

SUMMARY

India is one of the richest floristic region of the world and has been a source of plant and their products. The forest provides major as well as minor product of commercial and ethnomedicinal importance to the local inhabitants. Forest area is of natural types consisting trees, shrub, herbs, aquatic plant. Achanakmar forest is the Tiger reserve forest situated in Kota Tehsil Bilaspur division and new formal district of Mungeli of Chhattisgarh at North West between the maikal range of Satpura hills its diverse tropical climate condition irregularly topography has been considered as the treasure houses or botanical garden or plant genetic resource. Our herbal wealth consists of more than 5000 species and account of around 60% of all higher flowering plant species of India around 40% of medicinal plant are used for medicinal purpose.

Pushpangdan (1995) – In India almost all parallel system of medicine are used by large section of society mainly in rural and remote areas. The value of medicinal plant to human livelihood is essentially infinite. They obviously make fundamental contribution to humans based on knowledge of plants used by human is based on thousand of years experience. It is estimated that 95% of the medicines plants used in Indian herbal industry today are collected from wild.

Plant used in traditional medicine may constitute an important source of new biologically active compounds. Utilization of plant for medicinal purpose in India has been documented long back in ancient literature. About half a million ton is of dry material is collected through destructive means indiscriminately and 1.65 lakh hect. of forest is cleared and filled each year within increase in population rapid expansion of area under food and commercial crops, deforestation, extension of

urban area, establishment of industries in rural area etc. There is considerable depletion of plant genetic resources wealt many of the being in the process of extinction day by day. *Dreadhbalaetal* 1996 worked on Human beings use them in different ways according to their need, particularly as food and medicines. Indigenous medicinal plant as only alternative to antibiotic are said to play a significant role here. Floristics inventory is a necessary prerequisite for much fundamental research in tropical community ecology, such as modeling pattern of species diversity of understanding species distribution (Phillips et al, 2003). Many floristic diversity studies have been conducted in different parts of world. India is one of the richest floristic regions of the world and has been a source of plant and their products. The forest provides major as well as minor product of commercial importance to the local inhabitants. Forest area is of natural type consisting trees, shrub, herb, aquatic plants. In the value of medicinal plant to human livelihood is essentially infinite. Plant used in traditional medicines may constitute an important source of new biologically active compounds. India has century old heritage of medicinal plant and herbal medicines for caring human illness and promotion of health in tribal and rural areas. Indigenous people have shown evidences of historical continuity of resource use and possess a broad base knowledge of the complex ecological system existing in the vicinity of their habbit. Thus there exists an intensive relationship between the two entities i.e. forest and tribals. The total number of species available on the earth is not determined yet however, it is estimated that the total number of animal and plant species could be between 13 and 14 million (Heywood-1995). The cause for the loss of species is numerous but the most important is the loos and fragmentation of natural habitates.

Global conservation of biodiversity will require efforts at multiple levels to be successful (Miller et al 1999) more than 160 countries have ratified the convention on Biological diversity (CBD) and are expected to initiate inventory of various component of Biodiversity and institute measure for in situ conservation and monitoring (Rawat 2009). Forest are major stores of species, habitat and genetic diversity (Noble and Dirzo 1997) and activities on forest land will have a significant impact on local regional and global diversity and the health and function of natural ecosystem (Kimmins 1997).

Floristic composition reflects the diversity of vegetation of an area and can be affected by many factors such as overgrazing, soil deterioration, deforestation and dependence of local people/pastoralists on plants. The identification of local plant along with description of an area is essential as it can provide particular species of the local area, growing season, species hardness, any new species establishing in the area and the effect of climatic condition like overgrazing and drought on vegetation there (Ali 2008). Utilization of plant for medicinal purpose in India has been documented long back in ancient literature. Indigenous medicinal plant is only alternative to antibiotic are said to play a significant role here. Floristic studies are often the only source for botanical information about a specific area and may provide a suitable starting point for more comprehensive studies (Keith 1988). The life, tradition, cultural of tribals has remained almost static since last several hundreds of years. In the state about 2000 medicinal and aromatic plant are found, out of which 800 plants are in category of potential use. A large number of ethnic groups such as Baiga, Birhor, Gond, Kherwar, Agana, Baigas, Parika, Ghasiya, Balda, Korku, inhabit in 'Achanakmar Forest in Bilaspur division of Chhattisgarh. Understanding species diversity and distribution patterns is important to evaluate

the complexity and resources of these forests (Kumar et al, 2006). Majority of studies focus on inventory were done by (Whittaker and Niering, 1965, River and Rice, 1971, Linder et al 1997, sagaretak 2005). Apart from inventory disturbance intensity on regeneration (Kennidy et al 2002, Phenological assessment (Frankle et al 1974). Compression of tree species diversity species area and species individual relationship had been studied through floristic analysis. During the course of present investigation the “Study on the flowering diversity and ethano-medicinal use of tribal community of the Achanakmar forest, Kota, Bilaspur, District Mungeli Chhattisgarh” has been completed.

