Introduction

Jharkhand is having forest and is having plenty of ethno-medical plants and forest produce. Jharkhand comes under agro-climatic zone and it is best suited for the cultivation of ethno-medical plants. Since time immemorial people had been using ethno-medicine. Due to the side effects of chemical medicine, people are turning towards the ethno-medicine because such medicinal plants are found in ample amount in the state. More than 1500 ethno-medicine plants are found in Jharkhand.

Amazing are their therapeutic values as the plants which all look so simple and green carry wonderful results on the human health only after proper application.

The importance of traditional medicine is that which provides health service to 78-80 percent people of Jharkhand. Due to lack of communication and medical facilities ethno-medicine survives from generation to generation. The primitive man started the use of medicinal plants to overcome various ailments he suffered from. It is interesting that most of the primitive tribes do not accept any other medicine except the one prescribed by their ethno-doctors. It is observed that many of the districts of Jharkhand about 85 percent of the rural population depends on local traditional ethno-medicine for health care. Therefore, ethno-medicine plays important role in health service of Jharkhand districts. It has, in fact, become an integral part of the culture of the people. But unfortunately due to urbanization, rapid industrialization and acculturation of the tribal environment, their culture, faith and belief are changing.

In Jharkhand, there are 47 tribes but there are only 5 main tribes namely Munda, Ho, Santhal, Oroan and Kharia. All tribes, primitive and advanced, consider disease as pernicious and detrimental to normal life. They do not consider any disease as the cause of neglect of body or its organs.
They believe disease causes both transient and intransient illness. They think that most of the diseases are caused by supernatural entities. They have also developed the indigenous method of preventing, diagnosing and curing of various diseases.

**Objective**

1. To find out the reasons why indigenous people are using ethno-medicines for centuries and curing the disease.
2. To find out the relevance of ethno-medicine in today’s scientific age.
3. Why in the scientific age, indigenous people use the ethno-medicine.
4. Why ethno-medicine is more effective for the indigenous people.
5. Why there is no side effect of the ethno-medicine while treating a sick person.

**Methodology**

Observational, survey, experimental, historical method is used for collecting the data.

In tribal society mostly treatment is sought from a native magico-medical practitioner. Among them, there are specialists such as diviner, ethno-medicine man, masseur and sorcerer. Ethno-medicinal beliefs and practices are influenced by various cultural factors. The relationship between human sickness, treatment, healing and medicine is intimate of a tribal society. In tribal system, there is deep relationship between culture, medicine and belief. The example could be given of the main tribes of Chotanagpur.

The Mundas specifically and tribals in general believe that disease and death is caused by certain evil spirit or Bonga. This belief has a great influence on their attitude and psychology about the ailments. They have to take steps to counteract the inimical influence of the hidden power, to pacify, propitiate or satisfy some and punish others like witches. This indicates the origin of sacred incarnations, invocations, recitations, offerings, sacrifices amulets or talisman which are regarded as efficacious in the tribal faith. The evil spirits are associated with the cause of diseases. Evil spirits (bongas) are ikir bongas (water spirit), Buru Bonga (Mountain
Spirit), Dubal Bonga (drowned in water-spirit), pasal Bonga (Killed by people and their spirit). They are attributed with various specific diseases such as Diarrhea, Pneumonia, Goiter, Dropsy, paralysis, Gout, leprosy, Epilepsy etc.

In their belief Supreme Being, Singbonga is the only and real doctor who provides medicine and cures all diseases. When child is cured of his disease and the family celebrates and has little drink then they say “--- we thank the doctor. But the real purpose of this gathering is to ask Singbonga that he preserves the skills of the doctor. Without Singbonga’s good pleasure medicines are of no avail, for it is he who cures us--?” They believe that in and around the earth the spiritual and material power exist. Some are intensively active while others are not.

They believe that some spirits are mischievous spirits who impose their authority upon the people like Bhuts (evil spirits), Churin (Soul of woman dying at child birth or during pregnancy), Dein Bhut (Spirit of witches), Jogni (Dreaded spirit who reside in cremation or burial grounds). They are closely related with the spirits of persons who die in an accident or in an unnatural death like snake bite, killed by wild animals, suicide, death during pregnancy or child birth. These spirits are unseen and travel through the air.

