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Study of some Ethno Medicinal Plants used by Tribals of Alirajpur, Madhya Pradesh, India

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Abstract

Alirajpur is one of the tribal district of Madhya Pradesh and plants are being used as medicine and pharmaceuticals by large numbers of tribal, rural and urban people. Several tribal communities like Bhil, Bhilala and Barela inhibit in the area. An Ethno botanical surveys had been carried out in the Alirajpur district of Madhya Pradesh from 2009-2010. The investigation deals about15 plant species which is used by tribals of this area. A record of 15 medicinal plant species which is belong to 12 Family and 14 Genera used by tribals to cure various ailments among human beings are given. Ethno medicinal information was gathering through interview to Barwah and Rajaliya for curing of diseases. The present paper deals with the ethno botanical study of Alirajpur region for the preparation of an inventory. Details of medicinal plants are described alphabetically, Botanical names followed by family, local names, plants part used, and the ethno medicinal uses have been provided.

Keyword: Alirajpur, Barwahs, ethno medicinal plants, traditional healers.

Introduction

Ethnobotany term was given by Harshberger J.W. in 1896. It is the art of collection of useful plants by the society and describe its uses. Ethnobotany deals with the uses of the plants for fiber, fuel, fodder, dyes, tannin, gum. Use of plants based drugs and chemicals for curing various ailments and personal adornment is as old as human cultivation[1]. India is good sources of medicinal plants. It has approximately 7500 medicinal plant species are found. Important information of medicinal plants is also given in Rig-Veda. It is one of the oldest book on medicinal plants. Medicinal Plants and its parts are good sources of medicine even today it is the backbone of pharmaceutical companies. Medicinal plants have been used in our country since time immemorial. Thousands of Indians are used herbal drugs regularly. They are used spices in their food for good health. Since last four decades considerable progress has been made in the field of ethno medicine. A review of literature on ethno medicine indicates that various workers have contributed from different parts of India including Madhya Pradesh[2-7]. But still there are some interior areas which could be served intensively for the search of new traditional medicines.

In the present work is designed with an objective of providing identification of medicinal plants and formulation of ethno-medicinal uses of plants present in Alirajpur district of Madhya Pradesh.

Study area: Alirajpur District was carved out of Jhabua District on 17th May 2008. Alirajpur is predominantly a tribal district of Madhya Pradesh, located in the Western part of Madhya Pradesh. In the North-West it touches the state of Rajasthan while in the West it is surrounded by border of Gujarat. Mahee and Narmada rivers make its Eastern and Southern border. Alirajpur district have dived into six blocks namely: Alirajpur, Sondwa, Katthiwada, Bhabra, Jobat and Uaigarh. Alirajpur district lying between $22^0$18'N latitude and $74^0$20'E longitude, covers an area of 3182 square kilometers. According to census 2011, Alirajpur population is 728,999. Alirajpur District average Rainfall is 850 mm. Alirajpur District temperature ranges between 23^0-30^0C. Its major parts is covered with dense forest in which various tribal like Bhil, Bhilala and Patliya are living in majority. Bhilala are the main inhabitants of different villages of the district. Mangoes, wheat, maize, pulses, spices, sorghum, garlic, chili, brinjal are major agriculture product. It is the biggest trading center of mangoes in Madhya Pradesh. Bhagoriya is a special cultural public festival of Alirajpur district. The dryness of the climate and aridity different topography of the area provides a favorable ground to grow the plants.

Methodology

Ethno botanical survey was conduct in different tribal inhibited areas of Alirajpur district during 2009-2010. Extensive field trips were organized for collecting the plant species and data. The method adopted for collection of data was about medicinal uses of plants in the treatment of various diseases.

