

# Studies on ethnomedicinal uses of herbal plants resources in northern hilly zone of Chhattisgarh

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Accepted : October, 2009

## SUMMARY

Chhattisgarh is the only state of the country where about 43.85% (59285.27 heq) of the total area of state occupied by the forest. In this state the percentage of Sal and mixed forest is more than the teak forest. Chhattisgarh state is divided geographically into three regions, namely Northern hills, Chhattisgarh plain and Bastar plateau. Total 25 important plant species are enumerated which have ethno-medicinal value. Tribal and rural people of northern hilly zones used to treat their ailments by using these fresh plant materials. In the enumeration, data of medicinal uses of plant are arranged by botanical name, local name along with family and their mode of application.

**Key words :** Ethno-medicinal, Medicinal values

**E**thnobotany deals with the direct, traditional and natural relationship between human societies and plants. Ethnobotanical studies assume great importance in enhancing our knowledge about the plants grow and used by native/tribal communities, the rich diversity assembled by them for their sustenance and the different means adopted by them for its preservation and conservation. Vast Ethnobotanical knowledge exists in India from ancient times (Trivedi, 2002).

Chhattisgarh is the only state of the country where about 43.85% (59285.27 ha) of the total area of state occupied by the forest. Chhattisgarh state is divided geographically into three regions, namely Northern hills, Chhattisgarh plain and Bastar plateau. Various plants species are commonly applied as paste or extract externally on boils, wounds, cuts, swellings, burns, eczema, etc. ethnic groups and rural people of Chhattisgarh used to treat their ailments by using these fresh plant materials. Earlier, studies were carried out on the Ethnobotanical and medicinal aspects of plants by Thaker (1910), Nadkarni (1926), Dastur (1952), Roia and Smith (1977), Shah *et al.* (1981), Jain (1991), Agnihotri and Vaidya (1996), Kamboj (2000), Zafar *et al.* (2003), Laloo *et al.* (2006), Sandhya *et al.* (2006) and Verma *et al.* (2008).

According to WHO, about 80% population of world rely on traditional medicine for their primary health care needs (Retnam and Martin, 2006; Shah and Khan, 2007). These medicines have fewer side effects and men can get it easily from nature. The people have, by trial and error, developed their own traditional ways of diagnosis

and treatment of diseases and fulfill their basic requirement in this regard from the near by forest. As a consequence of this long experience and practice, it has become an effective way of accumulation of rich knowledge on medicinal plants and usage of other natural resources among them (Singh, 2002).

## MATERIALS AND METHODS

The present study was mainly conducted in northern hilly zone of Chhattisgarh. The information of medicinal aspect of plant, particularly on medicinal value have been collected by means of arranging meeting, dialogues and discussions with rural, tribal and knowledgeable people from various villages of Surguja district of Chhattisgarh from March 2008 to July 2008. The documental information was also verified by cross-questioning with key information's and elderly people of different villages. In the enumeration, the following aspects of plants are given. The botanical name, family, local name and ethno-medicinal uses of collected plants are given:

### Enumeration:

- |                     |  |
|---------------------|--|
| – Botanical name    | : <i>Cassia tora</i> Linn.   |
| Family              | : Caesalpiaceae  |
| Local name          | : Charota  |
| Parts used          | : Leaves, Seed   |
| Ethnomedicinal uses | : Paste of leaf and seed is applied on roasted, ringworm and eczema. |
| – Botanical name    | : <i>Jatropha curcas</i> Linn.                                       |
| Family              | : Euphorbiaceae  |
| Local name          | : Ratanjot   |
| Parts used          | : Leaves   |
| Ethnomedicinal uses | : Paste of leaves is   |

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- applied on rheumatism and swellings
- Botanical name : *Embllica officinalis* Gaer
  - Family : Euphorbiaceae
  - Local name : Amla
  - Parts used : Fruit
  - Ethnomedicinal uses : Fruit are applied are acidity and diarrhea.
- Botanical name : *Lannea coromandelica* Merr.
  - Family : Anacardiaceae
  - Local name : Gunja
  - Parts used : Leaves
  - Ethnomedicinal uses : Juice is externally applied on cut and wounds.
- Botanical name : *Ficus religiosa* Linn.
  - Family : Moraceae
  - Local name : Peepal
  - Parts used : Stem
  - Ethnomedicinal uses : Stem latex applied externally over wounds to stop bleeding.
- Botanical name : *Vitex negundo* Linn.
  - Family : Verbenaceae
  - Local name : Nirgundi
  - Parts used : Leaves
  - Ethnomedicinal uses : Leaf juice is used to cure boils and blisters.
- Botanical name : *Eclipta alba* Hassk
  - Family : Asteraceae
  - Local name : Bhringraj
  - Parts used : Leaves
  - Ethnomedicinal uses : Fresh leaves juice is used to baldness.
- Botanical name : *Azadirachta indica* A. Juss.
  - Family : Meliaceae
  - Local name : Neem
  - Parts used : Leaves, Seed
  - Ethnomedicinal uses : Seed oil applied on eczema, paste is used to healing ruptured boils.
- Botanical name : *Carica papaya* Linn.
  - Family : Caricaceae
  - Local name : Papita
  - Parts used : Latex
  - Ethnomedicinal uses : Latex used to gum
- Botanical name : *Abutilon indicum* L.
  - Family : Malvaceae
  - Local name : Kinghi
  - Parts used : Seed, Root
  - Ethnomedicinal uses : Seed paste used in piles, root paste applied on various skin diseases.
- Botanical name : *Buchanania lanzan* Spreng.
  - Family : Anacardiaceae
  - Local name : Chironji
  - Parts used : Seed
  - Ethnomedicinal uses : Seed oil is used to baldness.
- Botanical name : *Jasminum officinale* Linn.
  - Family : Oleaceae
  - Local name : Chamele
  - Parts used : Leaves
  - Ethnomedicinal uses : Leaves are chewed in order to cure mouth ulcers.
- Botanical name : *Allium cepa* Linn.
  - Family : Liliaceae
  - Local name : Pyaj
  - Parts used : Bulb
  - Ethnomedicinal uses : Paste of bulb is externally applied on boils and blisters.
- Botanical name : *Aloe barbadensis* Mill.
  - Family : Liliaceae
  - Local name : Gwarpatha
  - Parts used : Leaves
  - Ethnomedicinal uses : Leaves pulp is used as skin cream.
- Botanical name : *Annona squamosa* Linn.
  - Family : Annonaceae
  - Local name : Sitaphal
  - Parts used : Leaves
  - Ethnomedicinal uses : Paste applied on cattle to remove lice and externally used to healing.
- Botanical name : *Ricinus communis* Linn.
  - Family : Euphorbiaceae

