

A Birds Eye View on Ethnobotany of Dausa District, Rajasthan

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Abstract—An ethnobotanical survey of some medicinally important plants of District Dausa was undertaken by means of oral questionnaire. The aim of the survey was to collect information about these valuable plants used in the treatment of various ailments and to identify the knowledgeable traditional healers among different communities in rural areas of Dausa, Rajasthan. Interviews were conducted of the local people, who had knowledge on the medicinal uses of various parts of these plants. The survey was made during 1999-2000. Many plant species were reported to be in use among the rural people of different community of the study area. These species are frequently used for a variety of health problems. Due to overgrazing, encroachments, unsustainable other developmental activities in the regions, several persistent medicinal plant species are on the verge of extinction. The survey provides a veritable source of information traditional medical practitioners and medicinal plant researchers and help in developing strategies for future conservation.

1. INTRODUCTION

India has one of the oldest, richest and most diverse cultural traditions associated with the use of medicinal plants in the form of traditional system of medicine. Inherited from elders, every household in India has a recipe for home remedies to cure the routine disorders. However, no proper documentation of such remedies exists. Recently, many developing countries have ventured into studies of traditional medicines, devoting significant attention to migrant communities in industrialized countries.

Ethnobotany deals by means of the direct time-honored and natural association among human beings and plants (Trivedi, 1997). The use of plants as medicine to cure or prevent illness and to lubricate the wheels of social interaction at the interpersonal and group level is a behavior that predates civilization, and extending to every society irrespective of its level of development and sophistication.

2. METHODOLOGY

Periodic field surveys for ethnobotanical exploration were undertaken during 1997-2002, in which more than 50 persons were interviewed. Informants were requested to collect specimens of the plants they knew or to show the plant species on site. These informants were traditional healers themselves

or had a tradition of healing in their families and had at least some knowledge of the medicinal use of the plants. The information was collected by conducting personal interviews with different ethnic groups, villages and traditional healers. The species mentioned by the informants were taxonomically identified. The ethnobotanical data were collected through questionnaire, interviews and discussions among the traditional practitioners in their local language. Questionnaire allowed descriptive responses, such as part of the plant used, medicinal use, detailed information about the mode of preparation and form of usage such as fresh or dried, as ingredients mixed with other plants or unmixed. The information gathered was confirmed by old traditional practitioners in different groups of village people of the area of investigation. During the field survey, the plants have been collected from the natural habitats in their flowering and fruiting stages as far as possible. Collected voucher specimens were pressed, dried, mounted, prepared and preserved for further response. Plants with their correct nomenclature were arranged alphabetically by their scientific names, vernacular name and ethnomedicinal uses. In this observation important medicinal plants were photographed and the photographs were affixed in appropriate plates in the enumeration of data to support the present study. The plant specimens were identified using relevant floras. The identification was then verified and confirmed at Herbarium, Department of Botany, University of Rajasthan, Jaipur (RUBL).

3. RESULTS AND DISCUSSIONS

More attention was paid to species of highly threatened and endangered medicinal plants representing some genera that were used for primary health care practices as reported by the informants of different communities. These plants fall under different growth habits which include shrubs and climbers. This study established that many different parts of the medicinal plants species were used as medicine (root, stem, leaves, whole plant, flowers, bark, etc.) Most commonly used plant parts are the root and the stem. Though traditional healers of rural areas use different morphologically useful parts such as leaf, root, stem, bark, tuber and latex for their health care, the stem, root and whole plant extract were largely

used for herbal preparations. These collected medicinal plants are used for the treatment of several diseases like ulcer, headache, diarrhea, arthritis, cold, fever, bronchitis, elephantiasis, urinary disorders, eye diseases, joint pains, fertility enhancement, toothache, wounds, swelling, bone fracture and snake-bite. In general, the study made it clear that there is enormous scope for traditional medicines extracted from many species in the villages of many parts of India. Rural communities collect the curative plant resources in and around their dwelling areas. In a like manner, the documentation of the traditional system of medicines practiced by non-tribal communities in other regions of our country is necessary to harness the wealth of medicinally valuable plants and to adopt suitable utilization. Moreover, scientific validation of many species in terms of characterization of bioactive principles and their efficiency in treating various ailments are yet to be explored.

Human beings have been using plants since long. Research workers are bringing to light additional information on the relationship between plants and man. Man's vital interest in plants primarily as a source of food, shelter and clothing dates back to the very origin of human civilization. The number of species about which we have a reasonably detailed knowledge is probably less than one percent Sivarajan 1991.

