

NOTES ON SOME PLANTS USED IN REFRACTORY DISEASES

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ABSTRACT

The paper deals with the plants used by the tribals of Koraput district in treatment of diseases like piles, epilepsy, convulsion etc. The applications reported in the paper are either unknown or less-known.

INTRODUCTION

Tribal people are mostly living in and around the forest and they are closely associated with their biotic surroundings. They depend on forest to some extent for their survival. They possess empiric knowledge about the biotic resources, which are vanishing rapidly due to aculturation. In order to record such knowledge, survey and studies have been made in Koraput district of Orissa state. Geographically it is a southern district of Orissa state which lies between 81°27'-84°1' East and 17°5'-20°3' North. The district is bounded on east and south by Andhra Pradesh, Madhya Pradesh in west and Kalahandi and Ganjam districts of state, in north. Tribal population of the district is 13,71,550 *i.e.* 52.21% of the total population 24,84,005 of the district (Singh, 1990).

The tribals are mostly conservative and they do not easily expose themselves with other communities for exchange or to share their empiric knowledge, particularly about diseases. They are, by nature, reluctant to go to hospitals as they have a great faith on their own traditional system of medicine. Such information was gathered from "Desari" (Tribal medicine-man) and "Bijuni" (Tribal medicine-woman)

inhabited in the villages and in the forest sides. The reported information was thus, confirmed through cross queries.

The present paper deals with 30 Angiospermic plants which are used in treatment of refractive diseases and give good curative response to the diseases like piles, epilepsy, eczema, convulsion etc. The collected information was compared with the published literature Watt (1889-93), Kirtikar Basu (1935), Bal (1942), Chopra *et al.* (1956, 1969), Wealth of India (1948-1976), Panigrahi (1963), Mudgal and Pal (1980), Tribedi *et al.* (1982), Saxena *et al.* (1981), Paul & Mudgal (1985), Das & Kant (1988) and Das & Misra (1988) on medicinal plants revealing that the information discussed herein is either unknown or less known. The species are arranged alphabetically by their botanical names followed by families, local names, parts used, preparation of medicine and doses. All the voucher specimens are deposited at Central National Herbarium, Howrah (CAL).

The symptoms as told by the tribals on these diseases are as follows :

Piles : Swelling of the anal aperture sometimes blood comes out and person feels pain while passing stool.

Gouts : Pain in the joints with swelling in the joint or ankle and person cannot stand easily.

Hydrocele : When testicle swells with the accumulation of water.

Hysteria : Particularly among ladies when they do some abnormal activities due to non fulfilment of sexual desire.

Epilepsy : Person while talking or walking suddenly fell unconscious.

Waist Pain : Pain around the waist which may sometimes extend to the back.

Eczema : The portion of the skin becomes hard dark and rough with itching.

One-sided Headache : Half of the head pains.

Rheumatism : Pain in the joints and muscles.

Cataract : White spot on the iris so that person cannot see, usually developed in old age.

Chilblain : Painful cuts on the heels due to exposure to cold and water.

Madness : When the person behaves abnormally.

Convulsion : Thrilling of the body.

Whooping cough : Cough continues for a long period and could not be cured easily.

Swollen testicles : When the testicle swells due to injuries.

1. *Achyranthes aspera* L. (Amaranthaceae)
Apamarang or Upmarang.

About fifty-sixty fresh flowers are made into paste which is given orally with rice-washed water, in empty stomach, twice a day for piles till recovery.

2. *Alstonia scholaris* R.Br. (Apocynaceae)
Saptapani.

About 50 gm of stem bark with nine to ten "Peepli" (*Piper longum* L.) are made into powder which is equally divided into four doses. One dose prescribed daily in early morning for four days for gout. The massage of the warmed leaves extract is advised for speedy recovery.

3. *Borassus flabellifer* L. (Arecaceae)
Rollao-mara.

The hydrocele is treated by putting a piece of leaflet with nerve on the groin region of the hydrocele side. The tip of a rhizome of *Harud* (*Curcuma longa* L.) is burnt, in a fire made out of cow dung cake, is then placed all over the nerve of the leaflet placed in the groin. The process is repeated for a week.

