

SOME ETHNO-MEDICINAL PLANTS AND ECO-FRIENDLY NATURAL COLORS YIELDING FLOWERING PLANTS OF B.S.N. GOVT. P.G. COLLEGE CAMPUS, SHAJAPUR (M.P.) – A SURVEY REPORT

Bodane Arun Kumar *1

*1 Department of Chemistry, B.S.N. Govt. P. G. College, Shajapur, (M.P.), INDIA

Abstract:

The present work is attempt has been made to compile the some ethno-medicinal plants and eco-friendly natural colors yielding flowering plants their preparations used for cure of diseases and information of flowering plants with the list of plants from B.S.N. Govt. P.G. College campus Shajapur, India. The present study focused on some important plants having medicinal uses and color yielding potential. Now-a-days natural products and herbal medicines have been recommended for the treatment of various diseases. The present study of ethno-medicinal and natural colors yielding flowering plants is helpful for local peoples of Shajapur.

Keywords:

Ethno-medicinal plants, Flowering plants, Natural Colors, Madhya Pradesh.

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1. INTRODUCTION

Ethno-medicinal plants studies the complex relationships between plants and human. It is multidisciplinary science defined as the interaction between plants and human being. The relationship between plants and human being is not limited to the use of plants for food, clothing and shelter but also includes their use for health care, religious ceremonies and ornamentation. Medicinal plants have always been the main sources of medicine in India. Since ancient past and presently they are becoming popular¹⁻⁵. Natural color is one of the elements of nature that made the human living more aesthetic and fascinating. They are supposed to be associated with emotions, human qualities, festivals and passion in our life. In India, there are more than 470 plants that can yield bright colors⁶. Natural dyes are environment friendly such, turmeric, the brightest of naturally occurring yellow color is a powerful antiseptic which revitalizes the skin and many other common natural color yielding plants⁷⁻⁹. Different parts of the plants such as bark, leaves, flowers, etc were used for various purposes. The Study of available literature shows that several studies were carried out on ethno-medicinal and natural color yielding plants in the recent past.

2. STUDY AREA

Shajapur District is a district of Madhya Pradesh state of central India. The town of Shajapur is the district headquarters. Shajapur district is part of the Malwa Plateau. The district is situated in



the northwestern part of the state and lies between latitudes 32"06' and 24" 19' north and longitudes 75" 41' and 77" 02' east. The district is identified from the headquarters town Shajapur named after honor of Shahjahan, the Mughal emperor who halted here in 1640. It is said that the original name was Shahjahanpur, which subsequently reduces to Shajapur. Since the formation of the Gwalior state, it has remained a district. The constructed area of college is 15000 Sq. Meter. College constructed it in 1958. The study site "Naveen-Vatika" and surrounding area is rich in flower and medicinal plants. Floristic composition is the major morphological characters of the plant community. Thus, a detailed survey of the floristic vegetation was carried out in and around the study site 10.



Fig 1: Naveen-Vatika in College Campus, Shajapur

3. MATERIAL AND METHODS

The survey was focused on the group discussion and talks with local people of Shajapur, totally providing the information of ethno-medicinal and natural colors yielding flowering plants during the study. Data were collected through general conversation with traditional healers and questionnaires were used to obtain the plants used by them. Details of medicinal plants used,





mode of treatment were documented 11-13. Sometimes we also observed various patients coming and having relief.

Test of natural colors in plant parts first is crush the plant part in pestle mortar and smear the crushed plant paste on filter paper, if the color retains on paper, it may be a good source of natural dye. Second is if the color is retained on the fingers even after washing with water, it may be a good source of natural dye with probably good wash fastness. Third is squeeze the plant part preferably flowers and leaves between the fingers if color is discharged, it may be a good source of natural color and last is shake boiled water and put crushed plant part, if it releases color into the water, it may be a source of natural color.

The ethno-medicinal plants and natural colors yielding flowering plants observation recorded and as shown in Table 1 and 2.

Table 1: Ethno-medicinal Plants

| Sr. No. | Botanical Name | Local Name | Family | Parts Used | Ethno-medicinal Uses | |
|------------|---------------------------|---------------|-------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 01 | Aegle marmelos L. | Bel | Rutaceae | Fruits | Pulp is directly taken with sugar and Spices for stomach infections. | |
| 02 | Carica papaya L. | Papita | Caricaceae | Fruit, Seed Powder | Ripened fruits are suggested for jaundice patients, Seed powder is Digesting. | |
| 03 | Ocimum sanctum | Tulsi | Labiateae | Leaves | Cough, Cold, bronchitis, expectorants | |
| 04 | Mentha longifolia L. | Pudina | Lamiaceae | Leaves | Leaves are taken with spices as chatni for abdominal disorders. | |
| 05 | Zizyphus zuzuba | Ber | Rhamnaceae | Fruit, Seeds | Ripened dried fruits are crushed and powdered, taken with salt and sugar for the cure of indigestion and constipation. | |
| 06 | Mangifera indica Linn. | Mango | Anacardiacea e | Bark | Mangoes are rich in antioxidants such as beta-carotene, and Vitamin C, Antioxidants have been shown to play an important role in the prevention of cancer and heart disease. | |



