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# Studies on traditional herbal economic product used by tribal of Singrauli district of Madhya Pradesh

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**Abstract**
In the present paper 16 Commerce and cottage industry based plants species consumed by the tribals. All 16 plant species are enumerated with their botanical names, common names, family, parts used and economic product in the study area. Toothache is often alleviated by placing a small piece of onion (*Allium cepa*) on the affected tooth or gum. Likewise, chewing raw onion for 10 minutes is sufficient to kill the germs. Leaves paste of akarkara mixed with equal amount of root paste of madar and filled in cavity. It is an excellent herbal carries filler.
The tribal and rural people can achieved the economic prosperity and better standard of life by minor forest products. A number of economic products such as gum, basketry, cordage, perfume, broom, tannin, tea, fruits, seeds, oil, alcohol, plate, mat and bidi have been obtained, prepared and extracted by the native's of the study area. They sell these products in nearby village market and get the additional income. Moreover, they also utilized these products in their day-to-day needs. However, forest depletion has been rapid and the direct demand on forest has been mounting.

**Keywords:** herbal, traditional herbal, economic product, tribals, Singurali district

## Introduction
Herbs have been used by all cultures throughout the history. It was an integral part of the development of modern civilization. Primitive man observed and appreciated the great diversity of herbs available to him. The herbs provide food, clothing, shelter and medicine. Much of the uses of plants seem to have been developed through observations of primitive men by trial and error. As time went on, each tribe added the magic power of herbs in their area to its knowledge base. They methodically collected information on herbs and developed well-defined herbal knowledge.
Ayurveda, Siddha, Unani and Folk medicines are the major systems of indigenous medicines. Among these systems, Ayurveda is most developed and widely practised in India. Ayurveda dating back to 1500-800 BC and has been an integral part of Indian culture. The term comes from the Sanskrit root *Au* (life) and *Veda* (knowledge). As the name implies it is not only the science of treatment of the ill but covers the whole gamut of happy human life involving the physical, metaphysical and the spiritual aspects. Ayurveda recognizes that besides a balance of body elements one has to have an enlightened state of consciousness, sense organs and mind if one has to be perfectly healthy. Ayurveda by and large is an experience with nature and unlike in Western medicine, many of the concepts elude scientific explanation. Ayurveda is gaining prominence as the natural system of health care allover the world. Today this system of medicine is being practised in countries like Nepal, Bhutan, Sri Lanka, Bangladesh and Pakistan, while the traditional system of medicine in the other countries like Tibet, Mongolia and Thailand appear to be derived from Ayurveda. Phytomedicines are also being used increasingly in Western Europe. Recently the US Government has established the "Office of Alternative Medicine" at the National Institute of Health at Bethesda and its support to alternative medicine includes basic and applied research in traditional systems of medicines such as Chinese, Ayurvedic, etc. with a view to assess the possible integration of effective treatments with modern medicines. The development of systematic pharmacopoeias dates back to 3000 BC, when the Chinese were already using valuable herbs for the treatment of various diseases. China has demonstrated the best use of traditional medicine in providing the health care. China has pharmacologically validated and improved many traditional herbal medicines and eventually integrated them in formal health care system.
Green plants synthesize and preserve a variety of biochemical products, many of which are extractable and used as chemical feed stocks or as raw material for various scientific investigations. Many secondary metabolites of plant are commercially important and find use in a number of pharmaceutical compounds. However, a sustained supply of the source material often becomes difficult due to the factors like environmental changes, cultural practices, diverse geographical distribution, labour cost, and selection of the superior plant stock and over exploitation by pharmaceutical industry.
It is obvious from the foregoing account that several workers have paid attention on medical practices of primitive men, tribes and other folk healers of India and abroad, none have directed their attention towards the present work except some published report by (Dwivedi and Pandey, 1992; Abdurrahman, 2006; Akerele, 1987; Borins, 1987; Dwivedi, 1999, 2003, 2004, 2009; Dwivedi *et al.* 2012; Haile *et al.* 2008; Maclachlan *et al.* 1967 and Vidyasagar and Prashantkumar, 2007) [1-12]. Therefore, the present work was conceived.

**Study Area**

On 24 May 2008, Madhya Pradesh government declared Singrauli as its 50th district by separating from Sidhi with 3 tehsils, Singrauli, Chitrangi and Deosar. On 1 April 2012 two new tehsils were added, Mada and Sarai. This area has group of rock cut caves made in the 7-8th century AD in Mada, 32 km from Waidhan. The Mada caves are situated in Mada tehsil of Singrauli district. Famous caves include Vivah Mada, Ganesh Mada and Shankar Mada, Jaljalia and Ravan Mada. Besides rock cut caves, Singrauli also has pPainted rock shelters. Ranimachi, Dholagiri and Goura pahad lie in Chitrangi tehsil of Singrauli. These painted rock shelters belong to the Mesolithic age of microlithic implements culture. These paintings are representative of the early history of Indian art and are made of red ochre.

