

## Ethnomedical Plants of Purulia District of West Bengal

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Purulia is the westernmost district of West Bengal and is located between 22° 42' 35" to 23° 42' 0" North Latitude and 85° 49' 25" to 86° 54' 37" East Longitude. The district constitutes a transit zone between young alluvial plain of West Bengal and ancient plateau of Jharkhand. The climate of Purulia is characterized by hot summer and well distributed rainfall, Purulia receives about 1400 mm rain every year. Temperature ranges from 13°C to 46°C. Natural vegetation of Purulia can be described as tropical moist deciduous forest but the same has significantly changed because of various anthropogenic reasons. Still about 82% of total area is rural and has got various types of vegetation. Purulia has got remarkable presence of tribal who constitute nearly 18% of total population. Major tribes include Santhals, Oraons, Mundas and Koras. Tribal people of Purulia have been using various herbs for their therapeutic purpose from ancient period. The present study was aimed at collecting some first hand information's regarding the ethnomedical plants popular among tribal of Purulia. Tribal dominated area of this district was regularly visited and village medicine man, elderly, people and merchants of herbs were consulted. Information's collected from them were documented. Plants collected were identified with the help of available literature (Chopra and Chopra, 1992; Sharma, 1996).

### PLANT DESCRIPTION

1. BOTANICAL NAME : *Adhatoda vasica* (Nees)  
LOCAL NAME : Basak  
FAMILY : Acanthaceae  
CONVENTIONAL USE: Fresh leaf juice with honey is used as a remedy for cough and for loosen the cough. About 3 fresh leaves fried with 3 china rose (*Hibiscus rosa sinensis*) bud and consumed every day with rice to cure piles. The smoke of dried leaf is advised to inhale to cure asthma.
2. BOTANICAL NAME : *Aegle marmelos* (L.)  
LOCAL NAME : Bel  
FAMILY : Rutaceae  
CONVENTIONAL USE: Leaf extract with honey is used in treating jaundice. Fruit pulp is given in case of dysentery.
3. BOTANICAL NAME : *Alostonia scholaris* (R.)

LOCAL NAME : Chhatim

FAMILY : Apocynaceae

CONVENTIONAL USE: The latex is applied in gums to prevent tooth-decay and tooth-ache. Bark paste is boiled with 2 cup of water and reduced to ½ cup and applied onto the mammary glands of women to increase lactation.

4. BOTANICAL NAME : *Andrographis paniculater* (Wall.)

LOCAL NAME : Kalmegh

FAMILY : Acanthaceae

CONVENTIONAL USE: Half spoon of leaf juice with 4-5 cardamom seed powder is used to treat liver and digestion complaints. Leaf extract mixed with turmeric juice and sugar is taken to cure worms. leaf juice with water and fried cardamom seed powder is administered for dysentery.

5. BOTANICAL NAME : *Argemone mexicana* (L)

LOCAL NAME : Sialkanta

FAMILY : Papaveraceae

CONVENTIONAL USE: The yellow latex of the stem is taken orally for seven days for healing of wounds

6. BOTANICAL NAME : *Azadirachta indica* (A)

LOCAL NAME : Neem

FAMILY : Meliaceae

CONVENTIONAL USE : Leaf paste is applied externally for skin disease (allergy). Pieces of fresh branch are used as tooth brushes to keep mouth clean. It also prevents tooth decay, bad breath and gum diseases. 4-5 gm of Neem bark is left for night in warm water and advised to take early in the morning to cure.

7. BOTANICAL NAME : *Boerhaavia repons*(L)  
LOCAL NAME : Punarnaba  
FAMILY : Nyctginceae  
CONVENTIONAL USE: Root powder is used to treat bronchial asthma. Leaf juice is given to jaundice patients.
8. BOTANICAL NAME : *Cajanus cajan* (L.)  
LOCAL NAME : Aorhor  
FAMILY : Papilionanceae  
CONVENTIONAL USE: Fresh young leaves are chewed to cure tongue ulcer. Leaf extract or root bark juice is warmed and used to treat diabetes.
9. BOTANICAL NAME : *Calotropis procera* (R. Br.)  
LOCAL NAME : Akanda  
FAMILY : Asclepiadaceae  
CONVENTIONAL USE: Decoction of leaves is used for relieving pain in rheumatism. Latex is used internally in curing piles, intestinal worms etc. Latex is also applied in case of scorpion sting.
10. BOTANICAL NAME : *Carica papaya* (L.)  
LOCAL NAME : Pepe  
FAMILY : Caricaceae  
CONVENTIONAL USE : Infusion of latex and honey is given to children for expelling round worms. Latex is also helpful to get relief from pain of burns. It is also applied on wounds to check haemorrhage.
11. BOTANICAL NAME : *Cassia occidentales* (L.)  
LOCAL NAME : Kalkasunde  
FAMILY : Caesalpinaceae  
CONVENTIONAL USE : About 1 gm of fruit powder is advised to eat twice daily to reduce acidity till cured the leaf powder is mixed with sugar solution and taken in case of whooping cough. Few drops of leaf extract are dropped in nose to get back the sense from senselessness (Faint).

