REGULAR ARTICLE

TRADITIONAL MEDICOLORE IN BADWANI DISTRICT (M.P.) INDIA

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SUMMARY

The study concerns significant ethnobotanical information of 25 plant species belonging to 25 genera and 19 families traditionally used by the aborigines and rural folks of Badwani district, Of these 21 species are being noted for the first time from Indian region. Madhya Pradesh (India) to treat various human diseases such as, impotency, intestinal worms, fever, constipation, ring worms, eczema, hepatitis, menstrual complaints, urinary complaints, migraine stomach-ache, bone fracture, lactation, piles, night blindness, pregnancy and abortion, etc., This paper highlights traditional uses of plants used by the rural and tribal people. The district is inhabited with tribes viz., Gond, Baiga, Koraku, Bhariaya, Halba, Bhil, Kaul and Pawara. The population of the region is predominantly rural and tribal having considerable knowledge about ambient plant wealth and their traditional utility. The present work is an attempt to collect document and evaluate the ethnomedicinal claims in the areas under study.

Key words: Ethnomedicine, Badwani District, Madhya Pradesh

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1. Introduction

Badwani district lies between longitude 22°, 02¹ North, 74°, 54¹ East and 22°, 03¹ 74°,9². It is situated in Southwestern part of Madhya Pradesh. The Narmada river forms its northern boundary. The Satpuda range lies to its south. The district is bounded by Maharashtra state to its south to west, Dhar district to the north and Khargone district to the east. It consist of six tehesils, viz., Pansemal, Nilwali, Sendhwa, Badwani, Tikari and Raipur, According to census 2001 population is of the district is 73,222. Forest in the district are dry deciduous type. Apart rural populace, various tribal communities inhabit the district particularly Gond, Baiga, Koraku, Bhariaya, Halba, Bhil, Kaul and Pawara. They depend on the ambient plant wealth for their daily necessities of life.

2. Methodology

The ethnobotanical surveys in Badwani district are carried out since January 2009 as

an exclusive topic of research. Information has been collected from the repeated conversations with the tribal and rural people living in the district. Data is obtained w.r.t. botanical names, family, local names, specimen no., uses and method of applications etc., Asterisk to the plant indicate reports in classical literature. A special questionnaire was used to jot down the information during the field studies. Herbarium specimens have been prepared by using methods suggested by S.K. Jain (1977) and housed in the herbarium of Department of Botany, R. C. Patel Science College Shirpur. District Dhule. (M.S. India) The information collected has compared with the classical literature such as : i) Anonymous, ii) (1946-1976), iii) Ambasta, (1986), iv) Jain, (1991), v) Prajapati (2006), vi) Watt, (1889-1899), etc., so as to point out new or additional utilities from the district. The literature survey suggested that the region is untapped ethnobotanically and

hence the present authors are extending their efforts to collect treasure-trove of this area. Their indigenous knowledge will be helpful in suggesting new drugs or substitutes.

Enumerations

- *1 Acacia chundra Willd. (Mimosaceae) Khair (PSP 43):
 - A cup of decoction of dried bark is taken orally thrice a day to avoid pains during menstruation. It is advised for two days before menstrual period.
 - ii) A cup of decoction of roots and bark is taken orally twice a day for 15 days to cure bone fever.
 - iii) About two spoonful of leaf juice and fruit pulp (5 gm) are consumed daily for a week to kill intestinal worms.
 - 2 *Acanthospermum hispidum* DC. (Asteraceae) Gokharu: (PSP 53):
 - Equal amount of leaves, roots and seeds are powdered. Spoonful of powder is boiled in a cup of water. It is drunk twice a day to remove urinary stones.
 - ii) Extract of fruit and leaves (1:1) is mixed with lemon juice. 10-15 ml of it is taken orally twice a day to regulate urination.
 - *3 Aegle marmelos (L.)Corr. (Rutaceae) Bel (PSP 119):
 - Decoction of roots and boiled rice are used to prepare sweet-balls. They are consumed daily once against dysentery for 2-3 days.
 - 4 Argemone mexicana L. (Papavaraceae) Unhalyo, Piwala-dhotra(PSP 88):
 - Latex is homogenized with coconut oil.
 Paste is applied on the wounds of eczema. It is practiced until cure.
 - ii) Spoonful root powders taken orally once a day to delay menstrual period.
 - 5 Asparagus racemosus Willd. (Liliaceae) Chenglyo, Shatawari (PSP 63):
 - i) About 5 gm of root powder is kept in water for 10 minutes. A cup of it is taken orally twice a day to stop vomiting.

