Ethnomedicinal Plants Used To Cure Skin Diseases In Ambabarwa Wild Life Sanctuary Area Of Buldhana District (M.S.), India

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Research Article

***Abstract*:** Plants are used by tribals and folklore traditions in India in the treatment of skin diseases, like leprosy, scabies, rash, wound, psoriasis, swelling, eczema, dandruff. The traditional healers are on the decline because the younger members of the tribe have started moving towards the towns and cities and are not willing to practice this form of medicine. There is danger that the knowledge of these medicinal plants will also die with them. Some of useful species are under serious threat due to unsustainable activities. Hence, a proper documentation of useful plants with their present status and local traditional knowledge as well as practices is urgently needed.

The paper enumerates the traditional uses of 55 plant species belonging to 52 genera representing 39 families, which are used by the tribal communities of Amba-barwa wild life sanctuary area of Buldhana district for the treatment skin diseases.

***Keywords*:** Ethnomedicine, Skin Diseases, Ambabarwa Wild Life Sanctuary, Buldhana District (M.S.).

Introduction:

The knowledge of medicinal plants has been accumulated in the course of many centuries based on different Indian systems of medicines such as Ayurveda, Unani and Siddha. In India it is reported that traditional healers use 2500 plant species and medicine (Pei, 2001). In recent years, there has been a tremendous range of interest in the medicinal plants especially those used in Ayurvedas and other traditional systems of medicines. Drugs obtained from plant are believed to be much safer and exhibit a remarkable efficacy in the treatment of various ailments. Allopathic drugs have brought a revolution throughout the world but the plant based medicines have its own unique status. There is an urgent need to document the ethno biological information presently existing among the diverse communities before the traditional knowledge is completely lost (Rao, 1996).

Indian traditional medicine is based on different systems such as *Ayurveda*, *Siddha* and *Unani* used by various communities (Gadgil, 1996). Thus, there is now urgency for ethno-botanical research amongst aboriginal people (Maheshwari, 1983). In recent years, traditional ethno-botanical studies have received much attention due to their wide local acceptability and clues for new or less known medicinal plants (Tripathi, 2000).

Today there is an increasing desire to unravel the role of ethnobotanical studies in trapping the centuries old traditional folk knowledge as well as in searching new plant resources of food, drug etc. (Jain, 1987, 1991). People living in the developing countries rely quite effectively on traditional medicine for primary health care (Sullivan and Shealy, 1997; Singh, 2002).

Skin disease is a common ailment. Skin complaints affects all ages from the neonate to the elderly and cause harm in number of ways. The physical examination of the skin and its appendages, as well as the mucous membranes, forms the cornerstone of an accurate diagnosis of cutaneous conditions.

The tribal communities of Amba-barwa wild life sanctuary area are still dependent upon wild plants for their primary healthcare and treatment of diseases. They collect the useful plants from the forests and cultivated fields and use these plant materials as raw drugs. These communities have acquired good knowledge on the useful and harmful properties of the useful

plant resources in course of their constant association with forest and agro-ecosystems.

However, at present, this vast store of information is being eroded as a result of human's unsustainable activities. The loss of traditional knowledge within cultures undergoing rapid change is just as irreversible as the loss of species. Hence efforts should be made to document the various uses of plants before some of these plants are eliminated from the area, or

paper an attempt has been made to present indigenous knowledge and uses of the wild plants which are used by local communities for treatment of skin diseases.

Materials And Methods:

Study Area:

The present ethno-medicinal study has been carried out in Amba-barwa wild life sanctuary area of Buldhana district of Maharashtra. It is situated situated in Satpuda ranges. The study is carried out in some villages in and around the Ambabarwa reserve forest area. The villages are inhabited by different ethnic tribes like Bhil, Bhilala, Nihal, Tadvi Bhil which are rich in traditional knowledge and are totally depend on forest resources.