12. BOTANICALNAME: *Catheranthus roseus*(L.)  
LOCAL NAME : Nayantara  
FAMILY : Apocynaceae

CONVENTIONAL USE: Leaf infusion is taken to cure indigestion, control blood pressure and also to check diabetes. The decoction of stem and leaves are used for regulation of menstruation. The leaf paste is used in case of insect (ant, honeybee) bite.

13. BOTANICALNAME: *Centella asiatica* (L.)  
LOCAL NAME : Thankuni  
FAMILY :Umbelliferae

CONVENTIONAL USE : Leaves are boiled in water, and the water is applied on wounds to get quick recovery, this water is also given for gargling for sore throat. Decoction of the leaves is administered for dysentery.

14. BOTANICALNAME : *Cinnamomum tamalo* (Nees)  
LOCAL NAME : Tejpata  
FAMILY :Lauraceae

CONVENTIONAL USE : The leaf paste is rubbed to cure prickly heat . Leaf powder is applied on gums to relieve pain from toothache.

15. BOTANICALNAME: *Coriandrum satinum* (L.)  
LOCAL NAME : Bhane  
FAMILY : Umbelliferae

CONVENTIONAL USE : Coriander leaf chutney serves as an excellent remedy for abdominal pain caused by indigestion. The paste of seeds ground with some water applied to forehead to get relief from headache.

16. BOTANICALNAME: *Croton bonplandianum* (Baill.)

FAMILY : Euphorbiaceae

CONVENTIONAL USE : Oil obtained from seeds is used as strong purgative.

17. BOTANICALNAME: *Curcuma longa* (L.)

LOCAL NAME : Halud

FAMILY : Zingiberaceae

CONVENTIONAL USE : About 1 gm of Halud (Amlaki) powder, Neem leaf powder and emblic powder is advised to eat early in the morning in case of allergy. Inhalation from boiling water or warm taken with milk relieves sore throat Halud powder, salt is lime mined and warmed and is applied on swellings of sprain.

18. BOTANICALNAME: *Cynodon dactylon* (L.) Pres

LOCAL NAME : Durba

FAMILY : Poaceae

CONVENTIONAL USE : Decoction of leaf with sesame seed oil is administered for scabies. Leaf paste along with turmeric paste is used to cure scars caused due to any skin infection.

19. BOTANICAL NAME : *Datura metel* (L.)

LOCAL NAME : Dhutra

FAMILY : Solanaceae

CONVENTIONAL USE : The leaf juice is warmed and then applied externally to the swelling of the body. It is also used in asthmatic complaints. Leaf extract minced with mustard oil is used in rheumatism.

20. BOTANICALNAME: *Emblica officinalis* (Gaertn)

LOCAL NAME : Amlaki

FAMILY : Euphorbiaceae

CONVENTIONAL USE : The fruit poultice is used to stop bleeding from cuts. The fruit juice is useful in indigestion. Young fruit pulp (paste) is for applied on scalp for growing new hair.

21. BOTANICAL NAME : *Eucalyptus globosus* (Labill.)  
FAMILY : Myrtaceae

CONVENTIONAL USE : Oil obtained from dried leaves is used in the treatment of nose, throat disorder, asthmatic complaints and bronchitis.

22. BOTANICALNAME: *Foeniculum vulgare* (Mill.)  
LOCAL NAME : Mouri, Panmouri  
FAMILY : Umbelliferae

CONVENTIONAL USE : The decoction of leaves strengthen the eye-sight. Seeds of this plant facilitate digestion

23. BOTANICALNAME: *Hemidesmus indicus* (L.)  
LOCAL NAME : Anantamul  
FAMILY : Apocynaceae

CONVENTIONAL USE: The root decoction (About 10ml) is used thrice a day for one month as blood purifier and in skin disease also. It is also helpful in lactation of mammary gland. The root powder along with honey is administered for dysentery.

24. BOTANICALNAME: *Herpestis monniera* (L.)  
LOCAL NAME : Bramhi  
FAMILY : Scrophulariaceae

CONVENTIONAL USE: Leaf – decoction is used as a nerve tonic, and also in epilepsy and insanity. The leaf juice is warmed, then cooled and mixed with honey, and taken to get relief from choked throat.

25. BOTANICAL NAME : *Holarrhena antidysentrica* (Linn.) wall  
LOCAL NAME : Kurchi  
FAMILY : Apocynaceae

CONVENTIONAL USE : 5 gm bark powder boiled in 2 cup of water and reduced to ½ cup, this solution is administered for diarrhoea and dysentery. The seed

powder is mixed with honey and used to cure worms. The paste of the bark is slightly warmed and applied on abscesses to cure it.