- Local name : Arundi  
 Parts used : Seed  
 Ethnomedicinal uses : Seed paste is applied on boils and swellings.
- Botanical name : *Madhuca indica* Ginel.  
 Family : Sapotaceae  
 Local name : Mahua  
 Parts used : Flower  
 Ethnomedicinal uses : Paste of fallen dry flowers is applied on wounds.
- Botanical name : *Lawsonia Alba* Lamk.  
 Family : Lythraceae  
 Local name : Mehndi  
 Parts used : Leaves  
 Ethnomedicinal uses : Paste of leaves is applied on wounds, burns, boils, cuts and swellings.
- Botanical name : *Boerhaavia diffusa* Linn.  
 Family : Nyctaginaceae  
 Local name : Patharchata  
 Parts used : Root  
 Ethnomedicinal uses : Root paste is applied on boils and blisters.
- Botanical name : *Dalbergia sissoo* Roxb.  
 Family : Fabaceae  
 Local name : Shisham  
 Parts used : Leaves  
 Ethnomedicinal uses : Leaf paste is used in order to cure various skin diseases.
- Botanical name : *Withania somnifera* L.  
 Family : Solanaceae  
 Local name : Ashwagandha  
 Parts used : Leaves, Seed  
 Ethnomedicinal uses : Paste of seeds and leaves is applied on swellings and boils.
- Botanical name : *Chlorophytum borivillianum*  
 Family : Liliaceae  
 Local name : Safed mushli  
 Parts used : Tuber  
 Ethnomedicinal uses : Tuber used for physical weakness and health tonic.
- Botanical name : *Curcuma angustifolia* Roxb.  
 Family : Zingiberaceae  
 Local name : Teekhur  
 Parts used : Rhizome  
 Ethnomedicinal uses : Rhizome used for worms and anaemia
- Botanical name : *Acacia nilotica* L.  
 Family : Leguminosae  
 Local name : Babool  
 Parts used : Bark  
 Ethnomedicinal uses : Bark used for Asthma and bronchitis.
- Botanical name : *Bacopa monnieri* Linn  
 Family : Scrophulariaceae  
 Local name : Bramhi  
 Parts used : Whole plant, Root  
 Ethnomedicinal uses : Plants used Brain tonic, Leprosy, Leucoderma, Fever, Snake bit.

## **RESULTS AND DISCUSSION**

In the enumeration, data of medicinal uses of plant are arranged by botanical name, local name along with family and their mode of application. Total 25 plant species are enumerated which have ethno-medicinal value. Tribal and rural people of northern hilly zone used to treat their ailments by using these fresh plant materials. These people are prone to victim injuries, wounds, cuts, swelling etc. because they did hard work in their routine life. There are number of plants available in nature. Each plant species had its particular uses.

The tribal and rural people of northern hilly zone used to treat various ailments by plants whatsoever were available, and used them directly as and when required. These plant taxa are commonly applied as paste or extract from externally on boils, wounds, cuts, swellings, burns, eczema, ringworm etc. some plant, species are employed orally as decoction or tooth brush from, in cases of mouth ulcers, sore, throat, spongy gums, toothache, pyorrhea, tonsillitis etc. The enumerated plants have proved handy and easily available remedy material, which give quick results also.

### **Acknowledgement:**

The authors are grateful to Dr. R.K.S. Tiwari, Department of Plant Pathology, T.C.B.College of Agriculture and Research Station (IGKV) Bilaspur (Chhattisgarh) for, collection and identification of some

plant materials, for giving suggestions, help and encouragement. Authors are also thankful to Mr. Manoj Kumar Ambast, Director Biotech Lab Training and

Demonstration Canter, Ambikapur (Chhattisgarh) for providing Laboratory facilities.

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