

PROPHYLACTIC USES OF SOME MEDICINAL PLANTS IN BASTAR DISTRICT OF MADHYA PRADESH

D.C. Sharma and Umesh Chandra

National Bureau of plant genetic resources, New Delhi – 110 012.

Received: 27 June, 1996

Accepted: 26 July, 1996

ABSTRACT: *The present ethnobotanical exploratory study embodies the folk medicinal uses of certain important medicinal plants by tribals of bastar district in Madhya Pradesh state of India. Twenty seven medicinal plants form diverse families have been covered being therapeutically used against different diseases such acidity, debility, diabetes, male and female weakness, fistula, migraine and skin diseases etc. How the tribal folks consider the mode of drug administration and application in different ailments has been elaborately emphasized.*

INTRODUCTION

The treasure of herbal know-how in terms of ethnomedicinal therapy is concentrated to aboriginal communities, for they are totally dependent on nature and its cure for their sustenance all round. That is why the tribals in different areas of the country have very astounding herbal formulations to cure acute and chronic human disorders.

Though explorations have been carried out to study the tribal usage of different herbs on different human diseases in different parts of the country including the aborigines of Madhya Pradesh particularly Bastar area (1-5), still much ethnomedicinal information can be collected from the tribals of this area.

Description of climate and area surveyed

The present exploration was conducted in the area of Bastar (M.P) to collect more information on ethno-medico-botanical perspectives from the tribals of this area. The area is densely populated by different tribes such as Muria, Maria, Gond and Dhruvas. Hill, small valleys and plateaus constitute the prominent topographical

details of the land surface with latitudinal and longitudinal measures around 17° 45'-20°30'N and 80° 15'-82° 15'E. Bastar is surrounded southwards by Andhra Pradesh state and westwards and eastwards by the respective Maharashtra and Orissa state. Northwards, the area is surrounded by the districts of M.P viz, Rajnandgaon; Durg and Raipur.

Since the area is nearer to the tropic of Cancer, the climate of the region is warm and humid with annual rainfall of approximately 152 cms. The plant cover mainly forest tree species includes *Anogeissus latifolia* Wall., *Bambusa arundinacea* Willd., *Boswellia serrata* Roxb., *Diospyros melanoxylon* Roxb., *Hardwickia binata* Roxb., *Hardwickia binata* Roxb., *Holarrhena antidysenterica* (L) Wall., *Pterocarpus marsupium* Roxb etc. The area offers an excellent opportunity to explore tribals' knowledge of plants used in different ailments.

METHOD

During exploration to this area., to collect the related information, the methods described by Jain⁽²⁾ was adopted, comprised of detailed interviews with tribals and witness to the uses of plant y tribals in t villages. The information collected was analysed and documented ^(6and7). Apart from technician standpoint, personal tactics were used to let tribals reveal their conserved information as much as possible regarding treatments of various diseases through herbs. The use of their certain words and expression during interview may be helpful taking hem n belief and continuing the dialogue. Interviewer should be neutral while discussing with group or groups to avoid any conflict and the process of interview should be informal so that the person being interviewed may not feel so any middle man may also be helpful while discussing. During exploration in forest areas, assistance of local informants was sought and also they helped in identification of plants and their uses in diseases.

RESULTS

The enumerations have been given here alphabetically, botanical name of the plant is associated by the authority and family in the bracket, then vernacular or local names(s), followed by ethnomedicinal significance of plants.

Acacia Arabica Willd. (Mimosaceae)
Motichoor – Two drops of decoction of ground leaves are used, till the condition is alleviated, in the treatment of migraine permanently; drops should be used in the nostrils.

Adhatoda vasica Ness. (Acanthaceae)
Adusa- It is highly useful to cure cough problems. The recipe is as follows- Extract juice of one kg. leaves of the plant and boil, it will look like opium, now take one gm of

this preparation with honey for three consecutive days.

Allium sativum Linn. (Liliaceae) Lahsun – Pell off the bulb and boil the cloves in mustard oil, cool down, t preparation thus obtained is used as ear drops to relieve ear pain.

Bacopa monnieri (Linn) Pennell. (Scrophulariaceae) Brahmi – Ten tender leaves of plants pulus ten seeds of *Piper longum* together with one almond are ground in water and sugar. This recipe should be taken for 21 days, it is a very good nervine tonic.

Boerhavia diffusa Linn. (Nyctagin-aceae)
Punarnava- The plant locally known as ‘Patharchata’ is used as an effective remedy of jaundice. The paste of root is made and approximately 3 gms. As a single dose is orally administered daily the disease is cured in a week.

Cassia tora linn. (Caesalpiaceae)
Chakunda – Tribes call it as ‘Charota’ or “Chekour”. The leaves of the plant together with the seeds of *Vigna radiate* are used to cure skin diseases and even ulcerous sores when paste of the above is made and applied locally.