Ethnobotanical information throughout the world is available in the literature (Abbs et al 1992; Alan 1992; Manandhar, 1995; Medley, 1993). However studies related to ethnobotany in India have received due attention in the last two or three decades (Jain 1975; Chakravarti, 1975; Rao, 1981; Gangwar and Ramakrishnan, 1990; Dobriyal et al, 1996; Hedge et al, 1996; Singh, 1999a). Moreover sporadic ethnobotanical information is available from Rajasthan (Nathawat and Deshpande, 1960; Chandra, 1978; Shrivastava, 1977; Singh and Pandey, 1998; Singh, 1983; Shekhawat and Anand, 1984; Joshi, 1995; Singh, 1999b).

Medicoethnobotany acts as a bridge between botany and tribal knowledge regarding medicinal aspects of plants. Rajasthan is very rich in floristic diversity as well as in ancient folk literature which may be tapped for information since all systems of medicines have their roots, in one way or the other in folk medicines and house hold remedies. It is apparent from the foregoing account that rural inhabitants have a good knowledge of medicinal

uses of plants available in their area. The rural people exploit plants for the treatment of a wide variety of ailments whether major or minor like fever, asthma, cough, cold, headache, rheumatism, stomachache, skin diseases etc. during ancient years there has been a wide concern to collect more and more ethnobotanical information, especially ethnomedicinal (Jain, 1963,1964,1965,1981,1987,a,b; Choudhary et al 1989; Jain and Tarafdar, 1970; Binu et al 1992; Trivedi 2002).



Figure 1. Interviewing with sarpanch and villagers

Table 1. Medicinal plants, the part used to treat various ailments, the mode and preparation

S. No.	Name of the plant	Parts used	Ailment	Mode	Preparation
1	Abelmoschusmoschatus	Root & root bark	Abdominal pain & dysentery	Extract, orally	Crushed & strained
2	Abrusprecatorius	Leaves, seeds	Heart burn, plough wounds in neck of cattle, urinary tract infection, constipation	Rubbed locally, seed orally,	Paste

3	Acacia catechu	Exudates	Difficult child birth	Orally	Katha mixed with milk, local liquor
4	Acacia farnesiana	Leaves	Eye inflammation	Orally, poultice over eyes	Crushed into paste
5	Achyranthusaspera	Whole plant, root	Cough, cold, gangrene	One cake eaten orally locally	Cakes of ash and maize flour sandwiched in 2butea leaves
6	Adiantumcaudatum	Whole plant and stem	Cuts and migraine	As ointment	Crushed into paste
7	Ailanthus excels	Root, stem bark	Fever, cough, cold	Orally, vapors inhaled	Decoction, drug boiled in water
8	Aloe barbadensis	Leaves	Guinea worms	Locally applied,	As vegetable
9	Amaranthuscaudatus	Leaves	Constipation, loss of appetite	Eaten	As vegetable
10	Argemonesps.	Root, leaves	Eye inflammation, scorpion stings	Dropped in eye, locally applied	Juice
11	Curculushirsutus	Leaves	Cut, sores, wound, blindness	Dripped over eyes, eaten	Juice, vegetable
12	Crataevanurvala	Leaves,stem bark	Guinea worm, cracked skin	Hot ones tied locally	Boiled, paste
13	Cucurbita moschata	Fruit stalk	Scorpion stings	Locally	Sap by rubbing in stone
14	Cuscutareflexa	Stem	Jaundice	Orally	Decoction
15	Cyperusrotundus	Stem	Snakebite	Chewed	Chewed
16	Daturasp.	Latex, leaves	guinea worm	Smear locally	Paste
17	Dendrophoe falcate	Leaves	Dropsy	Bath taken	Handful of crushed leaves
18	Derris indica	Oil	Sores,wounds,lice and ticks in hair	Locally	Crushed or as decoction
19	Euphorbia hirta	Whole plant	Ring worms	Locally	Paste
20	Ficushispida	Receptacle	Facial swelling	Locally on face	Paste
21	Gymnemasyvestre	Whole plant	Dysentery	Orally	Extract in water
22	Indigoferalinnai	Leaves	Migraine	Three drops dripped in eye	Juice
23	Jatrophacurccas	Latex	Pimples, boils ,sores	Smear locally	Smear locally
24	Lawsoniainermis	Leaves	Conjunctivitis	Suppository	Paste
25	Syzygiumcumini	Stem bark	Dysentery, abortion	Orally	Crushed
26	Tamarindusindica	Seeds	Scorpion stings	Locally	Rubbed on stone with water
27	Tinosporacordifolia	Stem	Fevers,painful lactation	Rubbed locally	Water extract paste
28	Tridexprocumbena	Whole plant	Bleeding	Dripped over injured spot	Juice
29	Typhaaugustata	Inflorescence	Deep unhealing wounds	Tied as dressing	Infl. split in 2 halves, a half taken
30	Vitexnegundo	Leaves, seeds	Dropsy	One eaten daily	Laddoos of powdered fried seeds with 8 times their weight of flower

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