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# Ethnobotany and Ethnoveterinary Plants Used for Wounds Healing by Baiga Tribes for Umaria District, Madhya Pradesh, India



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#### **ABSTRACT**

Present paper deals with 24 plants species and presenting here botanical name followed by local names and along with parts used are furnished. Present survey in 2013-2014, Ethnobotany and Ethnoveterinary plants was carried out in the tribal area. District Umaria is located in the central part of Madhya Pradesh. It has three tehsil namely Pali, Umaria and Manpur. The Tribes are densely populated in the study area Baiga tribes are the dominant tribes inhabiting in Umaria district.





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#### INTRODUCTION

District Umaria is located to the North East of Madhya Pradesh. Mathematically the coordinates of the District extend from 23° 38' to 24° 20' North and 80° 28' to 82° 12' East. It has geographical area of 4548 sq. km. The greatest length of the district is about 150 km from north to south and the greatest width is about 60 km from east to west. The population of the district on the basis of 2001 census is 515963. Out of which about 83% population resides in rural areas. The district has extensive forests. About 42% of the total area is covered by forests only. The district is rich in minerals. The most important mineral found in the district is coal and as a result 8 mines are being operated by South Eastern Coalfield Limited in the district. The famous Bandhavgarh National Park (Tala) and Sanjay Gandhi Thermal Power Station Mangthar (Pali) are located in the district. Umaria was formerly the headquarters of the South Rewa District and thereafter the headquarters town of the Bandhavgarh tehsil. It is situated at a distance of about 69 Km from Shahdol, the parent district. Metalled roads connect the town with Katni, Rewa, Shahdol etc. on which regular buses ply.

Umaria is also a railway station on the Katni-Bilaspur section of the South-Eastern Railway. Bandhavgarh is the name of tehsil in Umaria District. Formerly it was the capital of the Bandhavgarh Kingdom of the Magha dynasty, then the head-quarters of the tehsil. At present its headquarters is Umaria. The fort of Bandhavgarh is a place of considerable archaeological and historical importance. It is a natural impregnable fort and stands on a hill, at an attitude of about 2430 metres above sea-level. The Bamnia hill is also a part of the fort, because it is enclosed by a rampart. The fort is on the Rewa-Umaria road, at a distance of about 41 Km from Umaria Town. Chandia is situated on the Umaria-Katni road, at a distance of about 21 km from Umaria. The railway station of ChandiaKhas, known as Chandia railway station. The most important spot of ChandiaKhas is a small temple, enshrining Goddess Kalika. Her mouth is wide open, but her out-stretched tongue is broken. There is also a old temple of god Rama and his consort Janaki. It was the seat of Thakur of Chandia. A small fair meets at SuraswahiChandia for 3 days in February/March, on the occasion of Shivaratri. PaliBirsinghpur is situated on the Umaria-Shahdol road, at a distnace of about 36 km from Umaria. Another road goes from Pali to Mandla via Dindori. Pali is also a railway station, and there is a rest house for the tourists to stay. The station is known as the Pali-Birsinghpur station. Near the railway station there is a temple, enshrining Birasinidevi. By popular belief she is Goddess Kali, represented here as skeleton Goddess, but with her mouth closed. Many

remains of old Jain idols kept here in some Hindu temples. The annual fairs are held both in October and March, on the occasion of Navaratri, near the temple of Goddess. Umaria Town the headquarters town of the Umaria district and Bandhavgarh tehsil, formerly umaria was the headquarters of the South Rewa District. It is situated at a distance of about 69 km from Shahdol. Near the railway station stands a Siva temple, known as the Sagara temple. It was an old shrine, recently remodeled. Its main gates are still intact with beautiful stone statues, carved in Khajuraho models. Near about it Jwalamukhi temple is present. About 6.5 km away from the town, there is another temple, with similar carvings of the Khajuraho pattern. It is known as the Mariwal temple.

Umaria is famous for its coal-mines, which were opened in 1881 by the Government of India and transferred to the Rewa Darbar in the same year, mainly to meet the requirement of railway at Katni. The topography is divisible into plains, mountains and plateau. Plateau occupies the middle part of the district. This is called plateau of Baghelkhand. Maikal range constitutes southern part of the district. The hilly tracts of Central India are covered by luxuriant vegetation. The tribals are distributed mostly in the aforesaid hilly tracts of the thick forest. They are adopted to live in these habitations. Baiga tribes are the dominant tribes inhabitating in Umaria district and most of the tribal populations are using plants for their domestic livestock. The Ethnobotany and Ethnoveterinary plants and traditional knowledge of ethno-medicines are gradually depleting due to lack of proper records and documentation.