Celastrus paniculata willd. (Celastraceae)
Malkangni – Oil from the ripe fruits is obtained and quantity equal to two drops of its is taken with batasha (aspherical spongy but crisp sugarcake), the sinus problem is remedied when the formulation is used for a week.

Costus speciosus (Koen) Sm (Zingiberaceae) Keoo – Rhizome paste of the plant is prepared and used locally to relieve snake bite. In mitigating acute

acidity, the paste of rhizome, tamarind (tender fruits) and jaggery are taken orally.

Dalbergia sissoo Roxb ex DC. (Fabaceae) Sissom – Ten leaves of the plant with ten seeds of black pepper and ten dried grapes (Big raisin) comprise one dose should be taken for 21 days continuously to cure acute diabetes.

Desmodium gangeticum (Linn.) DC. (Fabaceae) salparni- this plant is used as contraceptive by the tribals. The whole plant in young stage is dried and powder is made, the therapy is only for three days to a woman during menstruation. After prescribed drug administration, woman will not produce child in future.

Dioscorea triphylla Lin. (Dioscoreaceae) Kadukanda – The rhizome of the plant along with sandal wood after making paste are used on blotch.

Diospyros malabarica (Desr.) Kostel. (Ebenaceae) Mankad Kendu – Acute fistula is cured by seating the patient in a tub containing decocted water of one kg. leaves of the plant. This exercise with fresh preparations is repeated for three consecutive days. The problem is completely mitigated.

Erythrina indica Lamk. (Fabaceae) Rakta madar – The leaf juice is useful in alleviating earache and when paste made from leaves is applied externally it is useful in relieving joint pain.

Garuga pinnata Roxb. (Burseraceae) Ghogar – The juice of the plant is used to treat asthmatic problems.

Gloriosa superba Linn. (Liliaceae) Kalihari – the tribes have a good treatment of leucodermic spots, The prescription is as

follows – Grind the roots to paste and apply on the affected spot for three days, watery secretion oozes out, clean the spot with spirit, then the spot should be covered with bandages of dried tender leaves of *Butea frondosa*, on second or third day again clean the spot with the help of spirit and apply Burnol. The spots will be cleared and normal skin is developed.

Gymnema sylvestre (Retz) R. Br. (Asclepiadaceae) Gurmar – five gms. Leaves of the plant and equal quantity of stones of *Eugenia jambolana* (Jamun) together with the same quantity of *Cyamopsis tetragonoloba* (guar) seeds are ground. This preparation constitutes three doses. To cure diabetes all the three doses should be consumed.

The powder of leaf is stimulant, activates uterus and increases secretion of urine.

Imperata cylindrical (L.) Beauv. (Poaceae) – The paste of the plant roots is used locally for the treatments of piles.

Lagenaria siceraria (Mol.) Standl. (Cucurbitaceae) Kashiphal- Bitter fruit pulp when given for three days at the dose of three gms. Daily, jaundice may be cured.

Mimusops elengi Linn (Sapotaceae) Bark – The plant locally known as “Maulshri”. The tribals use this plant in curing different ailments, the different formulations corresponding to their diseases are as follows-

Against *pyorrhea* – Bark of the plant + aerial roots of palmyra palm + chankia suhaga (borax) + one fruit of jaiphal (*Myristica fragrans*) + one gm. Javitri + one gm camphor + 2gms. Tobacco, all these ingredients are ground and mixed with mustard oil. The formulation if used

continuously for a fortnight, the disease is cured forever.

Against *Constipation* – to alleviate constipation, seed paste of the plant is used.

Against *Headache* – powdered flowers are snuffed to cure the ache.

Bark and fruits of the plants are used to correct the problems of diarrhoea and dysentery.

Momordica dioica Roxb. Ex. Willd. (Cucurbitaceae) Jangli Karela- The so called 'Kheksi rhizome' (tap root) are ground and the powder thus obtained is made in the form of pills. One pill per day is the dose if taken daily till the permanent cure of diabetes is attained.

Ruta graveolens Linn. (Rutaceae) sadab – Tribals use this plant variously herb juice in ear as a remedy to ear ache; the juice is applied locally to alleviate rheumatism of joints and when the juice is mixed with the juice of *Allium cepa*, the preparation is taken orally to stop vomiting.

Scilla indica (Wt) Baker Non Roxb (Liliaceae) safed khus – In local and tribals 'language, it is known as 'Jangli piyaz' and 'Bailagondali'. The bulbs of the plant are used as cardiac stimulant and diuretic.

Terminalia arjuna (Roxb.ex DC) W.& A. (Combretaceae) Arjun – A piece of bark of the plant around two square inches is soaked in a glass of water overnight, then in the morning the water is taken orally. This prophylaxis should be continued for a week, it is a good treatment of discomposure and vexing.