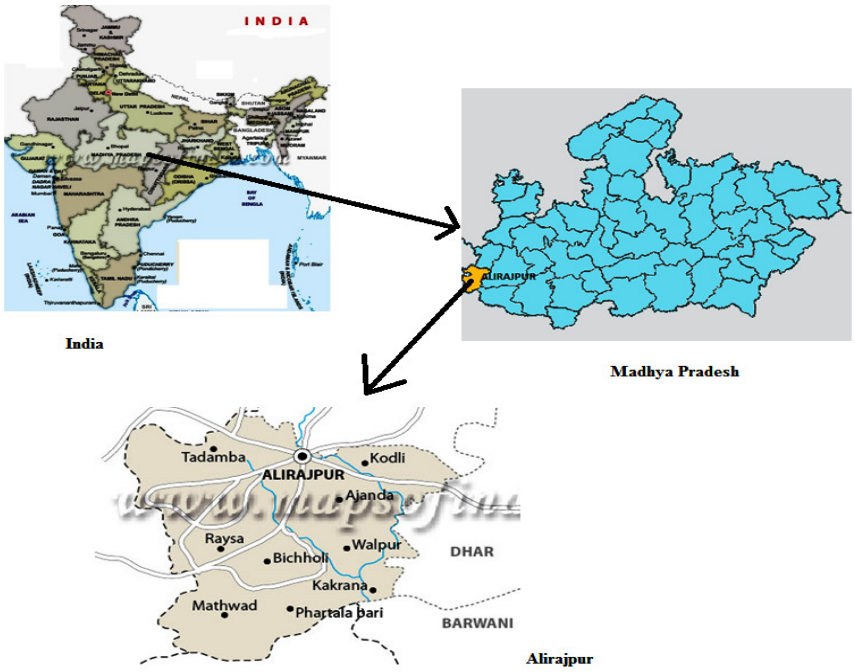

Figure-1
Map showing Alirajpur district

Ethno botanical information were collected by standard method of Jain and Rao[8]. A questionnaire was prepared to gather data for this purpose, the collected plant specimens were identified by using flora and others standard literature[9-12]. Information on plants used for other than medicinal purpose is also given. Information on ailments, plant part used, formulation along with dose and duration etc. gathered from tribals have been enumerated.

Results and Discussion

The plant species studied were arranged alphabetically along with their family, Local name, Medicinal uses, plant part used are as under:

Enumeration of plants: i. *Aegle marmelos Linn.(*Rutaceae): Local name-Bilpatra, Plant part used-Fruit, Uses-Pulp of fruits used for candy which is used for digestive problem. ii. *Alysicarpus vaginalis (L.) DC* (Fabaceae): Local name- Sevro, Plant part used-Root, Uses-Paste of root is mixed with Tulsi leaf and crushed it then it is given in cough. iii. *Abutilon indicum(Linn.)Sweet. (*Malvaceae): Local name-Atibala, Plant part used-Leaf, Uses-20 gm leaf powders mixed with 400 gm wheat flour and prepared bread and take it at night for 30 days to treat uterus displacement. iv. *Ageratum conyzoides Linn.* (Asteraceae): Local name-Gandhaniyo, Plant part used-Leaf, Uses-Leaf juice is given in leucoderma daily during morning for about one month. v. *Adhotoda zeylanica Medic.* (Acanthaceae): Local name-Adusha, Plant part used-Leaf, Uses-Two leaves are chewed and swallowed daily in morning for six month then it cured tuberculosis. vi. *Azadizachata indica A. Juss.* (Meliaceae): Local name-Neem, Plant part used-Bark, Uses-40 gm bark of Neem mixed with 40 gm bark of *Acaccia nelotica (Linn.) Willd ex. Del.* Boiled and filtrated it and 50 ml is taken in empty stomach in the early morning for 7 day to teat 'Swet-Pradar' (white discharge). vii. *Butea monosperma (Lam.) Taubert.* (Fabaceae): Local name-Dhak/ Khakra, Plant part used-Seed, Uses-Seeds rubbed with water on hard subtract and paste applied over scorpion bite. viii. *Balanites aegyptiaca (L.) Delile* (Balanitaceae): Local name-Hingot, Plant part used-Fruit, Uses- Ripe fruit pulp is mixed in cow's milk and given it twice in a day to the children suffering from pneumonia. ix. *Bombax ceiba L.* (Bombacaceae): Local name-Semal, Plant part used-Root, Uses-Root is chewed by males to increase sexual vigor. x. *Butea monosperma (Lam.) Taubert.* (Fabaceae): Local name-Dhak/ Khakra, Plant part used-Root, Uses-Root is chewed in the case of male impotency. xi. *Cynodon dactylon (Linn.) Pers.* (Poaceae): Local name-Duwato, Plant part used-Whole plant, Uses- *Hibiscus rosasinensis* flower, old molasses and whole plant are crushed with rice washed water and it is given in empty stomach to treat menorrhea. xii. *Centella asiatica (L.) Urb.* (Apiaceae): Local name-Brahami, Plant part used- Leaf, Uses-One teaspoonful dried leaves powder mixed with sugar and taken daily to increase memory. xiii. *Carica papaya L.(*Caesalpiniaceae): Local name-Papita, Plant part used-Fruits, Uses-Latex of young fruits is dried and given in cow's milk two times given it for abortion. xiv. *Syzygium cumini (L.) Skeel*s. (Myrtaceae): Local name-Jamun, Plant part used-Seed, Uses- 5 g powdered dried seed taken twice daily for curing diabetes. xv. *Mucuna pruriens (L.) DC* (Fabaceae): Local name-Kojda, Plant part used-Root, Uses- Root extract is given with water in empty stomach to sexually weak male.

