

Ethnomedicinal formulations used by traditional herbal practitioners of Ranchi, Jharkhand

Rabish Chandra, Malati Mahato, SC Mandal[#], Kamini Kumar & Jyoti Kumar*

Medicinal Plant Laboratory, University Department of Botany, Ranchi University, Ranchi 834008, Jharkhand

[#]Pharmacognosy and Phytotherapy Research Laboratory, Department of Pharmaceutical Technology
Jadavpur University, Kolkata 700 032, West Bengal

E-mails:rabishchandra@yahoo.com; jyotikumar1@yahoo.com; subhashmandal@yahoo.com

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Ranchi district of Jharkhand state is immensely rich in biodiversity and ethnomedicinal information. Ethnomedicinal survey was conducted during 2004. The information on ethnomedicinal formulation is based on the exhaustive interview with local traditional herbal practitioners and other knowledgeable persons, who prescribe their herbal preparation to treat various ailments. Twelve ethnomedicinal formulations reported in the paper includes 28 medicinal plants. These research finding need to be integrated with national healthcare systems, which requires further pharmacological validation.

Keywords: Ethnomedicine, Folklore, Traditional herbal practitioner, Ranchi, Jharkhand

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Ranchi, the capital of Jharkhand state lies between 22° 30'N-23°30'N latitude and 85°E-86° E longitude. It is located at an altitude of 654 m above sea level. The annual average rainfall in Ranchi district is about 1530 mm. The whole district is covered by red sandy soil¹⁻². Jharkhand state is immensely rich in biological diversity and traditional knowledge with about 23, 605 sq km forest area, which is 29 % of the total geographic area³. It is also rich in ethnomedicine and about 80% people live in rural area. In almost each village, there is one or more traditional herbal practitioners locally called *Kavirajas* or *Vaidyas*. These traditional herbal practitioners efficiently treat various ailments with animals, plants, minerals, etc. available in their surroundings. Apart from traditional herbal practitioner, the heads of the villages also use to give some folklore medicine. The knowledge of ethnomedicine is carried out from generation to generation among ethnic people orally and the medicinal plants survived in their minds and souls^{4,5}. Previously, workers of this area have concentrated on the documentation of the plants used by them, exploring its taxonomy⁶. In the paper, attempt has been made to document the folklore formulation so

that in near future it may lead to the discovery of new medicines and help in protecting their IPR.

Methodology

Ethnomedicinal survey was conducted during 2004 in different blocks of Ranchi district^{4,7}. Before launching into the fieldwork, rapport was established with the authentic person of all the blocks. The linguistic fluency, personality and social standing are crucial to establishing rapport between the participants involved. During field study, 30 medicine men approached were motivated for interview about some important folklore formulation, which they were prescribing to their patients. After documentation, use of formulations was crosschecked and confirmed. The local names of plant species were recorded. The plants were identified with the herbaria of Ranchi University, Ranchi, Jharkhand, Botanical Survey of India and different floras⁸⁻⁹. All the collected specimens were deposited in the herbarium of Department of Botany, Ranchi University, Ranchi for future reference.

Results and discussion

Twenty eight plant species used in 12 folklore formulations with their local names, plant parts used, quantity and mode of application for the

*Corresponding author

Table 1— Ethnomedicinal formulations used by traditional herbal practitioner of Ranchi, Jharkhand