Most of them believe that complicated diseases and ailments such as typhoid, Pneumonia, Lucoderma, Piles goiter, rheumatism originate from the wrong spell and curse to the evil spirits or exorcise, the violation of some Spirits or the work of sorcerers, who are inimical. They also believe that diseases like epilepsy, carries in teeth, leprosy, scabies, ringworm, eczema, venereal diseases, paralysis, elephantiasis, jaundice, cancer and infectiousness of other skin diseases are caused by larva or worms which are invisible to the naked eyes are infinite in number.

**The Tribal people have certain beliefs about medicinal plants**

1. Plants with latex have medicinal value.
2. Green plants before flowing are more effective as curative agents than the dried plants.
3. Roots are considered more effective medicine than the aerial parts of the plants.
4. Plants for the uses of medicinal purpose in various diseases should be collected in different times as in the morning, midday or in the afternoon.
5. The barks for the medicinal use are taken from that side of the plants on which the rising sun shines.
6. The tribals have a belief that the violation of any taboo makes the medicine ineffective.

Mundas, Oraons and Santhals believe that in combination with the fruits of black pepper (Piper nigrum) the medicine shows more efficacies. The tribal groups like Santhals, Mundas, Oraons prepare medicine in combination with 5, 9, 11 or 21 fruits of black pepper. Tribal people believe that these numerical numbers have some significance and bear magical power on medicines.

In general the tribals give name to plants with bad or good properties. In this context, the Mundas have rich terminology in comparison with other tribal groups. It is common that most of the medicine men have their own secret names for many of the medicinal plants, which generally creates confusion to the actual plant species.

The tribal names of the plants are frequently accompanied by two or three words, which in general are of Mundari or Dravidian dialect origin. Prefixes and suffixes of syllables on plant names indicate the habit of the plant, colour of flowers, shape of leaves size of fruits and seeds. For example the term as prefixing word before the name of the tree indicates the tree having white latex in it and the plant has medical value. The term Rang-dare indicates the plants of medicinal value. The term Red as suffix on plant name means the plant is of medical importance.

Tribal professional doctors, in general select the time and seasons for collection of medicine plants depending on the parts used:

<table>
<thead>
<tr>
<th>Plants parts</th>
<th>Time</th>
<th>Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave and branch</td>
<td>After sunrise in the morning but before 9 a.m.</td>
<td>Rainy and Spring season</td>
</tr>
<tr>
<td>Root and tuber</td>
<td>Only at daytime but before 12 noon.</td>
<td>Winter and Summer season</td>
</tr>
<tr>
<td>Bask, latex, resin, gum and flower</td>
<td>At day time but between 12 noon to 4 p.m.</td>
<td>Autumn season from the Eastern part of the plant</td>
</tr>
<tr>
<td>Seed and fruit both tender and ripe</td>
<td>Only at daytime between 12 noon to afternoon.</td>
<td>As the seasons when available.</td>
</tr>
<tr>
<td>Whole plant</td>
<td>In the morning time</td>
<td>After flowering and fruiting</td>
</tr>
<tr>
<td>Heart wood</td>
<td>At day time but before noon</td>
<td>Early Winter</td>
</tr>
</tbody>
</table>
Selective application of medicine

According to the diagnosis of the ailments the tribal people select mouth, eye, skin, corner of the nails etc. Practically there is a lack of standardization both in the case of weighing in measure and preparation of drugs. The variation comes from one Tribal community to the other even from one herbal practitioner to the other of the same community.

Restrictions: There are wide range of animistic conception associated with vegetation, plants species and forest worship. The Unique vegetation, forest with specific plants is the dwelling places of ancestral spirits and place of supernatural power. It makes most of their religious beliefs in definite forms of totemism. The totem plants and clan plants are not destroyed by the tribals because at a wedding place or at domestic rites or in rituals, plants are venerated. Some selected plants whose different parts are used in worship of God or in propitiation of supernatural powers. Plants are protected by veneration and with other traditional practices. Plants are having cultural and religious aspects. The concept of totem or clan tree is working in the mind of the people, has not changed at all but it has largely been modified due to ecological and environmental changes. Even today the vegetation in Sasan (burial ground) is kept protected.