During the survey plant and plant parts are used for medicine in Alirajpur to treat different diseases have been explored. Analysis of the data revealed that Root and Leaves are mostly used for various disease fallowed by Fruits, Seeds Bark and whole plant table-1 and figure-2. The number of plant species used by the tribe for curing some of the important and common diseases, shown in the parenthesis are digestive problem, cough, uterus displacement, leucoderma, tuberculosis, white discharge, scorpion bite, pneumonia, increase sexual vigor, male impotency, menorrhea, increase memory, abortion, diabetes and sexually weakness table-2. The present communication documents 14 plants species belonging to 12 Families 14 genera that are traditionally valued. Different plants part is used in different diseases. The plants used are found growing and are available in the vicinity and in many cases are immediately available as therapeutic. Different plants species were used in each treatment. *Butea monosperma (Lam.) Taubert*. Were the common plant species is used by the tribal of the region to treat scorpion bite. Traditional healers from the region provided plant remedies to humans and livestock health problems.

Conclusion

Our studies shows that tribal of Alirajpur are dependent upon the plant resources for medicine and other purposes. Our data proved a baseline to search new drug. It is helpful to Pharmaceutical Company to discover a new drug. Further work in ethnobotanical studies is in progress. The flora of Alirajpur provides very good source of many medicinal plant used as traditional medicine.

Table-1
Plant parts used as medicine

S. No.	Plant parts	No. of disease
1	Fruit	3
2	Root	4
3	Leaves	4
4	Bark	1
5	Seed	2
6	Whole plant	1

Table-2
Plant parts used in various Diseases

S. No.	Plant part used	Disease
1	Fruit	Digestive problem,
2	Root	Cough
3	Leaves	Uterus displacement
4	Leaves	Leucoderma
5	Leaves	Tuberculosis
6	Bark	White discharge
7	Seed	Scorpion bite
8	Fruit	Pneumonia
9	Root	Increase sexual vigor
10	Root	Male impotency
11	Whole plant	Menorrhea
12	Leaves	Increase memory
13	Fruit	Abortion
14	Seed	Diabetes
15	Root	Sexually weakness

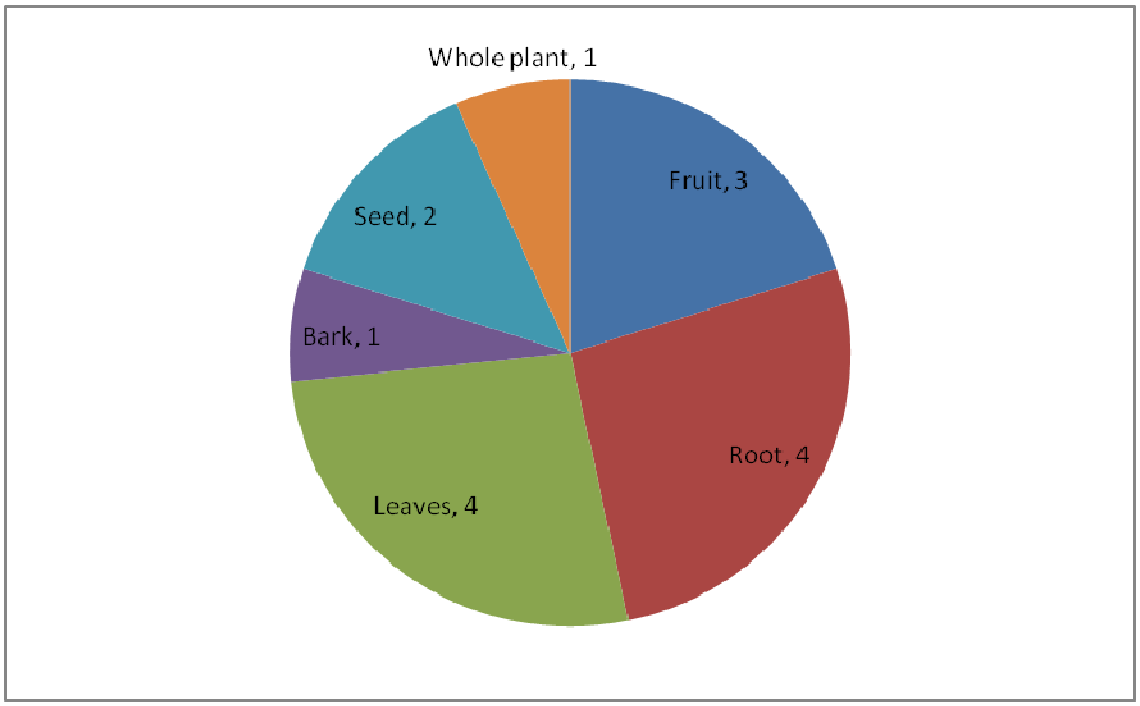

Figure-2
Number of plant part used as medicine

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