

UTILIZATION OF MEDICINAL PLANTS BY THE GOUND AND BHARIA TRIBES OF SATPURA REGION CHHINDWARA DISTRICT MADHYA PRADESH, INDIA : A CASE STUDY

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ABSTRACT: The use of various parts of several plants drugs as indigenous medicine to cure specific ailments has been in vogue from ancient times. We have rich heritage of knowledge about medicinal plants with rural and tribals gathered through experience of generations in the form of folk medicine. But in the last few decades, there is an unprecedented depletion of biodiversity, its habitat and knowledge world over. This raised a global concern, as these three factors have been fundamental natural resources for human development. So far, the full potential of the folklore knowledge has not been scientifically explored. Such medicinal plants have become rare, endangered or threatened.

KEYWORDS: Utilization plant; Satpura region; Chhindwara district; Madhya - Pradesh.

INTRODUCTION

The Satpura Range is a range of hills in central India. The range rises in eastern Gujarat state near the Arabian Sea coast, running east through Maharashtra and Madhya Pradesh to Chhattisgarh. The range parallels the Vindhya Range to the north, and these two east-west ranges divided the Indo -Gangetic plain of northern India and Pakistan from the Deccan Plateau to the south. The Narmada River runs in the depression between the Satpura and draining the northern slope of the Satpura range and running west towards the Arabian Sea. The Tapi River drains the Southern slopes of the western end of the Satpura Range. The Godavari River and its tributaries drain the Deccan plateau, which lies south of the central and eastern portion of the range and the Mahanadi River drain the easternmost portion of the range. The Godavari and Mahanadi river flow into Bay of Bengal, at its eastern end, the Satpura range meets the hills of the Chota Nagpur Plateau.

Chhindwara District located on the South-West region of 'Satpura Range of Mountains'. It spreads from 21⁰28' to 22⁰49' Deg. North (longitude) and 78⁰10' to 79⁰28' Deg. East (latitude) and spread over an area of 11,815 Sq. Km. This district is bounded by the plains of Nagpur District (in Maharashtra State) on the South, Hoshangabad and Narsinghpur District on the North, Betul District on West and Seoni District on the East.

MATERIAL AND METHODS

Present work is based on the result of six month intensive survey, collection, and study of flowering plants of Chhindwara District; Satpura region of Madhya Pradesh.

- The field work has been conducted following the suggestion of Santapau (1955).
- The field trips were arranged 4-6 times in a month, in such a way so as to cover all parts of the areas and to collect all the possible plants in flowering and fruiting stages.
- All the collected specimens were serially numbered and kept in polythene bags.
- Field observations were recorded in note book. Local name were also noted.
- As far as possible specimens were collected on a clear dry day and were studied and examined as early as possible at the end of the day of collection.
- Whole plants were collected in case of herbs, however, for shrubs and trees, small piece of twig with leaves, flowers were taken for the preparation of herbarium specimens.
- Too much pressure on specimens should be avoided, the branches, leaves, flower and fruits were properly spread up in such a manner that the plant may look as natural and as possible.
- All the dried specimens were identified and stored with saturated solution of mercuric chloride in rectified spirit.
- The poisoned specimens were mounted by favicol on the standard sized of herbarium sheets (42 x 28cm).
- Labels were affixed at the lower left hand corner of the sheets indicating all detailed information of the specimens, noted on the field diary during field visit.
- All the specimens were critically examined. Dissection of floral parts were made and identification easier.
- Further, the identified specimens have been confirmed by comparing them with authentic specimens, earlier deposited in the herbarium of Botany department. Government Science College Sausar, District Chhindwara Madhya Pradesh.

Enumeration of Plants of Plant Species:

01. *Aegle marmelos* (L) Corr.(Rutaceae) Bel

Cholera :Fruit Flesh of fresh fruit is taken along with sugar.

Dysentery : One spoon of powder is taken with one tea spoon of honey,

Vomiting: Leaves Tender leaves are crushed and 5 ml of expressed juice is taken thrice daily for 3 days.