Chhattisgarh is newly formed province of India, situated in mid of country. The Chhattisgarh lies between latitude $17^{\circ}46'$ and $24^{\circ}8'$ north and longitude $80^{\circ}15'$ and $84^{\circ}24'$ east. It covers an area of 135194 sq.kms. It is 360 kms. long from North to South and 140 kms. wide from East to West. It is situated on 500 meters above msl. The whole province is divided into 4 commissionaires and 30 districts. The Mungeli is one of the most important and newly formed district of Chhattisgarh.

Mungeli happens to be the newly formed district and it is a part of Chhattisgarh basin. It is situated in the eastern part of M.P. Mungeli lies between $21^{\circ}31'$ to $23^{\circ}7'$ N latitude and $81^{\circ}21'$ to $83^{\circ}40'$ E longitude.

For purpose of this research to explore and discuss the floristic diversity and species diversity of Achanakmar forest Kota-Mungeli (Bilaspur) Chhattisgarh. Present study will deal with following objectives: -

- Survey of the study site in Achanakmar forest with documentation of floral diversity of Achanakmar forest and identification of all the collected species will be done.

- Botanical identification of plant species are herbarium preparation of herbs, shrubs, trees and climbers was done.
- Photography of the study site and flowering plant and listing of plants as flora of Achanakmar forest with their ethnomedicinal use of tribal community and their economic importance use.
- Documentation of ethnomedicinal plant related to tribal people of Achanakmar forest has also done.

In present work survey was done in Achanakmar forest for the collection of flowering plant after collection identification and documentation of flora diversity and ethanobotanical information was gathered on species diversity of forest. After Herbarium preparation of all species belongs to herb, shrub tree and climbers, botanical identification was done with the help of local floras and research literatures, plant species of study site and photographic documentation listing of plant with this economic use was done of flowering plant. The specimen were collected during field tour after that identification and nomen culture was done. Previous floristic report on occurrence of a species from the region are given, those taxa not collected and characterized till data were ranked.

The Achanakmar forest both cover more than 557.55 km² and are located in Mungeli district and Bilaspur forest division of Chhattisgarh. It is well known for its large area and rich biodiversity and Sal, Bamboo, Mixed forest.

A large number of traditional herbal exist belonging to the tribal community are utilizing local plants in ethno-medicinal practices. Achanakmar forest Kota, Bilaspur (C.G.) with different sites were studied and within these sites the total number of 134 plant species belonging to 52 families and 126 genera have been reported in Achanakmar forest Kota. Family wise distribution of dominant families

of medicinal plants shows *Fabaceae*, *Solanaceae*, *Euphorbiaceae*, *Asteraceae*, *Combretaceae*, *Apocynaceae*, *Malvaceae*, *Poaceae* were 8 most dominant families and was co-dominant family *Anacardiaceae* and *Rubiaceae* etc.

In present work observed the floristic diversity with 134 plant species with 52 families in Achanakmar forest Kota, Graph 2 representing the comparative account in between species and genera in 8 dominant families.

Many work has been done by various scientist on ethnobotanical details and its botanical aspects. The scientist, the year and the work done by them are given in chapter 'Review of Literature'. Many books and publications are included in this chapter an ethnobotany and the sub-disciplines.

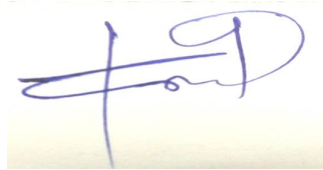
The different localities were selected for present investigation at various Achanakmar Forest, Kota.

To collect the plants and their economic importance, have been onserved in, field tours were made during the period July 2015 to June 2017. A survey was conducted in different parts of forest. The plants were collected, thoroughly examined and field notes were also prepared for taxonomic identification of the collected specimens. Four procedures were followed for gathering ethnobotanical information about the medicinal plants in the fields. The vernacular names prevalent among the tribals and rural people were also recorded for correct identifications of the plants by the help of various floras, the results were confirmed through Botanical Survey of India (B.S.I.) Allahabad.

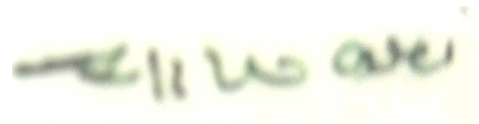
During the present study 107 plants have been described.

The survey was made for the economically important of plant under the heads ethnomedicinal plants yused as drugs. These are used for 59 diseases of human and animal. It has also been tried to salvage as many information as possible

from these tribals and rural people to save them from permanent disappearance as due to rapid urbanization and acculturation. The tribal communities are disappearing in a rapid pace and this indigenous culture and its originality from total extinction, has to be saved. Hence a lot of work is to be done in this direction, in the area to achieve the target before it is too late.



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