Several field trips in and around the study areas were undertaken during the years 2006-2008 with a view to collect plant species of ethnomedicinal value and to document the indigenous practices. The information was gathered using various techniques such as open and structured interview, and discussion with local informants, such traditional healers and experienced village elders including midwives and by direct observations on the way different plant materials were being collected and used. Plants were identified using relevant scientific literature (Hooker 1872 – 1877; Cooke 1967 (Rpr.); Sharma *et al.* 1996; Naik 1998; Singh and Karthikeyan, 2000; Singh *et al*. 2001). Voucher specimens are deposited in the Botany Department, Shri Shivaji Science and Arts College, Chikhli, Dist. Buldhana (M.S.).

Results And Discussion:

During the field survey, ethnobotanical information of 55 species of medicinal plants belonging to 52 genera and 39 families was compiled from various habitats of the study areas. The study shows that among the skin diseases, scabies, wounds, and boils are the major diseases in the villages. During the treatment of the diseases, various forms of preparation are used. In the following enumeration, the species are arranged alphabetically. The plant species are enumerated alphabetically by botanical name, family followed by local name, plant part used and mode of administration (Table-1). The paper presents a brief account of the uses of various ethno-medicinal plants against the diseases by the tribal people of Buldhana district (M.S.), India. The study provides information on 55 plant species (51-Dicots; 4Monocots) belonging to 39 families (Table-1).

Euphorbiaceae contributed maximum species (05). The plant parts used for medical preparation were bark, roots, rhizome, leaves and whole plants. In some cases the whole plant including roots was utilized. The most frequently utilized plant parts were leaf (21) followed by the roots (10), stem bark (7), latex (7), seeds (5), whole plant (4), fruits (4), rhizome (3) and root bark (2). The forests of Buldhana district are rich in medicinal plants, many are still not known to us. Present investigation indicates that Amba-barwa wild life sanctuary area of Buldhana district is blessed with magnificent diversity of ethno-medicinal plants used to cure many diseases. The present study will give new incentive to the traditional system of healthcare.

Rich and diverse forest ecosystems and vast tribal population with traditional knowledge systems due to cultural and environmental diversity in the country have attracted a number of workers for ethnomedicinal studies in this area. However, the vast stores of ethno-medicinal information of these study areas have not been fully documented.

Conclusion:

It is concluded that the persistence of folk medicine practices of tribals in Amba-barwa wild life sanctuary area of Buldhana before these inhabitants shift over to modern remedies.

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district; the triblas are still dependent on indigenous knowledge for their health care, providing a cheaper, biological safe and accessible alternative to the high cost pharmaceutical remedies. The possible benefit of plant-derived medications constitutes a rewarding area of research, particularly in countries such as India which have a rich biodiversity of plant resources coupled with a high prevalence and variety of infectious diseases where sustainable utilization of the biodiversity can be carried out. Therefore, documentation of these plants is the only way to preserve the traditional knowledge of the plant resources endemic to this area.

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Table-1. Ethnomedicinal plants used by the tribals.

Sr. No.	Botanical Name	Local Name	Part Used	Mode of Preparation and Uses
1.	*Abrus precatorius* L (Fabaceae)	Gunj	L/Sd/Rt	Fresh leaf paste applied over boils. Seeds and roots used in leucoderma.
2.	*Acalypha indica* L. (Euphorbiaceae)	Kuppi	L	Leaves paste with turmeric paste applied on affected areas.
3.	*Achyranthes aspera* L. (Amaranthaceae)	Kutri, Sarata	W	Plant paste is applied externally to cure eczema.
4.	*Acorus calamus* L. (Araceae)	Wacha	Rz	Rhizome paste is applied externally to cure scabies. Rhizome powder used to eliminate dandruff.
5.	*Adhatoda zeylanica* Medic. (Acanthaceae)	Wasak	L	Leaves are used to control acne and skin infections.
6.	*Aegle marmelos* (L.) Correa, (Rutaceae)	Bel	Ft	Young fruit is crushed with a piece of turmeric which is applied to cure ulcers.
7.	*Ageratum conyzoides* L. (Asteraceae)	Sahdevi	L	Fresh leaf paste is applied to cure infections of skin between the toes.
8.	*Alangium salvifolium* (L.f.) Wang. (Alangiaceae)	Katya Ankol	Rt	Root bark paste applied on affected areas till cure.