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| 07 | Emblica officinalis | Aawala | Euphorbiacea c | Fruit | Vitamin - C, Cough, Diabetes, cold, Laxative, hyper acidity. | | |
|----|---------------------------|-------------|--------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| | Officinalis | | C | | cold, Laxauve, hyper acidity. | | |
| 08 | Lawsennia iermis | Mehan | Lytharaceae | Leaf, Seed | Burning, Steam, Anti | | |
| | | di | | Flower, | Inflammatory. | | |
| 09 | Azardirchata - indica | Neem | Mahaceae | Rhizome | Sedative, analgesic, epilepsy, hypertensive. | | |
| 10 | Psidium gaujava | Amrud | Myrtaceae | Leaves and bark | Disinfectant and antiseptic for dressing wounds and sores. digestive disorders and reduce high blood pressure | | |
| 11 | Cassia fistula | Amalta s | Fabaceae | Fruit, Seed, Pulp, Root | Emetics, purgatives, febrifuges and relievers of thoracic congestion, asthma, leprosy, ringworm, fever. | | |
| 12 | Ficas benghalensis Lin | Bargad | Moraceae | Bark, Leaves | Grinding the pills and making decoction in toxicology. The bark of this therapeutically valuable tree is attributed with tonic, astringent cooling and diuretic properties in ayurveda. | | |
| 13 | Butea monosperma | Palash | Fabaceae | Flower, Bark, Leaves | Diarrhea, Dysentery, Intestinal Worms, Diabetes, Skin Disorders and Retention of urine. | | |
| 14 | Dalbergia sissoo | Shisha m | Fabaceae | Leaves, Root | Decoction of leaves is useful in gonorrhea. Root is astringent. Wood is alternatives, useful in leprosy, boils, eruption and to allay vomiting. | | |
| 15 | Calotropis procera | Aakda | Asclepiadace ae | Latex, Leaves, Root | Leprosy, syphilis, malarial, antimicrobial, hepatic protective agents, against colds and coughs, syphilis and elephantiasis, asthma and piles. | | |



Table 2: Eco-friendly natural colors yielding flowering plants

| Sr. | Botanical Name | Local | Family | Parts Used | Natural |
|-----|--------------------------|----------|----------------|-----------------|---------|
| No. | | Name | - | | Color |
| 01 | Acacia nilotica Linn. | Babool | Mimosaceae. | Bark | Brown |
| 02 | Aegle marmelosn linn. | Bel | Rutaceae | Fruit and Bark | Brown |
| 03 | Azadirachta indica.A. | Neem | Meliaceae | Bark | Brown |
| | Juss | | | | |
| 04 | Carica papya | papita | caricaceae | Leaf and fruits | Green- |
| | | | | | Orange |
| 05 | Thevetia peruviana pers. | Kaner | Apocynaceae | Flower | Pink |
| 06 | Delonix regia Rafin. | Gulmoher | Caesalpiniacea | Flower | Red |
| 07 | Lawsonia inermis Linn. | Mehndi | Lythyraceae | Leaf | Orange |
| 08 | Mangifera indica Linn. | Mango | Anacardiaceae | Bark | Brown |
| 09 | Nerium oleander Linn. | Kaner | Apocynaceae | Flower | Pink |
| 10 | Psidium guajava Linn. | Amrud | Myrtaceae. | Bark | Brown |

4. RESULT AND DISCUSSION

The observation and results, it can be reveals that during preliminary survey it was recorded that the B.S.N. Govt. P.G. College campus Shajapur, rich in herbal medicine with diversified ethnomedicinal values and eco friendly natural colors yielding flowering plants. The present study of ethno-medicinal and natural colors yielding flowering plants is also helpful for local peoples of Shajapur.

5. REFERENCES

- [1] Akarele, O., Medicinal plants in traditional medicine. In: Economic and medicinal plants research. Vol 4 (ed., H. Wagner and N. R. Farnsforth), 1990, pp 5-16
- [2] Bye, R.A., Medicinal plants of the Sierra Madre: Comparative study of Tarahumara and Mexican market plants. Economic Botany, 1986, 40: 102–124
- [3] Shrivastava, S. Dwivedi, S. Dubey, D. and Kapoor, S., "Traditional herbal remedies from Madhya Pradesh used as oral contraceptives- A field survey", Int. Jour. of Green Phar., 2007, 1(1): 18-22
- [4] Dwivedi, S.N.; Shrivastava, S. Dwivedi, S. Dwivedi, A. and Kaul, S. 'Relevance of medicinal herbs used in traditional system of medicine", Farmavita. Net
- [5] Gour D: Tradition dye yielding plants of Uttarakhand, India. Natural Product radiance. 2008; 7(2): 154
- [6] Dominguez, X.A. and Alcorn, J. (1985). Screening of medicinal plants used by Huastec Mayans of northeastern Mexico. Journal of Ethno pharmacology 13:139–156



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- [7] Hussein, S. A. M., Barakat, H. H., Merfort, I.and Nawwar, M. A. M., Tannins from the leaves of Punicagranatum. Photochemistry, 45, 1997, 819–823
- [8] Cristea G. Y. and Vilarem S. J.,: Ultrasound assisted enhancement in natural dye extraction frombeetroot for industrial applications and natural dyeing of leather, Ultrason. Sonochem., 2003, 16 (6): 782-789
- [9] Rashmi A, GeentaMahale, RK Sunanda and M Javed: Effect of katha leaves dye on USA sheep breed wool. NPR. 2004; 3(6): 413 -417
- [10] Wikipedia, http://en.wikipedia.org/wiki/Shajapur
- [11] Debajit M, Tiwari SC: Natural dyeyielding plants and indigenous knowledge on dye preparation in Arunachal Pradesh, Northeast India. Curr. Sci., 2005; 88(9):1474-1480
- [12] Gour D: Tradition dye yielding plants of Uttarakhand, India. Natural Product radiance., 2008; 7(2): 154
- [13] Tiwari SC and Bharat Ajay: Natural dye yielding plants and indigenous knowledge of dye preparation in Achanakmar –Amarkantak Biosphere Reserve, Central India. NPR, 2008; 7(1): 82 87