Ailments	Plant names	Local plants name, parts used and mode of application
Malaria	<i>Andrographis paniculata</i> Nees. + <i>Aegle marmelos</i> Correa. + <i>Cyperus rotundus</i> L.	5 gm <i>Kalmegh</i> leaves + 5 gm <i>Bel</i> leaves + 5 gm <i>Motha</i> tubers decoction is taken orally.
Malaria	<i>Calotropis procera</i> R. Brown	1 flower (excluding petals) of <i>Akwan</i> per dose taken orally.
Menstrual cycle disorder	<i>Plumeria rubra</i> L.	5-10 gm <i>Gulaincha</i> flowers (red varieties) macerated part is taken orally.
Menstrual cycle disorder	<i>Ficus glomerata</i> Roxb.	5-10 gm <i>Dummar</i> (<i>Gular</i>) fruits + <i>Madhu</i> (honey) is taken in empty stomach.
Toothache	<i>Elettaria Cardamom</i> White et Mason. + <i>Citrus aurantifolia</i> Swingle.	5 fruits <i>Elaychi</i> + juice of <i>kagzi nimbu</i> is applied on painful areas in the form of <i>chapan</i> .
Leucoderma	<i>Triticum aestivum</i> L. + <i>Coccus nucifera</i> L.	20 gm wheat root + coconut oil; wheat fried in coconut oil and is applied over the spot in the form of <i>chapan</i> .
Dog bite	<i>Achyranthea aspera</i> L. + <i>Cynodon dactylon</i> (L.) Pers. + <i>Piper longum</i> L.	50 gm <i>Chirchiti</i> root + 20 gm <i>Doob</i> grass having less chlorophyll +10 gm <i>Rali</i> fruit is applied over the bite portion in the form of <i>chapan</i> .
Skin disease	<i>Bahunia variegata</i> L. + <i>Celosia cristata</i> L. + <i>Pongamia pinnata</i> (L.) Pierre	20 gm <i>Koynar</i> bark +10 gm <i>Murga phul</i> +50 gm <i>Karanj</i> oil <i>chapan</i> is applied over infected portion.
Vitality	<i>Tinospora cordifolia</i> (Willd.) Hook. F. & Thomas + <i>Lipea geminate</i> Kunth. + <i>Hyllanthus amarus</i> Schum. & Thonn. + <i>Withania somnifera</i> (L.) Dunal	20-30 gm <i>Guduchi</i> powder & whole plant + 10 gm <i>Vana tuls</i> leaves + 10 gm <i>Bhooianwla</i> +10 gm <i>Asgandh</i> powder is taken orally.
Jaundice	<i>Moringa oleifera</i> Lam. + <i>Phyllanthus amarus</i> Schum. & Thonn.	50 gm <i>Munga</i> tender leaves + 20 gm <i>Bhooianwla</i> whole plant <i>sharbat</i> is taken in cold water.
Joints pain	<i>Curcilogo orchioides</i> L. + <i>Cipadessa baccifera</i> L. + <i>Moringa pterigosperma</i> L. + <i>Canna orientalis</i> Roxb.	10 gm <i>Talmula</i> root +25 gm <i>Titpungi</i> root +10 gm <i>Munga</i> bark +50 gm <i>Raktagarur</i> <i>chapan</i> is made and applied over the joints.
Contraceptive	<i>Piper betle</i> L.+ <i>Bambusa bambos</i> (L.) Voss.	2- 4 gm <i>paan</i> root + 2-4 gm bamboo seeds are taken orally in the form of <i>goli</i> in empty stomach.

Chapan: The paste form of the medicine is called *chapan*

Goli: Some of the formulations in the tablet form were termed as *goli*

treatment of various ailments/disorders have been enumerated (Table 1). The disorders include malaria, menstrual cycle disorder, toothache, leucoderma, dog bite, skin disease, vitality, joints pain and contraceptive. The knowledge of tribal people on the abortifacient and female contraceptives, which is one of the important information, is quite relevant to the present day situation⁵. The formulation for joints pain prescribed includes *Curcilogo orchioides*, *Cipadessa baccifera*, *Moringa pterigosperma*, and *Canna orientalis*. The rural ladies use these formulations in the form of paste. Local persons rely wholly on the traditional medicines prescribed by the local traditional herbal practitioner. These traditional medicines of indigenous origin may be integrated with national healthcare systems¹⁰⁻¹². Plants have been selected and used empirically as drugs for centuries, initially as traditional preparations then as pure active principles. The study is likely to promote a rational use of

botanicals and must be continued focusing on isolating and characterizing the active principles of the crude extract, its pharmacological validation, standardization and formulation. It is hoped that such ethnomedicinal study will provide important database of the different folklore formulation used locally of the study area to cure different diseases.

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