4. *Borreria articularis* (L.f.) Will.
(Rubiaceae) *Adponi.*

The root, measuring equal to the size of middle finger, is pasted and prescribed twice a day orally along with raw goat milk. It is given for ten days in epilepsy and hysteria. The root must be collected on Sunday before sunrise.

5. *Calotropis gigantea* (L.) R.Br. ex Ait.
(Asclepiadaceae) *Zilleri, Arakhi.*

The fresh leaves of the plant of "Bhuin neem" [*Andrographis paniculata* (Burm.f.) Wall.] and rhizome of *Curcuma longa* L. in 3:2:1 ratio are made into paste which is externally applied on eczema.

The skin is punctured, with the help of a sharp needle, just above the ear towards the side of headache. When blood oozes out then a pinch of diluted latex is applied to cure one-sided headache.

6. *Cassia occidentalis* L. (Caesalpiniaceae)
Chakund.

The root paste is kept overnight and given orally in early morning along with the second urine of the opposite sex to cure epilepsy,

- 7. *Celastrus paniculatus* Willd.**
(Celastraceae) *Horumonia*.

Root along with that of *Satabari* (*Asparagus racemosus* Willd.) and *Litimara* (*Streblus asper* Lour.) in equal proportion are made into a paste. The warm paste is applied on rheumatic pain of joints and waist.

- 8. *Coccinia grandis* (L.) Voigt**
(Cucurbitaceae) *Banoturda, Mahakalaa*.

Slightly warmed root paste is applied on the testicle at bed time to cure hydrocele.

- 9. *Diplocyclos palmatus* (L.) Jeffrey**
(Cucurbitaceae) *Makal*.

The root is made into a paste along with cow's urine ; it is important that the urine must be collected before sunrise. The paste, thus, formed is slightly warmed and placed over the green leaf of *Ardi* (*Ricinus communis* L.) and is applied on waist to allay the pain.

- 10. *Dipteracanthus suffruticosus* (Roxb.) Voigt** (Acanthaceae) *Nila-garidi*.

Few pieces of roots are soaked in an earthen pot. One of the roots is rubbed on a stone along with water and about a table-spoonful of the paste is given in convulsion in the morning time only for ten days.

- 11. *Euphorbia hirta* L.** (Euphorbiaceae)
Akhi-uturuli.

The diluted fresh latex is applied, on the edge of the eyelid, in cataract.

- 12. *Grangea maderaspatana* (L.) Poir.**
(Asteraceae) *Pokesonga*.

Root, measuring twice the length of the little finger of the patient, is made into paste and it is given with hen's blood in early morning for four days in epilepsy. It is said that the root must be collected at dusk.

- 13. *Hemidesmus indicus* R. Br.**
(Periplocaceae) *Sudandhi, Sukanti*.

Root and stem bark of *Ficus religiosa* L. in ratio of 2:1 is powdered. The powder is boiled in water and the decoction is mixed with honey is given empty stomach, twice a day for a week in rheumatic pain. The root paste alone is externally rubbed on the body in allergic eruption.

- 14. *Ichnocarpus frutescens* R. Br.**
(Apocynaceae) *Baro sugandhi*.

Root paste mixed with bit of salt is given empty stomach. The root is put in ear of a epileptic patients to avoid the frequent attack.

- 15. *Ipomoea pes-caprae* Sw.**
(Convolvulaceae) *Aanari*.

The watery sap is spread over the fomented leaves which are put on waist during bed time in rheumatism.

- 16. *Ixora arborea* Roxb. ex Sm.** (Rubiaceae)
Banaa-kanya.

The dried stem bark powder is boiled in oil of *Sesamum orientale* L. It is applied daily before sunrise in eczema.

- 17. *Jasminum grandiflorum* L.** (Oleaceae).
Banaa-malli.

The root paste mixed with raw goat milk is applied on head before sunrise at bed time in one sided headache.