On the other hand some useful plants near or inside the tribal villages are protected for respective utility. They avoid harvesting the medical plants. (Ranu Daru). Some places such as three and five point crossing in the forests, the trees in the name of Bongas (Spirits) are protected by the tribal communities. In such places, there are good numbers of creepers, herbs, shrubs and tall trees are found.

In general, tribal people avoid peeling the bark from any single plant more than once in a year. They prefer peeling bark fiber from the branches for making rope and cord. They never cut the living branches of Karam (Adina cordifolia), living plant of salpa (caryota urens) for any musical instrument purposes. They try to save the mahua plant (Madhuca longifolia) as its flowers, fruits; seeds serve as food during lean months.

There is a belief among the tribal communities that before flowering and fruiting the annual herbs do not have any medical value. In general tribal medicine men pluck their medicinal herbs at daytime before noon and collect bark only from one side of the tree or the branch that faces direct sunrays in the morning. They never uproot the whole plant for gathering
the medicinal roots, tubers, and rhizome from single species.

The leaves of the plants like Asan (Terminalia tomentosa), Bhura (Gardenia gummifera), are commonly used as fodder. But the tribal people never cut the whole tree like Sal (Shorea rolesta) or chop its branches for collecting the leaves to make plates and cups and nursing the larva of wild silk cocoon, collection of gum, resin, latex, sap is not being done from younger plants. At the time of collection of underground parts like tuber, rhizome fleshy root, bulb, corm of the plants, the tribal people leave some reproductive parts for regeneration of the species. Collection of all the fruits from a single plant is considered as sin. It is believed that violation of it causes incurable diseases. Plants like Sidh (Legerstromeia parviflora) Karam (Adina Cordifolia) Sal (Shorea rolesta) Kendu (Diospyros montana) Amla (Emblica officinalis) are venerated and marriage pandals are created under shade of those plants. For such reasons the tribal people have the attitude to save the plants in or near the tribal villages. Deforestation and shifting cultivation practiced by the tribal people has created problems for the preservation of plants.

Here we have compiled a list of some of the ethno- medicinal plants which provide forest produce of both therapeutic and commercial values.

**Tribal Pharmacology:** The preparation of drug and medicine among the tribal communities is really an art. Most of the tribal medicines are prepared either from single drug occurred from single plant or plant parts. The combination with other plant rock, mineral etc. in tribal medicine is not uncommon.

**Forms of Medicine**
1. Infusion
2. Decoction
3. Mixture
4. Syrup
5. Paste
6. Powder
7. Pills and small cakes
8. Extract- both in water and in alcohol
9. Fresh juice by squeezing fresh materials
10. Formentation
11. Medicated oil- both from plants and from animal fats.

In general, the dose prescribed for each medication is the adult dose.
It is proportionately reduced to the age of the patient. Pounding the plant or plant parts into paste or sleeping the pounded material in water to get the extract or squeezing them for juice and of fomentation are common practices among the tribal communities. Pounded products are generally administered directly or in the forms of pill and cake. For rheumatic swelling and boils, either boiled root, bark, leaf or the paste of the plant parts is applied as poultice. Dry plant parts are usually made into powder. In certain cases barks or roots of medical plants are chewed and sucked.

In general the tribal people take the medicine either with fresh cold drinking water or with country liquor, rice beer or with honey as advised by the medicine man. Most of the tribal medicines are prepared in combination with the fruits of either long pepper or black pepper. Sometime they also add ginger. The drugs are used in various forms. Few of the examples are illustrated how a particular plant is used as medicine.

1. **Bael Tree**

   In English it is called Bael tree and in Hindi and Sadri it is called Bael and its botanical name is Aegle Marmelos, Roxb.

