer and about 6°C in winter. Rainfall mainly occurs due to South-west monsoon wind and begins from the month of May and continues till the first quarter of October. The annual rainfall of the region is about 374 cm. Most of the sectors of Duars are covered with dense forest and savannah type grasslands and, hence, is very rich in biodiversity. Villages of Mech tribes are situated within the vicinity of the forest and they inhabit the land along with other tribes such as Rabha, Toto, Munda, Oraon, Garo, etc.1-3 Major part of Mech population (very primitive tribe of this region) in Duars (known as Bodo in Assam) is still dependent on traditional methods of treatment for recovering from most of their health problems. The study was conducted among these people during 2006 to 2008 to record the methods of treating jaundice, a quite common disease of the tribe.

Methodology

Information about the medicinal use of several plants was collected through surveys conducted in several villages in Duars located mainly in different parts of the Jalpaiguri district of West Bengal4-9. These people are apparently very friendly but maintained a deep secrecy about their traditional knowledge. However, after visiting them for several times after developing confidence, they finally shared their knowledge about the medicinal uses of plants growing around them. A good number of patients suffering from jaundice were also interviewed during the survey, mostly taking them away from the healer (Ojha). The voucher specimens of the useful plants were spotted by the healers were collected and processed following conventional techniques10. The plant species were identified, verified and deposited in NBU herbarium.

Results and discussion

As much as ten formulations of traditional medicine are used by the Ojhas of the Mech community in Duars for the treatment of jaundice. All these formulations have been enumerated along with the methods of preparation, doses and modes of administration. A total of 10 plant species are used in these ten formulations (Table 1). Apart from plants, hen’s egg, milk, curd and sugar candy are used in some formulations. There is also variation in the method of administration, decoction for massage, tying to different parts of the body and using like a

*Corresponding author
These formulations have been collected from eight Ojhas and 6 of them use just one formulation; 2 of them, Satish Narjeenary and Surendra Basumata use 2 formulations (Table 2). It is important to know the efficacy of the methods of treatment. For this, at different times, a total of 58 jaundice patients were consulted, who were under treatment for at least 2 months (Table 2). With 2 formulations (2 & 5), Satish Narjeenary treats a good number of patients and 18 of them (10+8) were interviewed and 11 patients (7+4) were fully cured and six (3+3) were partly cured. The record of successful treatment (50% or more) was also quite high with the formulations 1, 3 and 9. Not a single patient was cured with formulation 4 and the result is not satisfactory for formulations 6, 7, 8 and 10. However, none of these patients were tested for their blood sugar level prior or after the treatment and the general feelings or few symptoms were used for disease recognition and to understand the recovery status.

Documentation of these medicinal plants used by the Mech tribe is the firsthand report which shows that...
these people are still so much dependent on local vegetation for their healthcare. Unless such reports are documented, the knowledge will be lost along with the old people of the tribes. However, the rapid loss of natural vegetation in the country is posing threat about the availability of these ethnically useful plants. Not only the conservation of different types of natural vegetation of Duars needs to be implemented seriously, the Forest Department should educate the tribal people about the sustainable use of area’s plant resources.

Acknowledgement

Authors are grateful to the traditional Mech healers for sharing their knowledge and to the people treated for jaundice for helping us in the survey.

References