



ETHNOMEDICINAL PLANTS USED FOR ANTI-FERTILITY BY TRIBALS OF DHAR DISTRICT, MADHYA PRADESH, INDIA

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ABSTRACT

The present paper deals with an ethnobotanical survey was carried out during 2019-2021 in the some ethnomedicinal plants used for used anti-fertility by tribals of Dhar district, Madhya pradesh state in India. A total of 22 plant species belonging to 21 genera and 19 families used for anti-fertility of the study area. The tribal people depend on the herbal medicines for anti-ferti; lity. Such knowledge is transferred from one generation to another by word of mouth only and restricted to few families of the area recognized as 'Vaidyas' 'Badwa' and 'Ojhas'. Tribal do not approach doctors (physicians) due to lack of awareness and shyness or hesitation. Herbal healers and their patients who receive the treatment for any enquired the local names, parts used and method of administration. The binomial names are enumerated with utilization and dosage of these plants are like Viz. *Acacia nilotica* L., *Adina cordifolia* (Roxb.) Rdids., *Azadirachta indica* A.Juss., *Barassus flabellifer* L., *Buteamonosperma* (Lamk.) Kuntze, *Desmodium triflorum* (L.) DC. Further studies were suggested to validate the claims and herbal drug development for treatment of such anti-fertility.

KEYWORDS: Anti-fertility, ethnomedicinal plants, Dhar district, tribals.

INTRODUCTION

Dhar district is situated in the south-western part of Madhya Pradesh, India. The study area lies between 22° 00' to 23° 10' Northern latitude and 74° 28' to 75° 42' Eastern longitude. Covering 8153 Sq. Km study area and geographical area of 1214.8 Sq.km. Its population is 2184672 (Census 2011). Dhar The tribal people constitute over 83.93 percent of the population. The study area is mostly inhabited of tribal groups are *Bheel*, *Bhilala*, *Barela* and *Pateliya*. Majority of the population live in remote villages and depend on shifting cultivation and forest for their food, shelter and other requirements. These Tribals live close to the forest and are largely dependent on the wild biological resources for their livelihood. Although the tribal people traditionally use many ethno-medicinal plants to reduce anti-fertility, yet no such documentation has been done earlier. Keeping this in view, the present study was initiated with an aim to identify medicinal plants resources and traditional knowledge of tribal people of the study area. A synoptic account of plant species, parts used application and approximate doses in possible cases and ethno - medicinal values to the anti-fertility among the tribals has been prepared in the present study. Literature survey of ethnobotanical work was done (Kamboj *et al.* 1982, Hemadri *et al.* 1983, Srivastava 1984, Jain 1986, Sahu 1992, Jain 2004, Jadhav 2010, Tripathi *et al.* 2010,

Alawa 2015, Juyal *et al.* 2013, Alawa 2018). The present paper first time documented of the study area.

MATERIALS AND METHODS

The present paper is outcome of extensive field survey of different tribal villages of Dhar district during 2019-2021 to collect information on medicinal uses of different plant species for anti-fertility. Herbarium of the collected plants specimen was prepared following customary method (Jain and Rao, 1977). During field work, interviews were conducted with local knowledgeable villagers; local elders and experienced tribal peoples (both men and women) were interviewed and cross -interviewed again and again. Local 'Vaidyas,' 'Badwa' and 'Ojhas'. The collected plant species are arranged alphabetically along with their botanical name and family, local names, method of preparation of drug and mode of administration are given below in observation. The plant specimens were collected and identified with local flora available literature (Varma *et al.* 1993, Mudgal *et al.* 1997 & Khanna *et al.* 2001). Herbarium preserved in Department of Botany, PMB Gujarati Science College, Indore, Madhya Pradesh.

ENUMERATION OF SPECIES

During ethnobotanical survey of Dhar district it was found that some wild medicinal plants are used by tribal women as anti-fertility elements. Plant species are used

for anti-fertility. The enumeration of field observation are given below:

