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**PUBLISHED PAPER'S TITLE : REVIEW ON
SOME IMPORTANT MEDICINAL PLANTS:
THEIR CHARACTERISTICS, USE AND
GEOGRAPHICAL DISTRIBUTION IN CHAKIA
TAHSIL**

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Research Paper

REVIEW ON SOME IMPORTANT MEDICINAL PLANTS: THEIR CHARACTERISTICS, USE AND GEOGRAPHICAL DISTRIBUTION IN CHAKIA TAHSIL

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Declaration

The Declaration of the author for publication of Research Paper in Asian Journal of Modern and Ayurvedic Medical Science (ISSN 2279-0772) Chandra Shekhar¹, Ankana² the authors of the research paper entitled Review On Some Important Medicinal Plants: Their Characteristics, Use And Geographical Distribution In Chakia Tahsil declare that ,we take the responsibility of the content and material of my paper as we ourself have written it and also have read the manuscript of our paper carefully. Also, we hereby give our consent to publish our paper in ajmams , This research paper is our original work and no part of it or it's similar version is published or has been sent for publication anywhere else.we authorise the Editorial Board of the Journal to modify and edit the manuscript. we also give our consent to the publisher of ajmams to own the copyright of our research paper.

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ABSTRACT

Flora is considered as one of the most important natural resources and is a major source of fulfilling our basic needs. In this context, medicinal plants are important products extracted from these flora treasures. India has been very rich in medicinal plants and utilizes in therapeutic use since very long. In various cultures, traditions, text, mythologies etc., these plants are intricately and inextricably linked to each other. Today, India needs a proper management and planning to conserve and enhance the resources. Chakia Tahsil, situated in Uttar Pradesh, India, has total five forest ranges, namely Chakia, Chandraprabha, Jaimohini, Majhgai and Naugarh. The Tahsil's total protected forest cover is nearly 27431.08 ha and plantation includes nearly 36978.38 ha of land, is a prominent resource of the traditionally used herbal plants. Along with the distribution and identification of the major plants, the study also focuses on the vegetation resources.

Key Words: *Medicinal Plants, Geographical Distribution, Forest Resources, Therapeutic Uses*

INTRODUCTION

Geography has been a multidisciplinary subject and imbibes various disciplines to explain the human and environment relationships. In this reference, one aspect of geography lies as a branch of environmental geography. This field studies environment, their components and human activities with human responses to the environment. Sir A. G. Tensley in 1935 first used the term 'ecological system', referring whole community of organisms and its environment as a one unit. Mobius (1977) termed it as 'biocoenose'. In the distribution of an organism and their growth depends on the abiotic factors like sunlight, temperature, precipitation, soil fertility and wind. Biological communities develop and establish in an area in a series of stages over time. The change in species composition and community structure and function over time is called succession or ecological succession.

Like this, the study which deals the functional aspects of organism like plants and animals is under the theme of physiological ecology or Biogeography (Barrey, 1977). Hardey (1913) also expressed similar view that the study of the distribution of different types of vegetation and the way in which these types and their distribution are related to the other geographical conditions is called plant geography or Phytogeography. The study of plants as a resources of medicine has become more important today (Parage, 2007).

Plants have been used as a source of medicine throughout the world for more than 5000 years and still continue to

occupy an important place in traditional as well as a modern system of medicine. According to the report of the World Health Organization (WHO), up to 80% of the developing world relies on traditional (predominantly plants based medicines) for its primary health care need (Pandian, et..al., 2008). India is endowed with a rich wealth of medicinal plants. These plants have made a good contribution to the development of ancient India materia medica. India one of the 12 mega biodiversity centers of the world is one of the richest country in plant wealth and medicinal plant heritage (Chopra, 2007).

During the field survey of Chakia Tahsil certain important medicinal plants were observed which were well grown all over the witnessed land of Chakia Tahsil. These plants were properly identified and compared with the plants mentioned in the Ayurvedic literatures. Here, some of the expected plants were found extinct and many are facing a danger of extinction.