   **Tribal name-Bael**

   Aegle marmelos are popular and are popularly known as Bael in Jharkhand as well as in India. It is a tree that grows up to a height of 3 to 8 meters. The leaves of this tree are oval in shape and the flowers have a pleasant fragrance. The large round shaped fruit is greenish-white in colour with a hard but smooth outer surface. The inner content of the fruit is mucilaginous and faintly aromatic. It flowers in April-May and fruit comes in May-June.

   **Parts Used:** The root, leaves and fruits are used for the medicine.

   **Medical Use**

   1. Medicine is used for diarrhoea, dysentery, catarrh and fever.
   2. Root is used for fever.
   3. Fruit is used for gastic disorders, palpitation, mad dog bite, used for fish poison.
   4. Fruit is used for abscess, backache, diabetes, eye complaints, fever, heat in abdomen, jaundice, vomiting, wounds and cuts, stomach pain, breast pain, cholera, night fever, snake bite, for gastric trouble.
5. Bark is used for diarrhoea, dysentery and stomach disorder.
6. It is used as a mild laxative.
7. It is used to cure inflammation of the mucous membrane having a free discharge.
8. It is recommended for the cure of asthma.
9. It reduces or eliminates fever.
10. It is used for jaundice and constipation.
11. It is used for the combination of severe inflammation of the eye or conjunctiva, acute bronchitis and inflammation of the body.
12. It is used for intermittent fevers or a depressed unhappy emotional state and heart palpitation.
13. It is used for strengthening and giving tone to the stomach to prevent scurvy and aiding in digestion.
14. It is used for chronic diarrhoea or dysentery.
15. It is used for indigestion, discomfort or pain in the stomach.

How to Use
1. The leaves of the tree are used as a mild laxative, for fever or the inflammation of the mucous membrane having a free discharge and for asthma.
2. The decoction of the leaves are helpful in eliminating fever.
3. The leaf juice is given for jaundice and constipation.
4. A hot poultice of the leave is applied in severe inflammation of the eye, conjunctiva with acute bronchitis and inflammation of the body.
5. The root bark is used in decoction for intermittent fevers, or a depressed unhappy emotional state and heart palpitation.
6. The unripe fruit can be used as stomachic or strengthening and giving tone to the stomach. It is also used in case of chronic diarrhoea or dysentery.
7. The ripe fruit is aromatic, cooling and a laxative.
8. The extract of the ripe fruit with water is given for chronic constipation, indigestion, discomfort or pain.

Dose
1. Pill is a brain tonic dose one pill for 30 days.
2. Paste is used for fever for 3 days.
3. Fruit juice is used for stomach disorders, sunstroke for 3 days.
4. Dried fruit with pepper is taken for stomach pain for 3 days.
It has to be taken without any sweetening. Sugar should never be used. If necessary, a little honey may be used. It may be fermented overnight or it could be used fresh every morning but should not be taken together with food. It could be taken one hour before eating or two hours after eating. Liquid could be taken with the meal to improve the digestive process.

**Religiously:** Tree worshipped by Hindus as incarnation of Lord Shiva. Some Kharias also venerate this tree. Wood is used for the funeral pyre of the rich of much religious significance

**2. Karanj Tree**

- In English it is called Indian beech and in Hindi it is called Karanj and its Botanical name is pongamia pinnata, Pierre. In mundari it is called ‘koronjo’ where as in sadri it is called ‘karanj’.

**Brief Description**

It is normally found growing along rivers and streams. The leaves of the tree are placed alternately and are imparipimatumely compound. The 5 to 9 leaflets are ovate-oblong, bilaterally compressed and woody. The single seed inside the pod is kidney-shaped. It is a medium sized tree spreading branches and forming dense canopy. It flowers in May and June but its fruit remains till December to February

