

## MEDICINAL PLANTS WEALTH OF THE FAMILY EUPHORBIACEAE IN AZAMGARH DISTRICT (U.P.)

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### ABSTRACT

The ethnobotanical data obtained from the survey of Azamgarh district and its adjacent districts of eastern U.P. reveals some important information regarding the medicinal use of different plant parts belonging to the family Euphorbiaceae. In this study 18 plant species of Euphorbiaceae were found effective in curing some common human diseases. Mode of application of these has been provided in most of the cases. The study highlights how the tribal peoples developed the art of treatment through the use of different parts of different plants as drugs and they still use them to cure their diseases.

**KEYWORDS:** Ethnobotanical, Euphorbiaceae, Tribals, Azamgarh

The use of plant and plant parts to cure the disease is very old concept in our country, but its execution in our country is new. The ethnobotany expresses the interrelationship between man and the plants in the past and present human societies. The term ethnobotany was first coined by Harshberger (1895) for such studies, he conceptualized ethnobotany as a science. It is an offspring of economic botanist on one hand and anthropologist on the other hand. The present survey highlight, how the biological resources found in the nature are utilized by the primitive people. The tribal people are integral part of the complex web of the plants and animals, as they exploit many plants and animals for their survival. Living close to nature they have developed close relationship with the living organism of their locality. The plants / plant community play an important role in the economic social and cultural life of the tribal. With a view to record a rich knowledge on plant drugs, the present study was undertaken to record the data regarding the drugs of plant origin as used by certain tribal, common people and the medicine men of this area.

### MATERIALS AND METHODS

The survey of the area was conducted repeatedly and interviews of the experienced senior tribal people, common men and medicine men were arranged to know the medicinal use of the plant for their daily requirements. Repeated inquiries on medicinal application of the same plant were made to different persons of the same tribe to ascertain the correctness of the information. The tribes studied of

different areas are well known to make the different drugs derived from the plants / plant parts to cure the various human diseases. The information regarding the preparation and their application in each case was carefully recorded.

District Azamgarh has an area of 4234 sq. km and lies between 26° 3' N latitude and 83° 13' E longitudes. Its climatic condition is tropical with hot summer followed by heavy rains and dry winter. The winter extends from middle of October to end of March. The coldest month is January in which temperature falls below 7°C. The summer is hot, the average temperature for May is 34.1°C and for June is 34°C whereas, the extreme maximum recorded temperature is 43.5°C and 44.2°C respectively. The average total annual rainfall is about 1031 mm out of which nearly 80 per cent is received during rainy season (June to September).

The collected plants were identified with the help of local Floras - by Duthie (1903-1929); Kanjilal (1966); Srivastava (1986) as far as possible. The doubtful specimens were further verified and their identity are confirmed at NBRI, Lucknow; and Central Circle of BSI at Allahabad. Scattered information in the literature were also scrutinized and incorporated in our account of the taxa. Properly mounted specimens are deposited at the Herbarium of the department of Botany Shibli National College, Azamgarh.

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## RESULTS AND DISCUSSION

Information regarding the medicinal applications of different parts of 18 plant species belonging to family Euphorbiaceae was obtained through the information collected from tribal's (namely Banaras, Gonad Musher, Nut, Pan aria and Rebar), common people and medicine men belonging to district Azamgarh and adjacent districts. The information are tabulated and confirmed on the basis of personal inquiries made from time to time for the last two years. In most of the cases the medicinal applications of the plants have not been recorded earlier. It is suggested to screen out the medicinal plants recorded to study their active principle and to ascertain their usefulness and application given by the tribal and local peoples, as the information may not be always very authentic. In few cases information's as mentioned in Table have been personally verified. Chopra, et al. 1956 provided a glossary of the Indian medicinal plants. Gupta 1964

published a list of 115 plants of medicinal and aromatic plants of Chamba Forest division, Himanchal Pradesh. Bhattacharya and Bhargava 1979 gave the use of plant medicine of North West Himalayas. Some of the important ethnobotanical treaties were also consulted to verify the information (Kritikar and Basu 1933; Mooney, 1950; Ahmad, 1992). However, it is right time to pay more attention to the plant kingdom and to make systematic studies into this almost unexplored territory.

Much emphasis should also be given to the *in-situ* conservation of these medicinal plants. Due to over exploitation, habitat modification and environmental stress, a perceptible change is sometimes noticed in the growth patterns and regeneration strategies of plants. *In-situ* conservation of medicinal plants is highly desired along with their habitats. It is hoped that the information recorded will be helpful to the plant chemists and pharmacologists.