1. **Acacia nilotica** L.(L.N.- Babool) Fam. Mimosaceae
Uses: powder of flower and gum is given with milk mixed in empty stomach for one week is sufficient to prevent fertility.
2. **Actinopterys radiata** (S.W.) Link Swartz (L.N. - Bhuio tad) Fam. Actinopteridaceae
Uses: powder of entire plant is given twice a day for 3 days to a pregnant women to prevent chronic tendency of abortion.
3. **Adina cordifolia** (Roxb.) Rdids. (L.N.- Haldu) Fam. Rubiaceae
Uses: stem bark is crushed and kept in water for whole night decoction is given with water in early morning in empty stomach for abortion of miscarriage.
4. **Azadirachta indica** A.Juss. (L.N.-Neem) Fam. Meliaceae
Uses: Decoction of fresh flowers is given to women regularly to reduce fertility.
5. **Borassus flabellifer** L. (L.N.- Tad) Fam. Arecaceae
Uses: Inflorescence of male plant is given once day to women in early morning in the empty stomach for menstruation cycle prevent pregnancy.
6. **Butea monosperma** (Lamrk.) Taub. (L.N.-Palash) Fam. Fabaceae
Uses: Roasted seed powder is taken twice a day to women during menstrual cycle lead to permanent sterilization.
7. **Croton tiglium** L. (L.N.-Jamalghota) Fam. Euphorbiaceae
Uses: Powder of seed is given women to prevent conception.
8. **Curcuma domestica** Valetton. (L.N.- Haldi) Fam. Zingiberaceae
Uses: powder of rhizome with jaggery mixed is taken in menstrual period. It prevents pregnancy if it is repeated many times it will not be needed.
9. **Datura metal** L. (L.N.- Kala datura) Fam. Solanaceae
Uses: Powder of root is given women to prevent conception.
10. **Desmodium triflorum** (L.) DC. (L.N.-Kodawla) Fam. Fabaceae
Uses: Powder of root with Kukad kand (*Geodorum densiflorum*) to made into "Laddu" given to one week in early morning in the empty stomach to prevent conception.
11. **Enset superbum** (Roxb.) Cheesm. (L.N.- Jangli kela) Fam. Musaceae
Uses: Juice of leaves is given to women in infertility.
12. **Ficus benghalensis** L. (L.N.- Bargad) Fam. Moraceae
Uses: Powder of root with Alsi mixed is given women to reduce anti-fertility.
13. **Ficus religiosa** L. (L.N.- Pipal) Fam. Moraceae
Uses: Powder of root is given with beetle (*Piper longam*) leaf twice a day for one week during menstrual period is enough to prevent conception.

14. **Mangifera indica** L. (L.N.-Aam) Fam. Anacardiaceae

Uses: Powder of bark with water is taken orally twice a day for one week during menstrual period is enough to prevent conception.

15. **Moringa concanensis** Nimmo ex Dalz & Gibs. (L.N.- Jangli surjana) Fam. Moringaceae

Uses: paste of root is given to ladies to prevent conception.

16. **Phyllanthus emblica** L. (L.N.- Bhui amla) Fam. Euphorbiaceae

Uses: Dry fruit powder with ghee mixed is given twice a day for 3 weeks to prevent conception.

17. **Piper longum** L. (L.N.- Pippali) Fam. Piperaceae

Uses: Powder of root is used to ladies of abortifacient for during menstrual cycle.

18. **Plumbago zeylanica** L. (L.N.- Chitrak) Fam. Plumbaginaceae

Uses: Powder of root is given orally for ladies during after menstrual cycle for 3 days. It is also one of the best sterilizers.

19. **Ricinus communis** L. (L.N.- Arandi) Fam. Euphorbiaceae

Uses: Decoction of leaf is given orally twice a day to prevent conception.

20. **Syzygium cumuni** (L.) Skeels. (L.N.- Jamun) Fam. Myrtaceae

Uses: Powder of seed fried with butter mixed is given twice a day for 3 days to prevent conception.

21. **Vitex nigundo** L. (L.N.- Nirgundi) Fam. Verbinaceae

Uses: Juice of fresh leaves is given orally to the women regularly for one week during the period is enough to prevent conception.

22. **Ziziphus jujuba** Mill. (L.N.- Ber) Fam. Rhamnaceae

Uses: Lac of Ber with oil of Til mixed boild is given during once a day of menstrual cycle for ladies becomes steriles.

RESULTS AND DISCUSSION

The present study includes information on 22 ethnomedicinal plants which are belong 21 genera and 19 families used for anti-fertility. The data on ethnomedicinal plants for treatment of various plant species was collected from local people in Dhar district of Madhya Pradesh. Such knowledge is transferred from one generation to another by word of mouth only and restricted to few families of the area recognized as 'Vaidyas' 'Badwa' and 'Ojhas'. They generally treat all kinds of anti-fertility in locality and transfer their knowledge to their next generation. They generally diagnose diseases based on symptoms told by the patients as well as based on their personal experience in treating human ailments. It is also observe that were uses roots of 8, seeds of 4 species, flowers, fruits, Inflorescence of one species, stem, leaves, rhizomes of 2 species each. Such information should be spread among other societies living in urban and remote areas. Hence, the present study emphasizes a detailed account of the studied medicinal plants of the study area, which in

future may be accesses for various active phytochemical and pharmacological screening to formulate potent drugs.

CONCLUSION

The tribal people depend on the herbal medicines for anti-fertility. Such knowledge is transferred from one generation to another by word of mouth only and restricted to few families of the area recognized as 'Vaidyas' 'Badwa' and 'Ojhas'. Tribal do not approach doctors (physicians) due to lack of awareness and shyness or hesitation. Herbal healers and their patients who receive the treatment for any enquired the local names, parts used and method of administration. the herbs are valuable to all living beings. But some awareness is necessary to use any herbs.

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