**Medicinal Use**

1. Oil is used for burning lamp to drive away all kinds of insects and mosquitoes.
2. Oil is commercially important due to its medicinal value.
3. It is useful in expelling worms from the body, diseases of the eye, the skin, for tumours, piles, ulcer, itching.
4. It is useful for strengthening and giving tone to the stomach and it is an appetizer.
5. It is useful as an agent for digestion.
6. It is useful for purifying the blood, curing earache, chest complaints, chronic fever and hydrocele.
7. It is useful for itching, urinary disorders, headaches, chronic fevers and pain.
8. Karanj oil is used for burning, skin disease, rheumatism, sores, ulcer, bronchitis, chest pain, ear complaints, joint pain, whooping cough, cold, eczema, fever, itching and scabies. Flower is used for diabetes, and fruit is used for cough and leprosy. Bark is used for malaria, piles and tooth-brush.
How to Use

1. The decoction of the root and bark will take care of all the disorders, like expelling warms from the body, diseases of eye, diseases of skin, tumour, piles, ulcer itching.

2. The decoction of the tender shoots or sprouts will take care of giving strength and giving tone to the stomach.

3. The infusion of the flowers will take care of diabetes.

4. The decoction of the seeds will be used for digestion and purifying the blood.

5. The oil extracted from the seeds by pressure technique is useful to take care itching, urinary disorders, headache, cosmic fevers and various skins diseases.

Part Used

Roots tender shoots, leaves, flowers and seeds.

Pre-caution has to be taken that in case of bleeding from internal organs may result if used in excess. The tender branches are used as brush, which controls the blood pressure and all kinds of infections.

Dose

The decoction is used for stomach pain- and dose is given in 1 glass of water for 7 days. Bark decoction is used for menstrual problems. The dose would be 250 grams of bark put in 2 liters water and boil it half and give 100 ml for 21 days. The oil is used for skin diseases and other uses. The oil has to be applied on the body for 15 days.

3. Jamun Tree

It is called Java plum and in Hindi it is called Jamun and its Botanical name is Syzygium Cuminii Linn. It is called in Mundari and Kharia ‘Kuda’. In sadri it is called Jamun and Santhali it is called so-kod.

Brief description

Syzygium, is commonly known as Jamun in Chotanagpur as well as in India. It is a popular tree especially in the rural areas of the country. The tree may grow over 10 meters high with many branches and regular glossy and leathery leaves. The small white flowers are produced in large numbers which after a period of time rise to small green fruits which later grow into oval shaped, 1 to 3 c m. long bright Purple or black, flesh, sweet
and astringent one seeded fruit.

It flowers in April and gives fruit in May or June.

**Medical Use**

1. It is used for controlling excess sugar in the blood.
2. It is very effective in cases of diabetes.
3. It is used for dysentery; hemorrhages and leucorrhea.

**How to Use**

1. The seed powder is used to control excess sugar in the blood.
2. In case of diabetes, one and half gram to one gram of the seed powder is taken twice or thrice a day. For the same effect, the juice of the seeds could be taken. The dose could be two drops in a glass of water and three times a day.
3. The bark of the tree (dose of 20 grams for 1 liter of water) can be taken for dysentery, hemorrhages and leucorrhea, gastic, disorders, diarrhea, digestive disorders and piles.
4. Fruit juice is used for the stomach pain, dysentery and tonic, edible, and diabetes. It is taken one tea spoon daily.

**Parts Used**

The bark, seed and fruit of a tree are used for the medicine.

**Dose:** The dose is prepared out of the seed powder, or the bark of the tree or the fruit juice, it has to abide by the specific dose as follows-
- Adults - 4 or 5 cups a day.
- Children age 10 to 15 – 3 to 4 cups a day.
- Age 20 to 50 – 1 cup a day.
- Age 60 to 90 – 2 cups a day.
- Below 2 years – ½ cup a day.
- Below 1 year – 4 or less cup a day.

**4. Munga Tree**

In Hindi it is called Sainjnad which is known in English as drumstick and its botanical name is Moringa Oleifera Lamk. It is called munga in Mundari, Santhali and Kharia and Sadri language.
Description

It is a deciduous tree with corky grayish or pale brown bark and soft white wide leaves generally trip innate, itself opposite, elliptic ovate, 10-15 m. m. long. Its flowers are white in large maxillary panicles. Its fruits are angular, cylindrical and three valved. The cap is up to 30 cm long and 10-15 mm thick. It is green outside and white and pitted inside.