**Table 1: Some medicinal plants of the family Euphorbiaceae employed by tribal's and others**

Sl. No.	Name of Taxa	Local Names	Medicinal application
1.	<i>Acalypha indica</i> Linn.	Choti kuppe	<ul style="list-style-type: none"> <li>The paste of the whole plant is applied externally on ulcers, cuts and burns.</li> <li>The decoction of the plant mixed with jaggery is used for cold and cough and also in rheumatic complaints</li> </ul>
2.	<i>Baliospermum montanum</i> (Willd.) Muell.-Arg.	Danti, Nakli Jamal Ghota	<ul style="list-style-type: none"> <li>The decoction of leaves is given at bedtime in the treatment of whooping cough and asthma.</li> <li>The seeds are purgative.</li> </ul>
3.	<i>Bischofia javanica</i> Blume	Paniala	<ul style="list-style-type: none"> <li>Juice of the leaves is used in sores.</li> </ul>
4.	<i>Bridelia squamosa</i> Gehrman	Khaja	<ul style="list-style-type: none"> <li>Bark is useful in rheumatism.</li> <li>The decoction of tender leaves and twigs is administered along with cow milk for rapid calcification of fractured bone.</li> </ul>
5.	<i>Chrozophora verbascifolia</i> A. Juss.	Subali	<ul style="list-style-type: none"> <li>Root ashes-is given to children in cold and cough.</li> <li>Seeds are used in Constipation.</li> <li>The plant is used in the treatment of paralysis.</li> </ul>
6.	<i>Croton bonplandianum</i> Baill	Railpati/ Merchani	<ul style="list-style-type: none"> <li>Latex is used to cure nail diseases.</li> <li>Leaves are used for sprain in the form of poultice.</li> </ul>
7.	<i>Emblica officinalis</i> Gaertn.	Amla, Aoula	<ul style="list-style-type: none"> <li>The dried fruit is useful in the treatment of diarrhoea, dysentery, jaundice, haemorrhage, asthma, rheumatism, bronchitis and tuberculosis</li> </ul>
8.	<i>Euphorbia dracunculoides</i> Lamk.	Chegulputput Jaichi	<ul style="list-style-type: none"> <li>Fruits paste applied externally to cure warts.</li> <li>The seed oil is used externally in the treatment of gout, rheumatism, ophthalmia.</li> <li>The seed oil is externally used for ophthalmia and internally for digestive disorder.</li> </ul>

9.	<i>Euphorbia hirta</i> Linn.	Bari Dudhi	<ul style="list-style-type: none"> <li>• The root is considered as an anti-dote to snake venom.</li> <li>• Whole plant is used for the treatment of jaundice.</li> <li>• The latex of the plant is regarded anti-cancerous.</li> </ul>
10.	<i>Euphorbia nerifolia</i> Linn.	Singhore	<ul style="list-style-type: none"> <li>• Latex is useful in the treatment of asthma.</li> </ul>
11.	<i>Euphorbia thymifolia</i> Linn.	Chhoti Dudhi	<ul style="list-style-type: none"> <li>• The paste of the leaves is bandaged on wounds for quick healing.</li> <li>• The powder of entire plant is an effective medicine in the treatment of gonorrhoea.</li> <li>• Root and leaves are also antidysentric</li> </ul>
12.	<i>Euphorbia pulcherrima</i> Willd	Lall Patta	<ul style="list-style-type: none"> <li>• Latex is used as Purgative</li> </ul>
13.	<i>Jatropha curcas</i> Linn.	Ratanjot, Bilati rend.	<ul style="list-style-type: none"> <li>• Seed oil is a good laxative.</li> <li>• The seed oil is also used externally in the treatment of rheumatism.</li> </ul>
14.	<i>Jatropha gossypifolia</i> Linn.	Bhagend	<ul style="list-style-type: none"> <li>• Juice of the leaves is used to cure sores on the tongue of babies</li> <li>• Leaves powder is used as purgative.</li> <li>• Latex is beneficially applied externally on burns</li> </ul>
15.	<i>Mallotus philippinensis</i> Muell-Arg.	Rohini, Rohina	<ul style="list-style-type: none"> <li>• Powder found on the fruit is used for drying wounds.</li> <li>• Fruit Juice along with goat milk is given once daily for three days to lessen the sugar content in urine.</li> </ul>
16.	<i>Phyllanthus maderaspatensis</i> Linn.	Hazarmani, Hazardana	<ul style="list-style-type: none"> <li>• Leaves are used in headache.</li> <li>• Seeds are carminative, diuretic and laxative.</li> </ul>
17.	<i>Phyllanthus simplex</i> Retz.	Bhuia-vali	<ul style="list-style-type: none"> <li>• Root -externally applied for memory abscesses.</li> <li>• Leaves used in bruised and mixed with butter milk as a wash for itching in children.</li> <li>• Fresh flowers are also used in gonorrhoea.</li> </ul>
18.	<i>Ricinus communis</i> Linn.	Arand, Rendi.	<ul style="list-style-type: none"> <li>• The leaves are used in the treatment of jaundice.</li> <li>• A poultice of the root is applied externally in tonsillitis.</li> <li>• A poultice of seeds is applied with beneficial result to gouty and rheumatic swellings.</li> <li>• Castor oil is highly purgative.</li> </ul>

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