9.	*Alternanthera sessilis* L. (Amaranthaceae)	Panad	W	The whole plant is used to treat skin disease and liver problems.
10.	*Amaranthus spinosus* L. (Amaranthaceae)	Cholai	L	Leaves are crushed to paste and applied externally to cure eczema and pimples.
11.	*Ampelocissus latifolia* (Lam.) Planch. (Vitaceae)	Pahdwel	L	Leaves made into poultice and applied on scabies
12.	*Annona squamosa* L. (Annonaceae)	Sitaphal	Ft/ L	The fruit and leaf juice heated over boiling water with honey is rubbed on burn area and wrinkle.
13.	*Argimone maxicana* L. (Papavaraceae)	Pivla-dhotra	Lx	Latex is applied on skin against ringworm. Entire plant paste applied on scabies.
14.	*Aristolochia indica* L. (Aristolochiaceae)	Ishwarmul	L	Leaf paste with coconut oil is applied on skin infected area.
15.	*Azadirachta indica* A. Juss. (Meliaceae)	Neem	L/Sb	Leaf extract is applied externally on boils and blisters. The mixture of leaves, Stem bark and coconut oil applied for all skin diseases.
16.	*Bacopa monnieri* L. (Scrophulariaceae)	Brahmi	W	Plant extract on skin itching.
17.	*Barleria prionitis* L. (Acanthaceae)	Katekoranti	Rt	Root paste applied over pimples.
18.	*Boerhavia diffusa* L. (Nyctaginaceae)	Khaparkhuti	Rt	Root paste is taken orally to cure pimples.
19.	*Bombax ceiba* L.(Bombacaceae)	Katsawar	Rt	Root paste is applied externally in case of pimples.
20.	*Calotropis procera* Br. (Asclepiadaceae)	Rui	Lx	Latex direct applied on infected skin areas.
21.	*Careya arborea* Roxb. (Lecythidaceae)	Kumbhi	Sb	Stem bark paste with coconut oil area applied on infected areas of skin.
22.	*Carica papaya* L (Caricaceae)	Papaya	Lx	The latex is applied to treat ringworm and itching.
23.	*Cassia tora* L. (Cesalpinaceae)	Tarwat	Sd	Seeds paste is applied on itching areas till cure. Leaf paste is applied in case of ringworm.
24.	*Cassine glauca* (Roxb.) Ktze. (Celastraceae)	Bhutkes	L	The leaf paste is applied on skin against irruptions, wounds and cuts.
25.	*Celosia argentea* L. (Amaranthaceae)	Kurdu	Sd	The seeds are used for skin rashes and itching.
26.	*Centella asiatica* L. (Apiaceae)	Mandukparni	Rt	Leaf and root extract is applied on wounds.
27.	*Clerodendrum serratum* L. (Verbenaceae)	Bharangi	L	Leaf paste applied on itching and rashes.
28.	*Clerodendrum viscosum* Vents. (Verbenaceae)	Khanduchakka	L	The Paste of leaf is applied against all type skin diseases.
29.	*Curculigo orchioides* Gaertn. (Hypoxidaceae)	Kali-Musali	Rz	Rhizome paste applied on skin rashes and boils.
30.	*Curcuma longa* L. (Zingiberaceae)	Haldi	Rz	The Paste of the rhizome is applied on the skin against psoriasis.
31.	*Cuscuta reflexa* Roxb. (Convolvulaceae)	Akasbel	W	Plant is crushed to paste and applied externally on white spots on face.
32.	*Cynodon dactylon* (L) Pers. (Poaceae)	Durva	Rt	Root paste is applied externally to cure ulcers and boils.
33.	*Cyperus rotundus* L. (Cyperaceae)	Nagarmotha	Rt	Root paste is applied to treat blisters.
34.	*Datura metel* L.	Kala-Dhotra	Sd	Warmed seeds paste with seasame oil