It is cultivated in the month of September. It flowers in January and it gives fruit in May or June. The flower and fruit is used as vegetables. It is a very common tree which is found throughout India.

Medicinal use (Tribal medicine)

Lodhas give dried root powder with cow milk to women for treatment of hysteria. They boil root bark in brassica oil and use the medicated oil as massage for treatment of paralysis. They apply paste of stem bark as cure for Rangabad (a kind of skin diseases of children, men and women) and put leaf paste as poultice on swelling of legs. They boil gum in mustard oil and put that oil as cure for purulent discharge from ear. Santhals and Oraons prescribe stem bark decoction with common salt for treatment of cholera. Mundas give dried flower powder with lemon juice for treatment of madness. Oroans use fresh gum for same purpose. They chew stem bark as masticatory. Other ethnic communities apply bruised leaves as cure for wounds especially wounds created due to bite of wild animals. Seed oil is purgative and rheumatics. Tribals give stem bark decoction with common salt to cattle as cure for dyspepsia.

1. Oil is used for body and chest pain, cold and fever. The paste is applied on snake bite.
2. Oil is used for headache, skin discolouration, asthma, delivery problem, epilepsy, liver complaints, paralysis, rheumatism, scorpion bite, enlarge spleen dental problem, eczema, fever, dysentery, scabies, sores, urinary complaints, ear complaints and antifertility.
3. Its flower is used for cardic stimulant.
4. Its fruit is used for anthelmintic, appetizer, tonic, edible.

Poison: Tribals use fresh root bark paste for poisoning fish and to kill snakes.
Religious belief: Eating of Drumstick fruit is said to be as antidote to pox.

5. Gular-Cluster fig- *Ficus glomerat* Roxb

It is known as “Dumar” or Pipal in Santhali. A tree is of 15-18 meter high with spreading branches. The stamp and branches are of greyish brown colour. This tree is normally found growing along streams or rivers. The leaves are ovate-oblong and tapering to a bluntish point at the apex, with entire margins and shinny leaf surfaces when it is mature. The fruits which are really receptacles with short stalks are found in clusters on the trunk and branches of the tree. They are round in shape and pink or red in colour, when it is ripe between May to September.

Medical Use
1. It is used by lactating mothers to increase the secretion of milk.
2. It is used to give tone and vitality to the body.
3. It is used to check congestion of the liver, leucorrhoea and blood issues.
4. It is used to check leprosy exercise bleeding during menstruation, nose bleeding and for expelling intestinal worms.
5. It is used for curing asthma.
6. It is used for curing bronchitis.
7. It is used for curing dry cough and diseases of Kidney.
8. It is used for curing piles, diarrhoea and cancer.
9. It is used for checking glandular enlargements.

Parts Used: The bark unripe and ripe fruits, leaves, latex and sap of the root.

How to Use
1. Powder of tender flower bud is used with rice water for burning in the stomach. The dose would be the one tea spoon powder with one glass of rice water for 10 days on empty Stomach.
2. Fruit powder is used for diarrhoea for 3 days. Fruit is used for diabetes, leprosy, stomach pain, urinary complaints.
3. When you cut the root ends and you obtain water which is used for the burning in the stomach. Root is used for antifertility, veneral disease, menstrual complaints, muscle pain, scabies and small pox.
4. Leaf juice is used for application and for internal administration for dog bite. Leaf is used for bronchitis and pneumonia.
5. Bark of the tree is used for astringent, for cancer, leprosy and urinary complication. Wood is used in symbolic rituals.

6. Kathal Tree: Jack Tree - Artocarpus heterophyllus, lam.

It is called Kathal in Hindi and Jack tree in English. Its botanical name is Artocarpus heterophyllus, lam.

The jack fruit tree is well known for its very large fruit which sometimes weighs over 30 kilos. It grows in the tropical climate and its fruit is loved by most of the local inhabitants. The tree grows to a height of 10 meters or more with many branches and foliage which provide a beautiful shady picnic or resting spot. The edible pulp inside the fruit is fleshy and yellow, when it is ripe. When it is unripe fruit is eaten as vegetable. In fact, this plant grows well in Chotanagpur.

