

## **Medicinal Plants of Amarkantak Balco Open Cost forest Area, India**

**\* Rupesh Kapale and \*\*Manish Kumar**

\* Department of Botany, Indira Gandhi National tribal University, Amarkantak (M.P.)

\*\*Department of Zoology, Government P.G.College, Etah U.P.

### **Summary**

Medicinal plants occupy an important place not only in medical area but also in socio-cultural and spiritual areas. These plants constitute the main health care resource for a majority of our population. The paper deals with medicinal plants found in natural forest of balco open mine area of amarkantak forest.

**Key words:** *Biodiversity, Medicinal Plants, Balco forest*

### **Corresponding Author**

**Dr Rupesh Kapale**

**Assistant Professor**

**Dept of Botany**

Indira Gandhi National tribal University, Amarkantak (M.P.)

**Email:** kapalesir@gmail.com

### **Introduction**

Amarkantak is situated in the eastern most extremity of maikal range and a well - Known hot spot pocket of plant diversity in Anuppur district of M.P. It lies between latitude 22°44' N and longitude 80°54' E. There is an average altitude ranging from 800- 1100m from sea level. It has been identified as one of the richest biodiversity centers of the central India. Most of the land is undulating and covered with thick subtropical hill forest. Maximum rainfall is during July to September with annual rainfall of over 1900mm. The region is dominated mainly Tribes. Main Tribes are baiga, Panika and Gonds and Kol. They are mainly dependent on forest products for their survival[1,2]. The number of contribution about medicinal plants group have not been properly explore in study region. An attempt has been made to explore & documented their biodiversity in Amarkantak balco mine forest area. The survey conducted in the mouth of October and November. 2010. It was observed that medicinal plants are widely distributed in amarkantak forest area midst of a moist sal and mixed forest. Plant's belonging to various

family grow Naturally in pre-existing balco mine forest, kapildhara & town area which are said to be Marked study & survey area of forest. Amarkantak forest Protected under biosphere Program undertaken by Indian government [3,4]. Geologically the Amarkantak Hills have underlying basalt (Deccan Traps). The overburden consists of bauxite and laterite, making the soil ferruginous and clayey, with an acidic or neutral reaction.

## METHODOLOGY

Extensive survey cum collection Practices was made in the Pre-existing balco Mine forest area, Kapildhara and amarkantak township pockets, survey was made in mouth of September & October 2010. The collected plants of medicinal plant identified by Department of Botany, IGNTU, and Amarkantak and with the help of flora & local medicineman. The collected data further cross checked by other medicine man for confirmation. herbarium specimens sheet have been Prepared & deposited in botanical research laboratory of central University, Amarkantak. The Plants are arranged alphabetically, each by its botanical Name, followed by the local Name and also noted their medicinal uses by local tribals and villagers [Fig 1].



Fig: 1- MAP OF AMARKANTAK

**Table 1 :-** Medicinal plants biodiversity collected from the Amarkantak forest area.

Scientific Name	Local Name	Family	Medicinal uses
<i>Abrus precatorius</i> L.	Ratti	Fabaceae	grind the roots, make small pills, encase the pills in molasses and eat the same to treat night-blindness;
<i>Abutilon indicum</i> (Lam.) S.W.	Kanghi	Malvaceae	<b>Plant pacifies tridoshas, especially vata, and pitta, poison, hyperdipsia, vomiting, Leukorrhoea and Menorrhagia.</b>
<i>Achyranthes aspera</i> L.	Apamarg	Amaranthaceae	It is used in the recovery of wounds and seeds were used in starvation.
<i>Adhatoda zeylanica</i> Medik.	Adusa	Acanthaceae	
<i>Aegle marmelos</i> (L.) Correa	Bel	Rutaceae	, leaves & fruit-pulp used as laxative, tonic and for stomach disorders
<i>Alangium salvifolium</i>	Ankol	Cornaceae	liver disorders,
<i>Alectra chitrakutensis</i>	Nirgundi kand	Scrophulariaceae	Flowers and bark juice is taken in diarrhoea. Roasted leaves are tied on knee joints to relieve from joints pain.
<i>Anacyclus pyrethrum</i>	Akarkara	Asteraceae	<b>Use Tooth problem</b>
<i>Andrographis paniculata</i>	Kalmegh	Acanthaceae	Medicinal use as bitter tonic, a mild febrifuge, chronic fevers, anaemia, branchial asthma, liver disorders, dyspepsia etc.
<i>Anisomeles indica</i>	Vantulsi	Lamiaceae	Treatment of leprosy, Migraine, malaria, vomiting, dyspepsia, poisonous/parasitic infections. Essence used in confectionery, Sauces, Salad delicious etc.
<i>Argemone mexicana</i> L.	Satyanasi	Papaveraceae	Roots are useful in leprosy aphrodisiac, sedative
<i>Argyreia speciosa</i>	Vidhara	Convolvulaceae	Root and seed paste is applied externally on eczema, ringworm and other skin diseases and wounds.
<i>Arisaema flavum</i> L.	Kala telia kand	Araceae	Use in Snake biting
<i>Arisaema tortuosum</i> (Wall.) Schott	Vanmakka	Araceae	Use in Snake biting and detoxification of snake poison
<i>Asparagus racemosus</i> Willd.	Satawar	Liliaceae	In treatment of nervous disorder, burning sensation, nephropathy, throat infection, scalding of urine, cardiac debility, general tonic
<i>Bacopa monnieri</i> (L.)	Brahmi	Schrophulariaceae	Leaf extract is given to increase memories and also used for relieving cough.
<i>Barleria prionitis</i> L.	Katsariya	Acanthaceae	Root paste is used externally in rheumatism and joints pain.
<i>Barleria prattensis</i>	Vajradanti	Acanthaceae	joints pain
<i>Calotropis procera</i>	Aak	Asclepiadaceae	Use in Snake biting