26. BOTANICAL NAME : *Hygrophila spinosa* (T.)  
LOCAL NAME : Kulekhara  
FAMILY : Acanthaceae
- CONVENTIONAL USE: Leaf extract is consumed everyday to increase the amount of haemoglobin in blood. Leaf juice is warmed and taken with honey to get relief from foot swelling and to reduce muscle pain.
27. BOTANICAL NAME : *Leucas aspera* (speng.)  
LOCAL NAME : Dronpuspa  
FAMILY : Lamiaceae
- CONVENTIONAL USE: Decoction of the flower along with warm water is taken to loosen the cough. 3-4 drops of leaf juice is advised to be taken orally by the children to cure worms.
28. BOTANICAL NAME : *Madhuca indica* (Gmel.)  
LOCAL NAME : Mahua  
FAMILY : Sapetaceae
- CONVENTIONAL USE: A tincture of leaves is used in rheumatism and gout. A tea of boiled branches is used to treat cold.
29. BOTANICAL NAME : *Mentha arvensis* (L.)  
LOCAL NAME : Pudina  
FAMILY : Labiatae
- CONVENTIONAL USE: The leaf juice is used in stomach disorders, liver and spleen diseases. A solution of leaf juice, salt, black pepper powder and lemon juice is taken orally to reduce aversion or tastelessness.

30. BOTANICALNAME:*Neriumindicum*(Mill.)  
FAMILY :Apocynaceae  
CONVENTIONALUSE: Extracted oil from root bark is used in skin disease of a scaly nature . Fresh leaf juice is applied in eyes for inducing lachrymator in ophthalmia.
31. BOTANICALNAME :*Ocimum sanctum* (L.)  
LOCAL NAME : Tulsi  
FAMILY :Labiatae  
CONVENTIONALUSE: Leaf juice is mixed with honey and used in cough, cold, stomach trouble and diabetes. Decoction of leaf is applied in case of insect bite.
32. BOTANICALNAME :*Paderina foetida* (L.)  
LOCAL NAME : Gandal  
FAMILY :Rubiaceae  
CONVENTIONALUSE: Leaf paste with sesame seed oil is applied externally to reduce muscle pain. The prepared soup with leaf, is taken to get relief from cough and cold. Leaf juice along with fresh honey is taken orally to cure dyspesia.
33. BOTANICALNAME :*Piper longum* (L.)  
LOCAL NAME : Pipul  
FAMILY : Piperaceae  
CONVENTIONALUSE: The dried unripe fruit powder is useful in cold, cough, chronic bronchitis and diarrhoea
34. BOTANICALNAME:*Ricinus communis*(L.)  
LOCAL NAME : Reri  
FAMILY :Euphorbiaceae  
CONVENTIONALUSE: Oil obtained from seed is rubbed on to the boil or burns to get quick relief. One drop of leaf juice is warmed and dropped on eyes to cure conjunctivitis. Leaf paste is rubbed on to the joints to get relief from pain.



35. BOTANICALNAME: *Strychnos nux-vomica* (L.)  
LOCAL NAME : Kuchila  
FAMILY :Loganiaceae  
  
CONVENTIONALUSE: Stem bark along with lime juice is taken orally to treat cholera. Seed is used as tonic and taken in the treatment of paralysis and nervous disorders.
36. BOTANICALNAME : *Swertia ciliata* (L.)  
LOCAL NAME : Chirata  
FAMILY :Gentianaceae  
  
CONVENTIONALUSE: Dried stem and branches are added in water and left for whole night ,this water is advised to be taken early in the morning to reduce acidity, till cured. One gm of powdered leaf and stem is mixed with sugar and water and is taken to reduced vomiting during pregnancy.
37. BOTANICALNAME : *Taraktogenos kurzii* (king)  
LOCAL NAME : Chalmugra  
FAMILY : Flacourtiaceae  
CONVENTIONAL USE: Seed oil is used in the treatment of leprosy and skin diseases.
38. BOTANICAL NAME : *Trigonella foenumgraceum* (L.)  
LOCAL NAME : Methi  
FAMILY : Leguminaceae  
  
CONVENTIONAL USE: The flower is recommended for dysentery, diarrhoea. The seed is used to resolve inflammatory tumors. ½ gm of seed powder is taken with warm water to reduce joint pains.
39. BOTANICALNAME: *Vitex negundo* (Linn.)  
LOCAL NAME : Nisindha, Buan  
FAMILY : Verbenaceae  
  
CONVENTIONALUSE: Boiled leaf water mixed with Neem leaf and is used to cure wounds. The boiled leaf water is taken to cure joint pains. Leaf

juice with warm oil is rubbed onto the scalp to remove dandruff and also to promote hair growth on bald.

40. BOTANICAL NAME: *Zingiber officinales* (Rose)

LOCAL NAME : Ada

FAMILY : Zingiberaceae

CONVERTIONAL USE: Juice of underground part is used in cold and cough. Plant extract also acts as an antibiotic. Dried powder is applied on wounds to check haemorrhage.

Various earlier workers like Bhattacharjee (1977), Sarkar and Gupta (2000) and Robin (2004) have reported earlier that ethno medicine constitute back bone of health service among tribal of west Bengal. West Bengal state gazetteer further confirms this condition. Results of this research work also runs in same direction. Tribal people of Purulia district of West Bengal have adequate information about plants and they properly use these ethno medicine to treat various diseases.

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