- ii) Spoonful decoction of roots is administered daily orally to reduce pains during urination. It is followed for 4-5 days.
- iii) Extract of root bark is obtained. Spoonful of sugar is mixed in a cup of It is administered daily to mother to increase milk.
- 6 Bauhnia racemosa Lamk. (Caesalpiniaceae) Astara, Apta (PSP 94):
- i) Boiled leaves are kept in leaf juice of *Azadiracta indica L*. for about 12 hr Leaves are applied on body to treat fever for 2-3 days.
- *7 Butea monosperma (Lamk.)Taub. (Fabaceae) Payas, Palas (PSP 33):
- i) Spoonful of bark powder is dissolved in a cup of water. It is taken orally

twice a day to ease constipation.

- 8 *Carica papaya* L. (Caricaceae) Andakakdo, Papai (PSP 49):
- Seeds are powdered. Spoonful of it is consumed along with the leaf of *Piper* betel L. to regulate menstruation. It is advised before two days of the said period.
- ii) Spoonful of latex consumed along with unripe fruit to avoid pregnancy or for abortion. It is advised for a week.
- 9 Caesalpinia bonduc (L.)Roxb. (Caesalpiniaceae) Awalya, Avhin (PSP 61):
- i) Young leaves and seed powder (3:1 ratio) are boiled with the fecal
- matter of a goat. Paste is prepared and. applied for 15 days to treat bone fracture.
- 10 *Curcuma amada* Roxb. (Zingiberaceae) Haldo (PSP 67):
- i) Spoonful of rhizome powder is drunk with a glass of milk .Paste is prepared from spoonful of rhizome powder and oil of *Semecarpus ancadium* L. f. Paste is applied on joints to treat joint ache till cure.
- 11 Ficus religiosa L. (Moraceae) Pipo, Pimpal (PSP 69):
- i) Stem bark is powdered. Spoonful powder is kept in a cup of water for 12 hr. It is administered in early morning to treat hepatitis till cure.

- ii) Young twigs are used as a tooth-brush to treat tooth-ache. It is so advised for a fortnight.
- 12 Gossypium hirsutum L. (Malvaceae) Kapso, Rui, Kapus (PSP 117):
- Roots are dipped in water for one hr. Infusion is obtained. About half glass of it is taken orally twice a day for 7 days to cure hepatitis.
- ii) Root paste is applied on scorpion sting to get relief from pains.
- 13 Lagenaria siceraria (Molina)Standl. (Cucurbitaceae) Bhopala, Kuhav (PSP 13):
- i) Powder one seed is mixed in mother's\
 cow's milk. About 5 ml is administered
 to a child twice a day to ease
 constipation.
- ii) Paste is prepared from stem pieces and applied on foot to treat sunstroke.
- 14 Luffa cylindrica (L.) Roem. (Cucurbitaceae) Gilka, Gilke (PSP 96):
- Fruits are crushed. About 2-3 cup of extract is mixed with a cup of leaf juice of *Azadirechta indica* L. against snakebite.
- 15 Moringa concanensis Nimmo ex Dalz. & Gibs. (Moringaceae) Kodawo, Hegado, Shewaga (PSP 143):
- Latex is rubbed on stone Paste obtained is applied on scorpion sting to reduce pains.
- ii) Young leaves are crushed. About half cup of extract is taken orally twice a day for 15 days to treat night-blindness.
- iii) Bark strips are removed from the stem. They are heated and tied on the parts affected due to paralysis. It is advised until cure.
- 16 *Mimosa pudica* L. (Mimosaceae) Lajari, Lajalu (PSP 105):
- Decoction of roots, about a cup, is taken orally to regulate urination, it is practiced until cure.
- ii) Pellets are prepared from root powder. One pellet is consumed thrice a day to treat piles. Roots and leaf paste is applied on wound of piles.
- 17 Opuntia elatior Mill. (Cactaceae) Nagaphan (PSP 04):
- i) Root bark is crushed with the leaves of *Ocimum tenuiflorum L.* (1:1