02. *Andrographis paniculata*(Burm.f.) Wall. ex Ness. (Acanthaceae) Chiryata

Diabetes: Whole plant A decoction of fresh plant parts is prepared, 10 ml of which is taken thrice daily for 41 days.

Respiratory disorders: Whole palnt A decoction is prepared form fresh plant parts, 15 ml of which is taken twice daily for 7 days.

03. *Asparagus racemosus* Willd. (Liliaceae) (A-03) Satavar

Haematuria: Tuber Fresh tubers are crushed and taken along with milk.

Leucorrhoea: Tuber Fresh tubers are crushed and made into the form of porridge, which is taken daily in the morning.

04. *Azadirachta indica* A. Juss. (Meliaceae)

Diabetes: Leaves 10 fresh leaves are chewed along with peeper. Fever Leaves A decoction is prepared from fresh leaves, 10 ml of which is administered twice daily for 3 days.

Piles: Seed Seeds are ground and made into a paste, which is taken along with one tea spoonful of sugar.

05. *Boerhavia diffusa* L. (Nyctaginaceae) Punarnava

Urinary complaints: Whole plant Fresh leaves are boiled in water and the resultant extract taken orally.

Jaundice: Root A decoction is prepared, 10 ml of which is taken thrice daily for

06. *Centella asiatica* (L.) Urban (Apiaceae) Bramhi

Diabetes: Whole plant 5 ml of expressed juice is taken daily once for 21 days.

Toothache: Leaves Leaves are dried, powdered and the powder is used for brushing of teeth.

07. *Cynodon dactylon* (L.) Pers. (Poaceae) Doob

Fever: Whole plant Juice from the whole plant is mixed with double the quantity of water and taken thrice a day for three day's

Pregnancy: Whole plant Juice (6 tea spoon full) of the whole plant is taken orally along with 1 glass cow's milk at bed time

08. *Datura Stramonium* L. (Solanaceae) Dhatura

Asthma: Leaves Inhaling of dried powder of leaves and flowers frequently.

09. *Mimosa pudica* L. (Mimosaceae) Lajvanti

Cuts and Wounds Tender : A fistful of fresh tender leaves is crushed and juice so obtained is applied externally over the wound twice daily till the wound heals.

10. *Rouvolfia serpentine* (L.) Benth. ex Kurz (Apocynaceae) Sarpgandha

Snake bite: Root Fresh roots ground and applied on the affected area.

RESULTS AND DISCUSSION

Total 10 number of species of plants from 10 families were recorded which are used medically by the rural and tribal's of Satpura region Chhindwara District . Among these 10 species of herbs, it was observed that modern systems of the medicine for their ailments. People who extensively and solely use these plants as medicine, found it to be effective without side effects. The present study revealed that the folk medicine is a very important aspect of medical anthropology and is rightly attracting. Though the modern medicine system has made more spectacular strides during the last century, yet many people still follow native or indigenous system of medicine. The indigenous or folk medicine still remain alive as precious to the medicinal needs of the third world and herbal medicinal continue to cater to the medicinal needs of the third words countries, as it is considered to be almost free side effects and cost effective.

Considerable work has been done various ailments by Satpura region and Chhindwara District of Madhya Pradesh Sudip Ray and Jeetendra Sainkhediya (2014); Pankaj K. Sahu and Sharmistha Gupta (2014); Mona Dwivedi and Anita Sakalle (2014); Mujaffar S., Shukla S.K., and Mishra S., (2013); Nath Vijendra and Khatri Pavan Kumar (2010); Sharma, Vikas, Diwan, R.K., Saxena, R.C. and Shrivastava, P.N.(2010); Sharma Vikas, Rao, Sudhakar V, Diwan, R.K. Saxena, R.C. and Shrivastava, D.N. (2010); Rai M.K., Pandey A.K. and Deepak Achrya (2000); Pandey A.K. and Shukla P.K. (2008); Pandey A.K., Patra A.K. and Shukla P.K. (2005); Rai R, Nath V (2005); Rai R, Nath V, Shukla PK (2002); Mukta Shrivastava (1994); Rai MK, Nonhare BP (1992); Rai MK (1987); Rai MK (1987a).; Rai MK, Acharya D, Nordenstam B (1999). Rai MK, Ojha GC (1989); Rai R, Nath V, Shukla PK (2002); Ram P, Pandey RK, Bhattacharya P (1990); Saxena HO, Shukla CS (1971); Rai M.K, Ojha G.C (1989).