GEOGRAPHICAL PROFILE OF THE AREA

Chakia tahsil came into existence in 1997 along with the two other tahsil namely Sakaldiha and Chakia tahsil of Chandauli District (U.P.). The extent of study region is between 24°4' N to 25°3' N and 83° 3' E to 83° 24' E. (Fig 1). Physiographically, this tahsil enjoys an excellent combination of alluvial plain in the north and Vindhyan Upland in the south. The northern alluvial plain generally consists of flat topography with regional slope from south–west to north–east direction. This unit comprises of an upland plain (older alluvium) and low land plain (newer

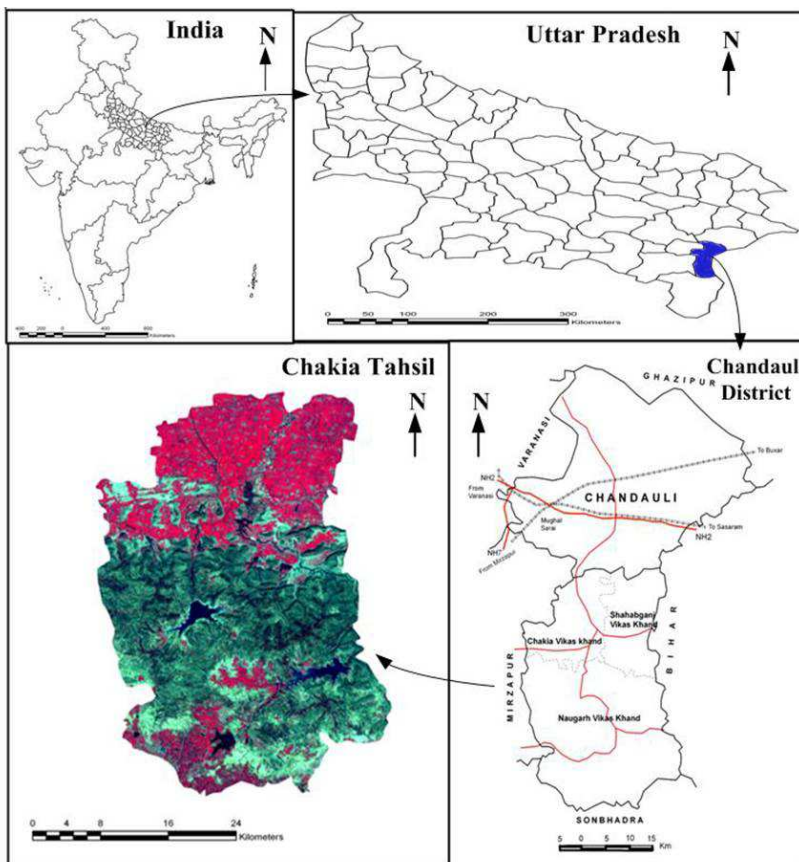


Fig. 1. Location map

alluvium). There is dead level topography with occasional water logging conditions at several places. The southern plateau rises abruptly from the northern alluvial plain with a number of the escarpments. The contour line of 100 m mainly demarcates the boundary between plateau and plain. The plateau zone is deeply dissected by network of Karamnasa River and is marked by highly rugged terrain. The resultant topography comprises of a number of mesas and isolated hillocks showing elevational differences from 150 m to 385 m above mean sea level. Intermontane valleys formed by the Karamnasa and Chandraprabha Rivers show varying elevation between 100-200 metres. Some deep gorges and waterfalls

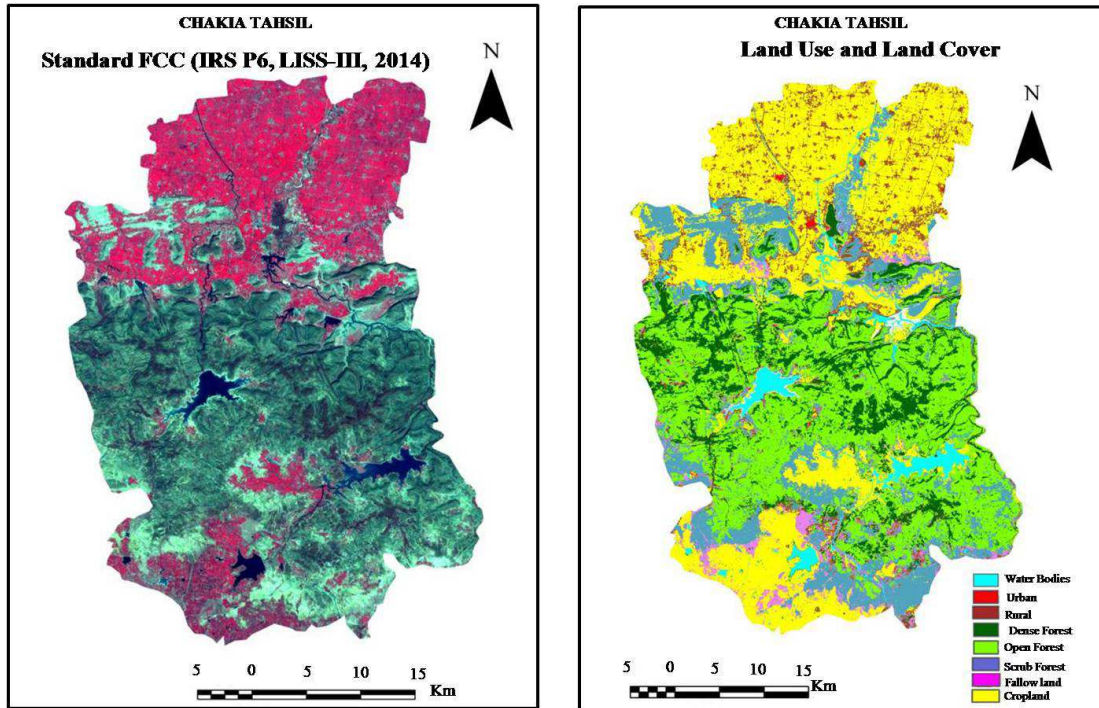
are prominent in this area such as at Rajdari (43 m), Deodari (58 m).