Out of the total Singrauli population for 2011 census, 19.25 percent lives in urban regions of district. In total 226,786 people lives in urban areas of which males are 120,313 and females are 106,473. Sex ratio in urban region of Singrauli district is 885 as per 2011 census data. Similarly child sex ratio in Singrauli district was 899 in 2011 census. Child population (0-6) in urban region was 30,804, of which males and females were 16,219 and 14,585. This child population figure of Singrauli district is 13.48% of the total urban population. Average literacy rate in Singrauli district as per census 2011 is 75.51% of which males and females are 83.97% and 65.93% literates respectively. In actual number 147,990 people are literate in urban region of which males and females are 87,408 and 60,582 respectively.

**Faith and Religion**

The tribals of Singrauli district are very religious and have deep faith on God and Goddess. They worship a number of devatas, viz., Lord Vishnu, Shiva, Hanuman etc. They treated some plants, e.g., neem, peepal, bargad, shami, tulsi and amala as their parents. They are apart from modern concept of diseases. Many of them believe that ailments caused due to evil sprits. They believe that the ancestor sprits are superior and protect from evil sprits and diseases. Mostly they have embraced the Hindu faith. However, they have also faith on danawa, daitya, bhuta, preta, jadu-tona etc.

**Social Environment**

The families are mostly matrilineal. The girls leave parental home after marriage and lives in husbands house. The family fulfils the biological, economic and the function of transmitting social heritage. The male child is welcome in the family. The peoples worshiped many devatas and trees and also participate in fest and festivals, with great joys. There is physiological division of labour in the family. In this community food gathering, farming, construction and repairs of houses are done by males while females actively engaged in kitchen and domestic work. However, in some cases both do agricultural operations.

**Materials and Methods**

Systemic field trips of the study sites were made during the August 2010 to December 2012**.** The entire region was covered and five places in each tehsils were touched. Data regarding to herbal heritage were collected as per plan suggested by Womersely (1981) [13], Miguel (1998) [14] and Parabia and Reddy (2002) [15].

During fieldwork personal observations regarding to uses of plants were noted in the field book, including herbal treatment and their mode of administration, dose, and duration, obtained by the tribals. Reports of the interpreters, guides, medicine men and other knowledgeable people were also recorded. The herbs used by the tribals were collected and numbered. Their habit, habitat, botanical features and uses were entered in the field book on the spot. On return, the specimens were kept in the field press as per technique devised by Agrawal (1983) [16] and Jain and Rao (1978) [17]. The voucher specimens and their parts collected from different study sites were shown to other people in the village market and other common places and more information were sought. It has been observed that the inhabitants used more herbs, but plants not personally observed and collected are not included. However, the plants used by them in their daily life and also used in the treatment of various ailments, have been included in this work.

**Results and Discussion**

The exact amounts of following herbs are taken and make the fine powder by grinding them together with black salt. This herbal powder is used as tooth powder. The tribal and rural people often used the soft twigs of some plants viz., babol, neem, nirgundi, chirchri, jamun, amrood etc., as toothbrush. Twigs crushed at end and used for rubbing teeth and gum, a common practice in rural India. They avoided marketed and branded toothbrush and tooth powder. The herbal tooth powder is very useful in care of gum, teeth and dental ailments.

**Table 1**

| Botanical Name | Common Name | Part used | Amount (gm) |
|---|---|---|---|
| *Acacia arabica* Auct. | Babool | Bark | 100 |
| *Acorus calamus* L. | Bach | Rhizome | 50 |
| *Azadirachta indica* A. Juss. | Neem | Leaf | 50 |
| *Nicotiana tabacum* L | Tambakhu | Leaf | 15 |
| *Ocimum sanctum* L. | Tulsi | Leaf | 15 |
| *Spilanthes calva* DC. | Akarkara | Whole plant | 50 |
| *Tephrosia purpurea* Pers. | Bajradanti | Root | 50 |

The tribal and rural people mostly utilize the herbs as available in their locality. Seldom they purchased some herbs from the local traders. Trade and commercial value of the species reveals the financial resources.

Commerce and small-scale cottage industries are based on plants and minor forest products. Balance exploitation of these can help the tribal and rural people to achieve economic prosperity and consequentially a better standard of life. However, forest depletion has been rapid and the direct demand on forest has been mounting. Yet, the situation is not very bad, because the natives if left on their own to manage their affairs have an inbuilt system of balancing their needs and are of their environment and ecology. The inhabitants utilize a number of plants (Table 1) for commercial, economic and industrial purpose.