Figure 1. Map of District Umaria in Madhya Pradesh, India

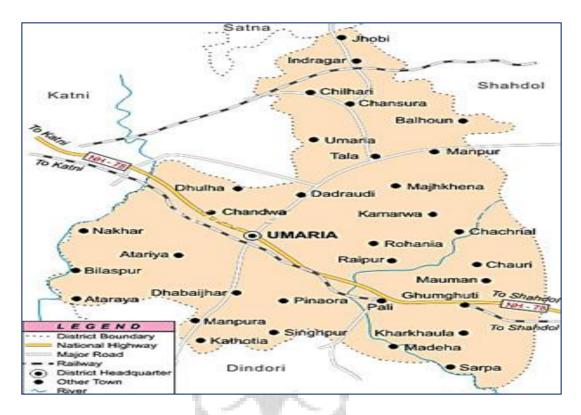


Figure 2. Location map of study site district Umaria, Madhya Pradesh

#### **MATERIALS AND METHODS**

Ethno-botanical survey was conducted to document the hidden knowledge of Ethnobotany and Ethnoveterinary plants used by tribals of Umaria district during 2013 to 2014. Interview was arranged among tribals local medicine men, Vaidya's and Guinea and other experienced persons. Prepared questions were asked and discussed about therapeutic uses of wound healer plants. Plants were immediately collected and identified with the help of flora (Hooker 1872-1897; Hains 1924; Jain and Rao 1977, Ray 1984; Ahirwar 2010, 2011, 2014 and 2015; Verma, *et al.*, 1993; Mudgal *et al.*, 1997; Singh *et al.*, 2001) and available Literature. Herbarium was prepared following standard method (Jain and Rao, 1977). Recent nomenclature has been followed. Authenticity of plant uses were cross checked and confirmed (Jain.2004; Katewa *et al.*, 2010). All the collected plant Specimens were deposited in the herbarium of department of Botany, Pt. S.N.S. Govt. P.G. College Shahdol, Madhya Pradesh, India.

#### **RESULTS AND DISCUSSION**

Present study reported 24 plants species wound healing of cattle these plants are distributing. Cultivated and wild plants are used for recovery of wounds of animal. Most frequently used

plants in our studies. Herbal medicines are prepared mainly by soaking crushed plant part in water by boiling the plant. Fresh plants are collected from forest or respective localities. Mode of uses and amount of medicine prescribed vary from region to region. Herbal medicines are prepared mainly by soaking crushed plant part in water by boiling the plant. Fresh plants are collected from forest or respective localities. Mode of uses and amount of medicine prescribed vary from region to region. Fresh plants are effective than dried material (**Table 1**).

Table 1: Some Ethnobotany and Ethnoveterinary plants used for wounds healing by Baiga tribes.

| S.No. | Botanical Name                           | Local<br>Name | Family        | Ethnoveterinary<br>Uses  | Plant<br>Parts<br>Used |
|-------|--|---------------|---------------|--|------------------------|
| 01    | Allium cepa L.                           | Kanda         | Liliaceae     | Crushed bulbs are administered to remove maggot infected wounds.                   | Bulb                   |
| 02    | Amaranthus<br>spinosus L.                | Cholai        | Amaranthaceae | Paste of whole plant is applied externally for quick healing of wounds.            | Whole<br>Plants        |
| 03    | Annona<br>squamosa L.                    | Sitaphal      | Annonaceae    | The leaf paste applied on the wound.   | Leaves                 |
| 04    | Argemone<br>mexicana L.                  | Pilikateli    | Papaveraceae  | Yellow latex and seed oils are given in chronic ulcerous wounds.                   | Latex<br>and<br>Seed   |
| 05    | Azadirachta<br>indica A. Juss.           | Neem          | Meliaceae     | The leaf pastes externally to the wound. Paste is also used to remove worms in it. | Leaves                 |
| 06    | Brassica<br>comprestis L.                | Sarso         | Brassicaceae  | Musterd oil mixed with paste of <i>Allium</i> cepa applied on wounds.              | Seed                   |
| 07    | Calotropis<br>procera (Aiton)<br>Dryand. | Aak           | Apocynaceae   | The latex is directly administered for quick healing of wounds.                    | Latex                  |