Vitex negundo Linn. (Verbenaceae) Nirgundi – This plant for tribals is useful to

remove acute weakness. They prepare powder after grinding leaves, flowers and fruits together and use this preparation for a fortnight, usually the dose is one to two gms.

Vitex peduncularis Wall. Ex Schauer (verbenaceae) – Charaigorwa – Locally this plant is known as 'nagbail' and used to cure any kind of fever and chest pain.

- Half cup of decoction alleviates fever.
- Bark paste made with water is applied on the chest to cure pain.

Withania somnifera (Linn.) Dunal. (Solanaceae) Aśgandh – Roots of the plant are ground with sugar and cow milk, the composition is made in such a way that the pills may be made. Two to three pills should be taken by both man and woman daily, they can produce child.

DISCUSSION

The enumerations derived above from the folklore of the area studied are not last, a treasure of ethnomedicinal uses of plants can be explored from these tribal areas, considering previous studies and the present exploration indicate that such kind of ethno-medico-botanical studies may be highly useful to human race in fighting diseases with cheap and best, and non-side effect remedies. It is only the disclosure of tribal knowledge and uses of plants studied during exploration but not a medical prescription regarding ailments mentioned, however, it can serve as a best tool to replenish the present day sophisticated medical care through synthetic drugs, also can provide an impetus to boost up research in formulating better conventional medicines.

Much curative remedies can be explored from several aborigines of the country. Since Madhya Pradesh has high frequency

of tribal population, it may serve as a focal point to revolutionise the herbal prophylactic remedies.

It has also been noticed during this study that the tribals particularly the medicine man do not easily reveal the secrets of disease treatment and use of plants. They speak these secrets to only that candidate who is very close to him and even at the last time of his life. Thus, to get such kind of information, an explorer needs to have more patience and should use tactics to win confidence so that

he may start talking freely to reveal ethnomedicinal concepts, and also it will be helpful in avoiding aggravation of tribals.

Lastly, from this study it can be understood that the ethno-medico-botanical reserves in the forests of M.P. and other areas of the country should be conserved that will also ultimately promote the policy of Govt. of India regarding the conservation of ethnic tribes in the country. Thus, the in-situ biodiversity conservation measures may be achieved spontaneously.

REFERENCE:

1. Jain, S.K. Studies in Indian Ethnobotany – less known uses of fifty common plants from tribal areas of Madhya Pradesh. *Bull Bot Surv, India*, 5: 225-236 (1963).
2. Jain, S.K. wild food plants of tribals of Bastar (Madhya Pradesh). *Proc Natl. Inst Sci.*, 30 B: 5-80 (1964).
3. Jain, S.K., On the prospect of some new and less known medicinal plants resources. *Indian Med. J.*, 59: 270 – 272 (1965).
4. Roy, G.P. and Chaturvedi, K.K., Less known medicinal uses of rare and endangered plants of Abujh Marh reserve area of Bastar (Madhya Pradesh) *J. Econ. Tax Bot.*, 9: 325-328 (1987).
5. Chandra Umesh and Mehra, K.L., Ethnobotany of Abujh Marh: Medicinal plants used by Abujmarh in India, *Asian conf. Trad. Asian Med (Abstract)* 53 (1983).
6. Chopra, R.N., Nayar, S.L., and Chopra, I.C., *Glossary of Indian medicinal plants*. Publications and Information Directorate (CSIR), Hill side road, New Delhi India (1956).
7. Anonymous, *The Wealth of India-Raw Materials series (Vol. I to XI, A-)* Publications and Information Directorate (CSIR), Hillside Road, New Delhi, India (1946-1976).

AMSAR PRIVATE LIMITED (ESTD. 1963)
BOMBAY, INDORE, MADRAS, DELHI, CALCUTTA, U.S.A CANADA,
STANDARDISED EXTRACTS/CONCENTRATS RESEARCH & DEVELOPMENT

Manufacturers of:

Standardized Extracts/concentrates of over 300

Indian Medicinal Plants.

Ayurvedic personal care products

Ayurvedic medicines.

Services provided:

Product Development for Ayurvedic formulators

Analysis of Ingredients

Technical support (Documentation etc.,)

Resources:

Fully dedicated In-House Quality control Lab

(IFDA Approved) With HPLC / Spectrophotometer/ TLC /LCC etc.,)

Technology, Gov. of India approved with HPLC/spectrophotometers)

In-House library on Medicinal Plants/ Chemistry/Trade

RECIET "NATIONAL AWARD FOR EXCELLENCE IN AURVEDA (EXTRACTS)"

Factory : 47 Laxmibainager, Indl. Estate, Fort, Indore

Telephone : 91-731 -410299,420824, Fax: 91-731-411652

Office (H.O) : 2, Hormuz Mansion, 72, Bhulabhai Desai Road, Bombay – 26.

Telephone : 91-22-3632348 Fax: 91-22-3672778