	(Solanaceae)			is applied to cure scabies and psoriasis.
35.	*Daucus carota* L. (Apiaceae)	Gajar	Rt	A paste of root with honey is applied on skin against pimple
36.	*Euphorbia hirta* L. (Euphorbiaceae)	Dhudhya	Lx	Latex is applied to cure burn wounds and boils.
37.	*Ficus bengaalensis* L.(Moraceae)	Vad	Rb	Root bark powder is used externally to cure scabies.
38.	*Ficus hispida* L.f. (Moraceae)	Bhui-umbar	Lx	Latex with oil is used externally to cure cut, burn wounds and ulcers.
39.	*Ficus religiosa* L. (Moraceae)	Pimpal	Sb	Stem bark power is used externally in case of pimples, itches and scabies.
40.	*Grewia hirsuta* Vahl. (Tiliaceae)	Dhaman	L	Leaf paste is applied on pimples.
41.	*Hibiscus rosa-sinsnsis* L. (Malvaceae)	Jaswand	L	Leaf is crushed to paste and applied over boils.
42.	*Jatropha curcas* L. (Euphorbiaceae)	Jungli-erand	Lx	Latex of stem and leaves with mustard oil is applied to cure scabies.
43.	*Lawsonia inermis* L. (Lythraceae)	Mendi	Sb	Stem bark paste applied externally till cure skin irruptions.
44.	*Mangifera indica* L. (Anacardiaceae)	Aam	Ft /Lx	Immature fruit paste is used to treat skin rashes. Latex is applied to cure ulcers.
45.	*Melia azedarach* L. (Meliaceae)	Bakan	Sb	Stem bark and fruit paste is applied to cure leucoderma and wound.
46.	*Momordica charantia* L. (Cucurbitaceae)	Karela	Ft	The fruit paste with few drops of vegetable oil is topically applied to treat dry skin.
47.	*Ocimum basilicum* L. (Lamiaceae)	Ban-tulsi	L	Leaf paste is applied to cure ulcers.
48.	*Phyllanthus embllica* L. (Euphorbiaceae)	Amala	L	Leaf power and oil mixed together and the paste is applied to cure burn wound.
49.	*Plumbago zeylanica* L. (Plumbaginaceae)	Chitrak	L Rt Rb	A paste of leaf with root bark and coconut oil applied on skin infected area. Root paste is is applied externally in case of ringworm and psoriasis.
50.	*Psidium guajava* L. (Myrtaceae)	Amrood	L	Leaf past is applied in case of itches and rashes.
51.	*Ricinus communis* L. (Euphorbiaceae)	Erandi	L/Sd	Seed or leaf paste is applied to treat skin cracks.
52.	*Soyamida ferbrifuga* (Roxb.) Juss. (Meliaaceae)	Rohni	Sb	The paste of stem bark is used for skin against wound and scabies.
53.	*Spheranthus indicus* L. (Asteraceae)	Gorakhmundi	L	Leaf paste is applied on wounds.
54.	*Tamarindus indica* L. (Ceasalpiniaceae)	Chinch	Sb /Sd	Dry stem bark power mixed with oil is applied on burn wound, seed paste is applied externally to cure scabies.
55.	*Ventilago denticulata* Roxb. (Rhamnaceae)	Ragatbel	L	Leaf paste is used in all type skin disease.

(Fruit- Ft, Leaf- L, Latex- Lx, Root bark- Rb, Root –Rt, Rhizome-Rz, Stem bark-Sb, Seed-Sd, Whole plant-W)