It flowers in November to January and fruit comes in February.

Parts Used: The whole plant, especially leaves, seed and root is used for medical purposes.

How to Use
a. The decoction of the root is a good remedy for diarrhoea, fever and asthma.

b. The milky latex of the tree is applied externally for the cure of ulcers, wounds, glandular swellings and insect bites.

c. Excessive consumption of ripe fruit works on the bowels as a laxative.

d. The consumption of roasted or boiled seeds gives tone and vitality to the body and help in checking abdominal pain.

Medicinal Use
1. Mundas and Kharias make a special tonic with ripe fruit and jaggery for tuberculosis.

2. They take edible part of the fruit and put it in mud pot with jaggery in alternate layers.

3. It is tightly seal the pot and keep it in sun for 21 days. Then give to the patient 2 tea spoons for 21 days on empty stomach.

4. The milky latex of the tree is used for ulcers, wounds, glandular swellings and insect bites. In case of ulcer and wound, insect bites, it is given to the patient for seven days evening and morning. For the glandular swellings, it is given for 21 days.

5. Fruit edible is used for carbuncle, post natal complaints, small
pox, sores, sterility, stomach complaints, skin disease and for acute abdominal pain.

6. The wood is used for dye, for furniture and musical instruments.

7. Bail Tree

In English it is known as sweet basil and in Hindi it is known as Gulal tulsi and its botanical name is Ocimum basillicum linn. In Santhal and Mundari it is known as Dimbubuha but it is commonly known as sweet basil or tulsi. In lodhas, it known as Jatanri ba.

Description

The basil plant is erect having many branches. It is slightly hairy and it's very aromatic. It reaches about one meter high. It grows in open waste high. It grows in open waste lands. The leaves are ovate to oblong-ovate. The flowers are purplish or pink, in racemes up to 15 cm long. The strong and pleasant odour is a typical character of the plant.

The flower and fruit comes between Septembers to March.

Parts used: The parts which is used for medicinal purposes are leaf, pulp, seed and roots.

How to Use

1. The roots of the plant can be used for bowel complaints for children the dose would be 1 to 3 tea spoon only for a day.

2. The decoction of the leaves or the crushed seeds can be applied as a compress on the nipple of the mammary gland while mother is breast feeding. This is to treat the affected gland. The dose would be once or twice a day only.

3. A syrup can be prepared from the root for the treatment of tuberculosis of the lungs as it is necessary.

4. For all other complaints listed the decoction of the leaves is to be used.

Medicinal Use

Lodhas prescribe root decoction with honey for three days, 2 times a day for treatment of sexual weakness. They give stem decoction with paste of long pippers and common salt for 3 days twice a day for treatment of black water fever and give leaf decoction as expectorant. They prescribe leaf paste with paste of long peppers for 3 days once a day for treatment
of neuralgia and apply leaf paste with common salt for 2 days once a day for ring warm.

- Mundas apply seed paste as poultice on boils and use the paste with sandal wood paste for 2 days once a day on forehead when there is severe headache. Munda apply seed paste against stings of wasps, bees and other venomous insects.
- Santhals give leaf decoction with paste of black peppers and common salt for 5 days for 3 times a day to children against errhine, discharge of mucous from nose.
- Oraon and other ethnic communities give leaf juice with honey to children for treatment of cough and cold and put fresh leaf juice as drop in ear as curative of earache. They put seeds in cold water for overnight duration and are taken in the morning as purgative.

Tribals and other ethnic communities used crushed leaves for collecting honey. They create smoke (by burning dried plants) and use the smoke as mosquito repellent. Leaf is a source of oil of sweet basil.

All the tribals use for coughs, ringwarms, skin diseases, hepatic disorders, earache, malaria, chronic constipation and piles and sores.

8. Dawn Bush

In English it is fire-flame bush. In Hindi it is called Dawn and its botanical name is Woodford fruitions, Kurtz. In mundari it is called Hitch, in Santhali it is called Hawaii and Chair Hither. In sadri, it is called Wilbur.

