

Short Communication

Medicinal plants used in the treatment of skin diseases in Central Bastar of Chhattisgarh, India

M. K. Sinha¹, D. K. Patel² and V. K. Kanungo³

¹Government P. G. College, Jagdalpur, C. G.

²Department of Rural Technology, G. G. V. (A Central University), Bilaspur (C. G.), India.

³Government Nagarjuna P.G. College of Science, Raipur (C. G.).

Accepted 15 October, 2021

A survey on ethno Medicinal plants used in the treatment of Skin Diseases in central Bastar of Chhattisgarh State has been conducted during 2011 - 2012. The information on the utilization of the Medicinal plants for above purpose were collected on the basis of personal interviews with traditional healers, Baidyas, Sirhas, tribal doctors, old women of the village society in 10 villages of District Bastar. The investigation revealed that 25 medicinal plants belong to 18 families and 21 genera are used in the treatment of Skin disease in district Bastar of Chhattisgarh State.

Keywords: Medicinal Plants, Treatment, Skin Diseases.

INTRODUCTION

Bastar District is a district of the state of Chhattisgarh in central India. Jagdalpur is the district headquarters. The district has an area of 8755.79 km². Bastar, the land of tribes and about 70% of the total population of Bastar comprises tribals, which is 26.76% of the total tribal population of Chhattisgarh.

The tribes of Bastar region are known for their unique and distinctive tribal culture and heritage in all over the world. Each tribal group in Bastar has their own distinct culture and enjoys their own unique traditional living styles. Each tribe has developed its own dialects and differs from each other in their costume, eating habits, customs, traditions and even worships different form of

god and goddess.

Forests play an important role in the life of the people, providing food security and livelihood through the collection of minor forest produce, and employment (as casual labour) in the Forest Department. The forests provide for people's consumption needs like fuel and firewood, medicines, food and drink, implements and housing materials.

The documentation and assessment of the traditional medicinal knowledge is very important for the Indian society. Ethno-botanist over the world has been actively working to collect document of the indigenous medicinal plants. Ethnobotanical studies on Medicinal plants were done by Chopra et al. (1956), Hassan and Khan (1996), Mahendra et al (2011) and Yadav et al (2012).

The aim of the present study was to assess the plant species used for Medicinal values as treatment of Skin disorder specially.

Corresponding author Email: dplantscience@yahoo.co.in

MATERIALS AND METHODS

Ethno-botanical data were collected through survey during 2011-12 with traditional healers, local knowledgeable person, old age women, and tribal doctors in the field trips. During the interview local names, useful part of the plant, method of drug preparation, and dosage. The plant species were identified with the help of regional and local floras (Hooker, 1897; Gamble, 1967; Narayana Rao *et al.*, 1981, Rangacharyulu, 1991; Thammanna *et al.*, 1994 and Matthew, 1983). The method of collection of voucher specimens, their preservation herbaria and technique for the collection of ethno-medico botanical information follows Jain and Rao (1977).

RESULTS

1. *Aloe vera* (L.) Burm.f. (Liliaceae)
Leaf pulp is used as a moisturizer in dry skin and emollient in burns.
2. *Andrographis paniculata* (Burm.f.) Wall. Ex/Nees (Acanthaceae)
Leaf paste is used externally and decoction of whole plant used internally in black spots and sun burn till they completely disappear.
3. *Azadirachta indica* A. Juss. (Meliaceae)
Leaf, bark and seed oil is used for skin eruptions and troubles for a 01- 02 Weeks.
4. *Cassia auriculata* Linn. (Caesalpiniaceae)
Leaf paste is used for boils for about 3-4 days.
5. *Cassia fistula* Linn. (Caesalpiniaceae)
Bark is used for fungal skin diseases as an external application for about a month. Its decoction is used as a washing liquid.
6. *Cassia tora* Linn.. (Caesalpiniaceae)
Seed paste is used externally for ring worm and other fungal infections for a period of 7-8 days.
7. *Clerodendrum inerme* (L.) Gaertn. (Verbenaceae)
Leaf paste is used for scabies and leucorrhoea about 2-3 weeks.
8. *Cuscuta reflexa* Roxb. (Cuscutaceae)
The paste of the whole plant is used against warts for a period of one week.
9. *Ficus carica* Linn. (Moraceae)
The fresh leaf juice and latex is applied twice a day for 2-5 days externally against hypercritical dermatitis.
10. *Lantana camara* Linn.Var. *Aculeata* (L.) Mold. (Verbenaceae)
Leaf paste is an externally applied to wounds and cuts.
11. *Lepidagathis cristata* Willd. (Acanthaceae)
Whole plant paste is used against itching sensation.
12. *Oxalis corniculata* Linn. (Oxalidaceae)

The juice of the whole plant is gently rubbed on the skin against allergies for 2-5 days and also it can be taken orally for a month.