<i>Carissa carandus</i> L	Karonda	Apocynaceae	Root decoction is given orally in stomach disorder.
<i>Celastrus paniculatus</i> Willd.	Malkangni	Celastraceae	liver disorders,
<i>Centella asiatica</i> (L)	Mandookparni	Apiaceae	
<i>Centella rotundifolia</i> Roxb.	Brahmi	Apiaceae	increases memory and lifespan ,blood-purifier,
<i>Chlorophytum tuberosum</i>	Safed moosli	Liliaceae	Medicinal use as general tonic, in postal-natal care, to increase the fertility and in diseases pertaining to females.
<i>Citrullus colosynthes</i> (L.)	Indrayan	Cucurbitaceae	
<i>Clerodendrum indicum</i> L.	Bharangi	Verbenaceae	Root decoction is useful in fever. Flowers juice is given to patients suffering from nervous disorder.
<i>Clitoria ternatea</i> L.	Aparajita	Fabaceae	Flowers, root, bark & seeds are used in Blue dye, leaves used for cattlefeed. Roots are diuretic and laxative. And also used as poultice for swollen joints.
<i>Cordia macleodii</i>	Dahiman	Boraginaceae	As an antiseptic, for treatment of gastric ulcer,
<i>Costus speciosus</i>	Keo kand	Costaceae	<b>Rhizome:</b> bitter, astringent, acrid, cooling, purgative, aphrodisiac, anthelmintic, depurative, febrifuge, expectorant and tonic, also beneficial in asthma, anaemia, bronchitis, leprosy, flatulence, constipation, fever, skin diseases and inflammation.
<i>Curcuma amada</i> Roxb.	Amahaldi	Zingiberaceae	<b>Cough and cold</b>
<i>Curculigo orchoides</i> Gaertn.	Kali musali	Hypoxidaceae	Rhizome powder is sprinkled on cuts to stop bleeding and the recovery of wounds.
<i>Curcuma amada</i> Roxb.	Van haldi	Zingiberaceae	As blood purifier, in skin diseases, gall complaints
<i>Curcuma caesia</i> L.	Kali haldi	Zingiberaceae	Dried rhizome powder mixed with goat milk and sugar is administered for the treatment of dysentery and fever.
<i>Dioscorea hispida</i> Dennst.	Baichandi	Dioscoriaceae	Hill tribal population uses as substitute for rice, essential ingredient in toothpaste/powders Colouring & Flavouring ice-creams, Confectionery items etc. Medical use for gonorrhoea, piles, leprosy and as an anthelmintic. jaundice; dysentery, piles
<i>Diplocyclos palmatus</i> (L.)	Shiv lingi	Cucurbitaceae	Plant pacifies vitiated vata, pitta, inflammation, cough, flatulence, skin diseases and general debility.
<i>Dryopteris aspara</i>	Jatashankari	Aspidiaceae	Recovery of wounds.
<i>Gloriosa superba</i> L.	Kalihari	Liliaceae	As an antiseptic, for treatment of gastric ulcer, falling and greying hair, in ophthalmopathy and cough syrup formulations
<i>Acorus calamus</i> L.	Vacha.	Araceae	Epilepsy, asthma, bronchitis, cold and cough, dry cough, indigestion

<i>Gymnema sylvestre</i>	Gurmar	Asclepiadaceae	Leaf juice is taken orally in diabetes, piles and asthma. Leaf paste is applied externally on cuts and wounds.
<i>Psoralea corylifolia</i> L.,	<i>Bavchi</i>	Fabaceae	Leaf paste is applied externally on boils; seed powder is applied externally for the treatment of psoriasis and leucoderma.
<i>Plumbago zeylanica</i> L.,	, <i>Chitrak</i>	Plumbaginaceae	Root powder mixed with milk is given orally in piles and stomach disorder.
<i>Mucuna pruriens</i> (L.)	., Fabaceae	<i>Kivach</i>	Dried pod powder is given to remove intestinal worms.
<i>Euphorbia neriifolia</i> L	Euphorbiaceae	<i>Thuar</i>	Latex is used externally in snakebite and recovery of wounds.
<i>Tinospora cordifolia</i> (Willd.)	Menispermaceae,	<i>Giloy</i>	Stem juice is given orally in malarial fever.
<i>Urginea indica</i>	Liliaceae	<i>Jungli Piaz</i>	Bulb paste is externally applied in paralysis

### **Results And Discussion**

All known medicinal plants of the study area are enumerated with table mentioned blow. which are as followed by botanical Name, local Name and their medicinal uses.

All the medicinal biodiversity are recorded after Critical Screening with the available literature. Since, these plants species are being exploited from the forest area of the Amarkantak [5]. There is an urgent need for their conservation before they get extinct [6-9]. The floristic biodiversity of amarkantak eco-region is said to be very rich. However, for many decades, like-wise world's biological diversity threat, this region has also many causes responsible for the loss of medicinal plant biodiversity. Human population growth and pressure is the sole factor for the loss of natural resource. Exploitation of forests, forest fire, expansion of agricultural lands, industrialization, development of cities, construction of dams, roads, railway lines; over exploration of natural habitats and over-grazing of grass lands and forest areas have been defined as the main causes for the rapid loss of medicinal plant biodiversity in the region of meikal.

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