Description

The fire-flame is a very common shrub which grows to a height of 3.6 meters and is found in the hilly regions of India. The brown bark has fibers peeling off from the hairy stem. The stalk less, ovate-lance late leaves are placed opposite to each other and sometimes in whole of three arising at the nodes. The small red bell-shaped flowers arise from the axils of the leaves and along the stems. The capsule is membranous and the seeds are known in colour.

It flowers in between January to April and fruit comes in May.

Parts Used: The bark, flower and root are used to prepare the medicine.

How to Use

1. The decoction of the bark is used to cure the skin and blood diseases.
2. The infusion of the flowers is used to cure hemorrhagic and toothache.
3. The dry powdered flowers are mixed with honey and administered to check dysentery and diarrhea.

**Medicinal Use**
1. The root decoction is used for dysentery. The dose has to be given in 50 ml for 15 days.
2. Flower is used for heat in stomach and excess menstruation. The dose would be
3. Flower and root of *smilax ovdlifolia*, ingredients must be prepared of both and a pill has to be given every day for 15 days.
4. Flower yields dye and tannin and flower powder is used for diarrhea. The flower is also used for cancer, cough, diarrhea, dysentery, injuries, loss of appetite, in pregnancy and sprain. The root is used for rheumatism, burns, bleeding in pregnancy, bone fracture, carbuncle, cholera, dropsy, menorrhagia, spleen complaints, syphilis and ulcer.

**9. Chokond Bush**

In English it is called Fetid Cassia. In Hindi, it is called Shauna. The botanical name is *cassia torah*, limn. In Sadri, it is called chokond even in Mundari it is called chokond. In Oldham, it is called Jamaican and in Santhali it is called Bheda-doren. The common name is sickle sienna.

The flower comes in September and fruit comes in October.

**Description:** The “chokond” is a very common annual herb. The leaves are obviating. The flowers are yellow, small in maxillary pairs. The pods are long, curved four-sided. It grows about 1 meter high. It is found in waste land roadsides and paddocks. Ecologists have found that this plant can inhibit the growth of pantheism or congress weed. Being a leguminous plant, it also provides nitrogen to soil.

**How to Use**
1. It is used as a mild, gentle laxative.
2. It prevents recurring diseases such as malaria.
3. It is used to reduce or eliminate fever.
4. It is used to kill or eliminate worms from the body.
5. It helps in digestion.
6. It is also administered for intestinal disorders.
7. It provides a valuable remedy for itching of the skin, ringworm, chronic inflammation of the skin and other skin diseases.
**Medicinal Use**

1. Root paste is applied for body pain.
2. Root is used for abnormal child birth. Dose would be once a day 1 tea spoon and it would be continued 1 to 3 months in a glass of rice water.
3. The leaf powder is used in worm rice water for blood pressure. Dose would be 1 tea spoon in a glass of rice water for 1 to 3 months.
4. Leaf is used for anthelmintic, antiseptic, vermicide, vegetable and for boils, bone fracture, cuts, indigestion, intestinal disorder, jaundice, night blindness, rheumatism, skin disease, stomachache, wounds, epilepsy and sores.
5. Flower is used as edible, tonic, increase of fat and is substituted for coffee.

**Tribal Medicine**

1. Lodhas (Tribe) apply root bark paste with albumen of hen’s egg to heal bone fracture.
2. Lodhas prescribe dried seed powder with lime once a day for three days to cure ringworm.
3. Mundas and Santhals and Hos use leaf decoction with paste of black peppers as laxative for twice a day for five days. They apply leaf paste against eczema.
4. Other ethnic communities apply fresh leaf juice like tincture of iodine.

In the understanding of Munda people, medicine and medicinal practitioner is a means but the real doctor who heals all diseases is the Supreme being, Singbonga himself. The thanksgiving sacrifice is offered to none but to Singbonga himself.

**REFERENCES**


MEDICINAL PRACTITIONER
Tirkey, Prakash, (Singpur)
Surin, Ignace (Mundagrha)