13. *Portulacca quadrifolia* Linn. (Portulacaceae)
Whole plant is pasted and used for ulcers for a period of 10-15 days. It is taken internally in anaemia.
14. *Psoralia corylifolia* Linn. (Fabaceae)
Seeds especially recommended in leucoderma, psoriasis, leprosy and inflammatory diseases of skin.
15. *Tridax procumbens* Linn. (Asteraceae)
Fresh leaf juice is applied over cut wounds for 2-3 days.
16. *Pergularia daemia* (Forssk.) Chiov. (Asclepiadaceae)
Leaf paste is applied externally for scabies thrice a day for a period of 7 days.
17. *Calotropis gigantea* (L.) R.Br. (Asclepiadaceae)
Root, bark, leafy and latex is used in leprosy and skin diseases for a period of 8-10 days.
18. *Plumbago zeylanica* Linn. (Plumbaginaceae)
Diluted paste of the root bark is applied on the skin, to treat leucoderma and ringworm for a period of 3-4 weeks.
19. *Euphorbia hirta* Linn.(Euphorbiaceae)
50gm of whole plant, garlic (3-4 no.) And pepper (3-4 no.) Pasted in butter milk applied on boils for a period of 10 days.
20. *Rubia cordifolia* Linn. (Rubiaceae)
Root paste is applied externally for eczema for 3-4 months, and its decoction is given internally for the same period.
21. *Tinospora cordifolia* (Willd.) Hk.f.&Th. (Menispermoraceae)
Root paste is used commonly in leprosy.
22. *Cassia alata* Linn. (Caesalpiniaceae)
Leaf paste mixed with seed oil of *Pongamia pinnata*, applied externally for skin diseases.
23. *Strychnos nux-vomica* Linn. (Strychnaceae)
Leaf paste is applied externally for common skin diseases.
24. *Ficus hispida* Linn.f. (Moraceae)
Fresh Leaf juice is applied externally for skin disorders like Leucoderma and fruit juice is given internally for 3 days.
25. *Achyranthus aspera* Linn. (Amaranthaceae)
The powder of whole part of the plant mixed in goad urine than applied over the affected part of the body three times in a day.

DISCUSSION

The total number of plant species utilized in studied region is 25 belongings eighteen families. Many of the researchers like Joshi A R and Joshi K (2007),

Buragohain J and Konwar B K (2007), Mohammad A R (2010), Mahmood T (2012) etc. studied a variety of medicinal plants for their medicinal value as treatment of skin diseases. The common dosage forms include decoction, paste, juice, and powder. A decoction is prepared by boiling the plant parts in water for 10-15 min. Most of the herbal remedies are taken orally.

It can be concluded that the local and tribal people of the district have very good knowledge on the use of medicinal plants. But such knowledge of medicinal plants is restricted to a few persons in a rural area. Therefore it is necessary that suitable requirements are needed in order to protect the traditional knowledge in particular area with reference to medicinal plant utilization and it was found that traditional ethno-medicine still persists among the tribal's in District Bastar of Chhattisgarh.

REFERENCES

- Buragohain J, Konwar BK (2007). Ethnomedicinal Plants used in Skin Diseases by some Indo-Mongoloid Communities of Assam, Asian J. Exp. Sci., Vol. 21, No. 2, 2007, 281-288.
- Chopra RN, Nayar SL, Chopra IC (1956). Glossary of Indian Medicinal Plants. CSIR, New Delhi.
- Choudhary MS, Mishra N, Trivedi S, Upadhyay R (2011). Indigenous Knowledge of using Medicinal Plants in Treating Skin deceases by Tribal's in Central Narmada Valley of Madhya Pradesh (India). Bulletin of Environment, Pharmacology & Life Sciences, 1 (1) : 60 – 63.
- Gamble JS, Fischer CEC (1967). Flora of the Presidency of Madras, Vol. 1-3, Calcutta.
- Hassan MA, Khan MS (1996). Ethnobotanical records in Bangladesh - 2. Plants used for healing cuts and wounds. Bangladesh J. Plant Taxon. 3(2): 49-52.
- Hooker JD (1897). The flora of British India, Vol. 1-7, Reeve, L. Co. Ltd. Ash ford, Kant, London.
- Jain SK, Rao RR (1977). Field and Herberiam methods. Today and Tomorrow publishers, New Delhi.
- Joshi AR, Joshi K (2007). Ethnomedicinal Plants Used Against Skin Diseases in Some Villages of Kali Gandaki, Bagmati and Tadi Likhu Watersheds of Nepal, Ethnobotanical Leaflets 11: 235-246.
- Kirtikar RR, Basu BD (1975). Indian Medicinal plants (Repr. Edition), vol 1-4. Periodical express, New Delhi.
- Madhava Ch, K, Rao KN (1989). Ethnobotany of Sarakallu and adjacent areas of Chittoor District, Andhra Pradesh, Vegetos, 1(2) 160-163.
- Mahmood T (2012). Indigenous knowledge for treating skin disease in madhya pradesh (India), Life sciences Leaflets 4:69-74.
- Matthew KM (1983). The flora of Tamil Nadu Carnatic. Vol. 1-3. The Rapinat Herbarium St. Joseph's College, Tiruchirapalli, India.
- Mohammad AR (2010). Indigenous knowledge of herbal medicines in bangladesh.
- Narayana R, Thammanna KP, Das KSK (1981). Plant Wealth of Tirumala TTD Press, Tirupati.
- Rangacharyulu D (1991). Floristic Studies of Chittoor district, Ph.D. Thesis, SV University, Tirupati.
- Sudarsanam G (1987). Ethnobotanical survey and phytopharmaco-chemical screening of selected medicinal plants of chittoor district, A.P. S.V. University, Tirupati.
- Thammanna PK, Narayana R, Madhava KC (1994). Angiospermic wealth of Tirumala, TT D Press, Tirupati.
- Treatment of skin diseases by tribal communities of the hill tracts districts, Bangladesh J. Bot. 39(2): 169-177.
- Yadav M, Yhan KK, Beg MZ (2012). Ethno-botanical plants used for curing skin diseases by tribals of rewa district (Madhya Pradesh) Indian J.L.Sci.2 (1): 123-126.
- Yoganarasimhan SN (2000). Medicinal plants of India. Vol.2 Tamil Nadu, Basaveswara nagar, Bangalore.