**Table 1:** Commerce and cottage industry based plants

| S. No | Botanical Name | Common Name | Family | Parts Used | Economic Product |
|---|---|---|---|---|---|
| 1. | *Acacia arabica* Auct. | Babool | Mimosaceae | Gum | Gum |
| 2. | *Bambusa arundinacea* Ait. | Bans | Poaceae | Stem | Basketry |
| 3. | *Bauhinia vahil* (W.&A.) | Kachnar | Caesalpiniaceae | Leaves | Plate making |
| 4. | *Buchanania lanzan* Spr. | Chirongi | Anacardiaceae | Seeds | Edible seeds |
| 5. | *Butea monosperma* Roxb. | Palas | Fabaceae | Leaves Shoot | Plate making Lac |
| 6. | *Crotalaria juncea* L. | Aprajita | Fabaceae | Shoot | Cordage |
| 7. | Cyprus pangorei L. | Sarpat | Cyperaceae | Leaves | Mat making |
| 8. | *Diospyros melanoxylon* Roxb. | Tendu | Ebenaceae | Leaves | Bidi making |
| 9. | *Guizotia abyssinica* (L.) Cass. | Ramtil | Asteraceae | Seeds | Oil extraction |
| 10. | *Madhuca longifolia* (Koen.) Mac Br. | Mahua | Sapotaceae | Flowers Seeds | Alcohol Oil |
| 11. | *Oryza sativa* L. | Dhan | Poaceae | Grains | Paddy/Rice |
| 12. | *Phoenix acaulis* L. | Khajur | Palmae | Leaves | Broom and Mat |
| 13. | *Sterculia urens* Roxb. | Kullu | Sterculiaceae | Gum | Gum |
| 14. | *Tamarindus indica* L. | Imli | Caesalpiniaceae | Fruits | Fruits |
| 15. | *Terminalia arjuna* W.&A. | Kahawa | Combertaceae | Bark | Tannin and Tea |
| 16. | *Vetiveria zizaniodes* (L.) Nash. | Khas | Poaceae | Roots Leaves | Perfume Broom |

There should be established the financial strategies for the purchase and selling of valuable herbs, so the suitable cost can be made. Medicinal plants and minor forest product based cottage industries in the tribal areas should be developed to uplift their social and financial status.

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**References**

1. Dwivedi SN, Pandey, Archana. Ethonbotanical studies on wild and indigenous species of Vindhyan plateau : I. Herbaceons Flora. J. Econ. Taxon Bot. (Addl. Ser.). 1992; 10:143-150.
2. Abdurrahman AA, Fajemiroye OJ, Oladele FA. Ethnobotanical study of economic trees: uses of trees as timber and fuel wood in Ilorian Emirate of Kwara state, Nigeria. Ethnobotanical Leaflets. 2006; 10:113-120.
3. Akerele O. Role of traditional medicine in health-care delivey system. Paper presented at the Ist Int Seminar on Unani Medicine, New Delhi. 1987, 13-15.
4. Borins M. Traditional Medicine of India. Canadian Family Physician. 1987, 33.
5. Dwivedi SN. Traditional health care among the tribals of Rewa district of Madhya Pradesh. J. Econ. Taxon. Bot. 1999; 23(2):315-320.
6. Dwivedi SN. Ethnobotanical studies and conservational studies on wild and natural resources of Rewa district of Madhya Pradesh. Ibid. 2003; 27(1):233-244.
7. Dwivedi SN. Herbal remedies among the tribals of Sidhi district of Madhya Pradesh.. Ibid. 2004; 28(3):675-687.
8. Dwivedi SN. Status and utilisation of medicinal plants in Shahdol district, Madhya Pradesh, India, Part 1. Nutra Cos (Milano-Italy). 2009; 8:28-31.
9. Dwivedi SN, Sangeeta Alava, Mishra RP. Phytochemistry, pharmacological studies and traditional benefits of Trachyospermum ammi (Linn.) Sprague. IJPLS. 2012; 3(5):1705-1709.
10. Haile Y, Ensurmu K, Tanarat B, Ermias L. Plants used as traditional management of human ailments at Bale Mountain National Park, Southeastern Ethiopia. J. Med. Planta Res. 2008; 2:132-153.
11. Maclachlan MJ, Rodnan GP. Effect of food, fast and alcohol on serum uric acid and acute attacks of gout. Amer. J. Med. 1967; 42:38.
12. Vidyasagar GM, Prashantkumar P. Traditional herbal remedies for gynaecological disorders in women of Bidar disrict, Karnataka, India. Fitoterapia. 2007; 78:48-51.
13. Womersely JS. Plant Collection and Herbarium Development – A Manual. FAO, Rome. 1981.
14. Miguel NA. Selected Guideline for Ethnobotanical Research: A Field Manual. Scientific Publisher, Jodhpur. 1980.
15. Parabia M, Reddy MN. Protocol for Ethnomedicinal studies in Ethnobotany. Avishkar Publishers, Jaipur. 2002.
16. Agrawal VS. Perspective in Botanical Museum with special reference of India. Today & Tomorrow, New Delhi. 1983.
17. Jain SK, Rao RR. A Hand Book of Field and Herbarium Methods. Today & Tomorrow, New Delhi. 1978.