| 08 | Catharanthus<br>roseus (L.)<br>G.Don            | Sadabhar  | Apocynaceae   | Whole plant extract is applied on wounds.                                      | Whole<br>Plant |
|----|---|-----------|---------------|--|----------------|
| 09 | Ceiba pentandra<br>(L.) Gaertn.                 | Semal     | Malvaceae     | Paste of stem bark<br>and stem juice are<br>applied externally on<br>wounds.   | Stem           |
| 10 | Cocos nucifera<br>L.                            | Nariyal   | Arecaceae     | Nariyal Seed oil is applied on wounds.   | Seed           |
| 11 | Curcuma longa<br>L.                             | Haldi     | Zingiberaceae | Rhizome powder with Ghee are warmed and applied on wound for quick healing.    | Rhizome        |
| 12 | Datura metel L.                                 | Datura    | Solanaceae    | The leaf paste applied on the wounds of cattle.                                | Leaves         |
| 13 | Eclipta prostrata<br>(L.)                       | Bhrangraj | Compositae    | The poultice of the whole plant is used for healing wounds and cuts.           | Whole<br>Plant |
| 14 | Euphorbia hirta<br>L.                           | Dudhi     | Euphorbiaceae | Latex is applied on wounds to stop bleeding.                                   | Latex          |
| 15 | Ficus<br>benghalensis L.                        | Pipal     | Moraceae      | White latex is applied on maggot infested wounds.                              | Latex          |
| 16 | Adhatoda<br>vasica L.                           | Adusha    | Acanthaceae   | A poultice of leave is used for healing fresh wound and inflammatory swelling. | Leaves         |
| 17 | Lantana camara<br>L.                            | Krmich    | Verbenaceae   | Krmich leaf juice is administered for quick blood clotting.                    | Leaves         |
| 18 | Lawsonia<br>inermis L.                          | Mahandi   | Lythraceae    | Mahandi leaf<br>decoction is used as<br>wash on wounds.                        | Leaves         |
| 19 | Madhuca<br>longifolia var.<br>latifolia (Roxb.) | Mahua     | Sapotaceae    | Boiled flowers are tied on injured part of body to cure wounds.                | Flowers        |
| 20 | Nerium oleander                                 | Kaner     | Apocynaceae   | Seed ashes and   | Seed           |

|    | L.                             |           |                | musterd oil are               |        |
|----|--------------------------------|-----------|----------------|-------------------------------|--------|
|    |                                |           |                | mixed for recovery of wounds. |        |
|    |                                |           |                |                               |        |
| 21 | Nyctanthes<br>arbor-tristis L. | Harsingar | Oleaceae       | Leaf decoction is             |        |
|    |                                |           |                | applied on maggot             | Leaves |
|    |                                |           |                | infested wound.               |        |
| 22 | Phyllanthus                    | Buiawla   | Phyllanthaceae | Juice of leaf is              |        |
|    | amarus                         |           |                | applied as dressing           | Leaves |
|    | Schumach.                      |           |                |                               | Leaves |
|    | &Thonn.                        |           |                | for wounds.                   |        |
| 23 | Plumbago<br>zeylanica L.       | Chitrak   | Plumbaginaceae | The paste of root is          |        |
|    |                                |           |                | applied on maggot             |        |
|    |                                |           |                | infested wound to             | Root   |
|    |                                |           |                | kill worms and quick          |        |
|    |                                |           | 6              | recovery of wounds.           |        |
| 24 | Ricinus<br>communis L.         |           | A              | Leaf juice is applied         |        |
|    |                                | Arandi    | Euphorbiaceae  | on the wounds for             | Leaves |
|    |                                | 1         | 1              | healing.                      |        |

#### **CONCLUSION**

Some Ethnobotany and Ethnoveterinary plants are directly or indirectly related to uplift economy of local people. These plants are very ethno-botanically useful. Present study reveals that some plants have lost their existence in the area due to over-exploitation; Government should conserve them in their natural habitat or in botanical gardens. People should encourage growing this Ethnoveterinary plants in their surrounding areas.

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