- ratio). Juice is obtained. A cup of juice is administered orally thrice a day to stop excessive bleeding during menstruation.
- 18 *Piper betle* L. (Piperaceae) Bhulanwela, Nagen-pan (PSP 72):
- i) Dried leaves are powdered and mixed with powder of roots of *Withania*
- somnifera (L.)Dunal. Sweat balls are prepared. One ball consumed daily at night to overcome impotency.
- 19 *Sesamum orientale* L. (Pedaliaceae) Tivi, Til (PSP 70):
- i) Seeds are tied for 12 hr in the leaves of *Butea monosperma* (Lamk.)Taub. Oil is extracted from seeds and applied on burning wound. It is practiced till cure.
- ii) Seed oil is heated and applied on stomach of a pregnant woman to reduce pregnancy pains.
- 20 *Tamarindus indica* L. (Caesalpiniaceae) Amali , Chinch (PSP 10) :
- i) Ripe fruits are boiled along with jaggery in water. Half litre water is drunk during a daytime to treat sunstroke. It is advised till cure.
- ii) Paste is prepared from seed powder. It is applied on eyes, then slices of fruit of *Cucumis sativas* L. (Kakdi) are placed on eyes to reduce redness of eye.
- *21 Terminalia bellirica (Gaerth.)Roxb.(Combretaceae) Behdo, Behada(PSP 25):
- i) Fruit pulp is consumed along with a piece of fruit of *Areca catechu L.* and pulp of *Semecarpus. anacardium L.f* after dinner against flatulence.
- 22 *Tridax procumbens* L. (Asteraceae) Bhutyakes, Ekdandi (PSP 56):
- i) Paste is prepared from the root powder and leaf juice. Paste is applied on wounds till cure.
- ii) Extract of entire young plants, about a cup, is drunk thrice a day for 7 days to treat hepatitis.
- 23 Tinospora cordifolia (Willd.)Miers. (Menispermaceae) Giloi, Gulwel(PSP 34):
- i) Spoonful of sugar is added in a cup of stem bark extract. It is administered

- twice a day for 7-8 days to treat hepatitis.
- Decoction of stem pieces, about half cup, is taken orally once during cloudy days to avoid body - ache or joint-ache.
- 24 Tectona grandis L. f. (Verbenaceae) Sagalu, Sag: (PSP 29):
- i) Stem bark is powdered. About 10-15 gm powder is mixed in a cup of water and kept for 30 minutes. About half the quantity is of it is taken orally to cure stomach-ache. It is advised once daily for 3-4 days.
- 25 Zingiber officinale Rosc. (Zingiberaceae) Alo, Adrak (PSP 28):
- i) Extract is obtained from the rhizome. One gm of jaggery is added in 5 ml of extract One to two drops of it are poured in nose to treat migraine. It is poured through opposite nostril.

3. Discussion

During the ethnobotanical field survey in the rural and tribal villages, hamlets of Badwani district, Authors observed ethnomedicinal uses of 25 angiospermic species belonging to 25 genera and 19 families, Comparative of ethnomedicinal claims indicated that 21 species form the first reports for India. They have been in vogue to combat various human ailments viz., impotency, intestinal worms, constipation, ring worms, eczema, hepatitis, menstrual complaints, urinary complaints, migraine stomach-ache, bone fracture, lactation, piles, night blindness, pregnancy and abortion, etc.

Few exotic floristic elements such as Acanthospermum hispidum, Opuntia vulgaris, Gossypium hirsutum, Tridax procumbens, Laginaria siceraria, Argemone mexicana, Luffa cylindrica and Moringa concanensis etc., have gone down into local uses. The remedies used are in form of extract, paste, powder, juice, infusion, decoction, latex and oil. These are obtained from plant parts like rhizome, roots, stem, leaves, fruits, seeds, bark to treat various human ailments. These prescriptions are practiced daily in life of aborigines and rural folks of the district, plants are used singly or in combination with other plants.

This study shows that usage and knowledge of the ethno medicines to treat the aforesaid ailments among the aborigines and rural folk is a major segment and their life knowledge is transmitted to generations. Comparative study of ethno medicinal claims indicated that 21 species form the first report for India. Asterisk to the plant indicate reports in classical literature. Isolation of principles and the chemical, pharmacological investigations on these species and their derived products are required to know their efficacy on modern scientific lines.

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