The Tahsil enjoys 'monsoonal' type of climate. It receives rainfall during from mid June and lasts till mid September. The hot summer season starts in mid March and lasts till mid June until the onset of monsoonal rainfall. From November to February, the season is known for the Winter season, with the pleasant cool weather. Western disturbances in the last phase decrease temperature and create chilly weather. February receives rainfall in this season because of western disturbances.

MAJOR IMPORTANT PLANTS AND TREES

The northern portion of this region, primarily utilized in the cultivation. The forest occupies almost the entire southern portion of Naugarh block of Chakia Tahsil.

The entire southern plateau region is covered under forest. Forest resource management in Chakia does not consider



Note: FCC: False Color Composite of Satellite data (IRS-P6) of Chakia Tahsil

Fig. 2.

only forest alone rather wildlife and other environmental issues are also dealt along with it. Different plantation centers existing in different five ranges, take care of necessary action in the Tahsil from time to time (Fig. 2). Forest types like deciduous dense, open and scrub forests along with plantation in the Tahsil. The southern region is almost covered with forest. Forest plantation is done in the southern area, remarkably on pediment zones. Structural hills, residual hills, along the river courses and pediment zones reflect coverage of scrub forest. Now the government is focusing more on the forest plantation to prevent from deterioration of forest cover (Fig. 2).

The forests are mainly of tropical dry mixed deciduous type. These forests occur on the ridges, flat hill tops, suitable

slopes, foothills and plains of the Tahsil. Important trees in this region are *Salai*, *Mahua*, *Tendu*, *Dhaw*, *Bel*, *Amla*, *Palas*, *Makoh* and some important grasses include *Kans*, *Parwa*, *Khus Khus*, *Kusha* or *Chickwa* etc.

Each and every tree, in this forest is productive. There is hardly any tree which is left unused. The *Bahera* and *Amla* is used for medicinal purpose. The *Semel* is used for stuffing quilts, mattresses. The leaves of *Tendu* are used for *Biri* making. The *Palas* or *Dhaka* yield dyes and its seeds are used in medicine. The *Khair* provides raw materials for the other cottage industries. *Piar* or *Chiraunji* seeds are also used in medicine. For the local inhabitants, the forest is being the main source of firewood and charcoal. *Peepal*, *Salai*, *Jigna* etc. is used as firewood by the villagers. Thorn and

thistles are used in fencing. Honey and wax are also extracted from this forest. *Sabai* grasses are used in making ropes. The liquor, extracted from *Mahua*, is the favorite drink among the people. *Bamboos*, wood of *Sal*, *Mahua*, *Tendue* etc. are used locally mainly for building purposes. Forest products are also exported to nearby various other local industries. *Tendu* leaves are also exported to Ghazipur, Jaunpur, Mirzapur, Azamgarh, Faizabad. Wood of *Korayeya* is exported to Varanasi for toy making. The list of some medicinal plants and their therapeutic uses is listed in the Table 1.

CONCLUSION:

25 medicinal plants of different families which were commonly used by the local population for medicinal use) were recorded in this survey and tabulated with their vernacular names, common synonyms, habit, medicinally usable parts and therapeutic properties. The present finding indicates that there is a need of general awareness in the common people of Chakia Tahsil regarding the conservation of flora treasure as a major part of this flora has been deteriorating. Some forest part has been converted into cultivable land. Some forested land is seen as a scrub forest land. Some part of land is found to be barren. So this region needs a proper management and planning.