- 18. *Leea indica* Merrill** (Leeaceae)
Gorimanda.

The roots are made into a paste and placed on formented leaves of the plant which is applied locally for two-three days at bed time on swollen testicles. This application in some cases may result in some eruptions on testicles, which is cured by applying the paste of the root of *Hemidesmus indicus* R.Br. for one or two days.

19. *Pentanema indicum* (L.) Ling.(Asteraceae) *Banaalsi*.

The plant is burnt to ash which is then mixed with *Alsitel* [*Guizotia abyssinica* (L.) Cass]. oil to make an ointment. The ointment is locally applied in eczema below knee and in septic wound.

20. *Plumbago zeylanica* L. (Plumbaginaceae)*Lulpalsi*.

A tea-spoonful of the root powder along with honey is given thrice a day in waist pain. A table-spoonful of root decoction mixed with pinch of salt is also given twice a day in rheumatism. The latex is applied on the heel at bed time, in "Chilblain", the heel-cracks.

21. *Pothos scandens* L. (Araceae)*Surali-mara, Kashkari-mara*.

Slightly warmed root paste is applied, in early morning and at bed time, in rheumatism.

22. *Puraria tuberosa* DC. (Fabaceae).*Pordha-mara*.

Root of the northern side of the plant is collected on the day of solar eclipse which is made into paste. About a tea-spoonful of the paste is given thrice a day madness till recovery.

23. *Smilax ovalifloia* Roxb. (Liliaceae).*Chakara-bhodi*.

Leaves mixed with bark of *Ficus religiosa* L. in ratio of 3:1 is boiled in water and a tumbler full of decoction is given twice a day in rheumatism. The paste of the plant is tied in a piece of cloth then placed in cow dung cake's ash for some time. A tea-spoonful of the extract, obtained by pressing the poultice, is mixed with equal proportion of honey and powdered stem bark of *Ficus religiosa* L. The whole mixture is given thrice a day in whooping cough.

25. *Sphaeranthus indus* L. (Asteraceae)*Munduri*.

About one tea-spoonful powdered root is given with honey, thrice a day, in epilepsy. In piles the powder is taken along with lukewarm water twice a day till recovery.

26. *Strychnos nux-vomica* L. (Longiniaceae)*Koraa, Jutupadeasi*.

The dried seeds are kept in cow urine for seven days and the urine is changed every day. After seventh day 25-30 seeds are taken, washed, and made into a paste which is given early morning along with water in rheumatism.

27. *Tragia involucrata* L. (Euphorbiaceae)*Agni-kumari*.

The latex from the leaf is applied towards the back side of the ear in early morning before sunrise in one-sided headache that starts with the sunrise and ends with sunset.

28. *Trichosanthes cucumerina* L.-(Cucurbitaceae) *Kusum-mara*.

Stem bark of the plant and the root of the *Anklea* [*Alangium salvifolium* (L.f.) Wang.] in equal ratio are mixed with the soil from river or pond and whole mixture is boiled in water. The sediment left after boiling is applied on joints in gout.

29. *Vitex negundo* L. (Verbenaceae) *Neergundi*.

A full tumbler of leaf decoction is given twice a day in rheumatism.

30. *Xanthium strumarium* L. (Asteraceae)*Jhagadaa*.

Root mixed with that of *Cassia occidentalis* L. in 2:1 ratio is made into a paste. The paste, about a tea-spoonful, is mixed with pinch of salt and given twice daily along with water in epilepsy. The paste of the leaf and turmeric in equal proportion is applied externally in eczema. It is said that it gives mild burning sensation after application.

DISCUSSION

Thirty species of the flowering plants belonging to 30 genera and 22 families are employed in refractory diseases by tribal people of Koraput. It is evident that the efficacy of the family Asteraceae stands first in this respect. In a country like India where the death rate, particularly in rural areas, is much higher than the other developed countries, the tribal's faith in traditional system of treatment is high. Intensive studies. It may give new sources of plant material in refractory diseases where there is particularly no casual organism.

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