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REFERENCES:

1. **Omkar Bawistale, T. R. Sahu, Pankaj Sahu and Brajesh Sahu (2007)** "Check list of medicinal flora of Patalkot, District Chhindwara Madhya Pradesh" Life Science Bulletin 4(1&2) 2007(53-56).
2. **Omkar Bawistale, Brajesh Sahu and Pankaj Sahu (2010)** "Some plant in folk medicine of Chhindwara District Madhya Pradesh." Annals of Pharmacy and Pharmaceutical Sciences. Vol. 1. 106 – 108.
3. **Omkar Bawistale, T. R. Sahu, Pankaj Sahu and Brajesh Sahu (2010)** "Medicinal importance of grasses of Chhindwara District Madhya Pradesh." International Journal of Plant Science Vol.5 696-997.
4. **Omkar Bawistale, T. R. Sahu (2012)** "Medicinal plant from Silewani area, Th. Sausar District Chhindwara Madhya Pradesh". International Journal of Plant Science Vol. 7 (1) :190 – 192.
5. **Omkar Bawistale, Dev Nandinin Sonekar, Pankaj Sahu, T. R. Sahu & V.K. Dua (2015)** "The family Caryophyllaceae of Chhindwara District Madhya Pradesh". Journal of Contemporary Science National conference 2nd – 3 Jan. 2015. Page no.: 26-27.
6. **Omkar Bawistale, Pankaj Sahu, T. R. Sahu, Dev Nandini Sonekar & V.K. Dua (2015)** "Plant used women religious ceremony of Chhindwara District Madhya Pradesh". Journal of Contemporary Science National conference 2nd – 3 Jan. 2015. Page no.: 17-19.
7. **Sudip Ray and Jeetendra Sainkhediya (2014)** "Some New Record for the flora of Madhya Pradesh" Bioscience Discovery, 5(2):187-192, July – 2014
8. **Pankaj K. Sahu and Sharmistha Gupta (2014)** "Medicinal plant of morning glory: Convolvaceae Juss. of Central India" Biolife Vol. 2 Issue 2 463-469.
9. **Ramesh Kumar Ahirwar (2014)** Utilization of medicinal Plants by the Tribes of Bhatiya, District Shahdol, Madhya Pradesh Volume 3 Issue 9, Sept. 149-151.
10. **Mona Dwivedi and Anita Sakalle (2014)** "Socio economic plant of Patalkot, Chhindwara District" Madhya Pradesh Int. Journal of Current Res. and Academic Res. Vo. 2 Aug. 2014 pp 202-204
11. **Laxman J. Landge and Ajit T. Kalse (2014)** "Indigenous herbal medicine used by tribal people in Satpura Mountain" Int. Sci. Journal Vol. 1. Issue: 1 pp 65-69.
12. **Mujaffar S., Shukla S.K., and Mishra S., (2013).** "Some Angiospermic plants new to central India." Sci. Res. Rept., 3 (2):102-105.
13. **S. Mujaffar, S K Shukla and Shakun Mishra (2013)** "Some Angiospermic Plants New to Central India" Science Research Reporter, 3(2): 102-105.
14. **Mujaffar S. (2012).** "Study on Flora of East Nimar Region, Madhya Pradesh" Life Science Bulletin., 9(1):187-190.
15. **Vipin Soni, Anil Prakash and Manisha Nema (2012).** "Study on ethno-medico-botany of some plants of Dindori district of Madhya Pradesh, India" Int. J. of Pharm. & Life Sci. (IJPLS), Vol. 3, Issue 8: August: 2012, 1926-1929