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Table 1: Showing the important medicinal plants with their Botanical Name, Families, Synonyms /Vernacular names, Habit, Parts Used and Therapeutic Uses.

S. No.	Medicinal Plants	Botanical Name	Family	Synonyms /Vernacular names	Habit	Parts Used	Therapeutic Use
1	Shalparni	<i>Desmodium gangeticum</i> DC	Papilionaceae	Vidargandha, Sariwan	Herbs	Whole (Panchang)	Fever, Diebetic, Urinary disorders
2	Chirbilb	<i>Holoptelea integrifolia</i> Planch.	Ulmaceae	Karanji	Tree	Bark	Skin Disorder
3	Madhuk	<i>Madhuka Indika</i> J.F.Gmel.	Sapotaceae	Mahua, Gud Pusp	Tree	Flower, seed, oil	Respiratory Disorder, Tuberculosis
4	Shinspa	<i>Dalbergia sissoo</i> , Roxb	Papilionaceae	Sheesum, Krishnasar	Tree	Leaf, root, bark	Skin Disorder, Jaundice
5	Shallaki	<i>Boswellia serrata</i>	Burseraceae	Salai	Tree	Bark, Latex	Diabeties, Cough
6	Tendu	<i>Diospyros peregrina</i> (Gaertn.)	Ebenaceae	Tendu	Tree	Bark, Fruits	Rheumatoid arthritis, Ulser
7	Dhawa	<i>Anogeissus latifolia</i> Wall	Combretaceae	Dhurandhar, Bakali	Tree	Latex, bark	Skin Disorder, ant poisonous
8	Bilbva	<i>Aegle marmelos</i> Corr.	Rutaceae	Bel	Tree	Leaf, root, fruits	Gastric Disorder, Diarhoea
9	Aamlaki	<i>Emblica officinalis</i> Gaertn	Euphorbiaceae	Amala, Dhatri	Tree	Fruits	rejuvenation, Hair loss
10	Palas	<i>Bute monosperma</i>	Papilionaceae	Kinshuk, Dhaka	Tree	Bark, flower, seed	Headache, Insomania
11	Makoi	<i>Solanum nigrum</i> Linn.	Solanaceae	Kakmachi	Herbs	Fruits	Hepatitis, Sskin disorder
12	Usheer	<i>Vetivaria zizanoides</i>	Poaceae	Khaskhas, Jalwaas	Grass	Root	Thrist and fever, Anti-anthelmintic
13	Kusha,	<i>Desmostachya bipinnata</i> Stapf.	Graminae	Ygnabhushan, Chickwa	Herbs	Root	Burning Sensation in urinary disorder
14	Peepal	<i>Ficus religiosa</i> Linn.	Moraceae	Bhodhivriksha	Tree	Bark, latex	Gout, Diabeties
15	Shalmali	<i>Salmalia malabarica</i> Schott.	Bombaceae	Semel, Mocha	Tree	Root, flower, latex	Kidney stone
16	Vhibhitak	<i>Terminalia bellirica</i> Roxb.	Combretaceae	Bahera	Tree	Fruits	Diabeties, laxative
17	Arjun	<i>Terminalia arjuna</i> R oxb.	Combretaceae	Veer Vriksha, Nadi Sarge	Tree	Bark	Heart Disease
18	Bhringraj	<i>Eclipta alba</i> Hassk.	Compositae	Markaw	Herbs	Seed and leaf	Hair colour
19	Arand	<i>Ricinus communis</i> Linn.	Euphorbisceae	Rendi, Panchangul	Perrenial Herbs	Seed, oil, root and leaf	Laxative, liver disorder
20	Parijat	<i>Nyctanthes arbortristis</i> Linn.	Oleaceae	Harsringar	Shrub/Tree	Leaf, bark	Analgesic, Joint disorder, fever
21	Neem	<i>Azadirachta indica</i> A. Juss	Meliaceae	Margossa Tree	Tree	Leaf, seed, oil	Skin disorder
22	Aam	<i>Magnifera indica</i> Linn.	Anacardiaceae	Mango, Aamra	Tree	Fruits, bark	Constipation, bleeding disorders
23	Bamboo	<i>Bambusa arundinaceae</i> Wild.	Graminae	Baans, Satprawa	Grass	Root, leaf	Lucorhoea, fever
24	Durwa	<i>Cynodon dactylon</i> Pers.	Graminae	Doob	Grass	Whole	Lactation and jaundice
25	Amaltas	<i>Cassia fistula</i> Linn.	Caesalpinioideae	Raajvriksha, Aaragbadha	Tree	Root bark, leaf, flower	Skin disorder