



Tribal used medicinal plants in curing skin diseases in Bhimashankar forest region of Pune district, (MH) India.

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ABSTRACT

The surveyed of medicinal plants was carried out during October-November-2020 and february-2021. A total of 26 species of medicinal plants to treating skin diseases belonging to 20 family were reported with help of standard flora among local healers, elder and older tribal. The medicinal plants used by local peoples are arranged alphabetically followed by Family name, Botanical name, and their therapeutic uses.

Keywords: Medicinal plants, Bhīma Shankar, tribal people, skin disease.

INTRODUCTION

Tribal men has been dependent on forest and forests plants product for their traditional medicines since time immemorial. This knowledge of medicinal plants has been accumulated past several centuries forming basis of systems of Medicines (Naikade and Rathod, 2014). World health organisation estimate over 80% of the people in developing countries depend on traditional medicines for their primary health needs (Anonymous, 1984). India's traditional system of medicine is related to richness of herbal plants biodiversity and cultural biodiversity. In past few decades it was found that an increasing interest in inventory of traditional uses of medicinal plants has been witnessed in different regions of the world mainly because of several problems associated with synthetic drugs coming forth of multi drugs resistant pathogens (Nolan, 19998). Traditionally the treatment of medicinal plants to cure skin diseases is economically benefits (Hue *et al.*, 1998). Traditional knowledge in this regard has been conserved for next generations in tribal communities of the world and western region of India which is a hot-spot of traditional medicines (Jain, 1981). Tribal people lives away in forests due to the difficulties in transportation and an aware about these treatments and facilities in past. So they are depends on local people remedies, During the present study a detailed medicinal plants survey was carried out in the study area. When such indigenous knowledge is

being lost, people are forced changed their livelihoods often cause severe environmental degradation (Jain and Tarafder, (1963; . Jain and Rao 1976; Jain, 1981; Kala, 2005; Kothari & Moorthy, 1996; Kulkarni and Despande Adwait, 2011). An attempt was made to explore the traditional health care system of using medicinal plants by the community of Bhīma Shankar, of Pune district for the treatment of various types of skin diseases and ailments. Bhīma Shankar is located at between Latitude 19^o.173913 E and Longitude: 73.582421N; Area is -131 km² Elevation is 2100 feet to 3800 feet above sea level. Bhīma Shankar wildlife Sanctuary was created in the Ambegaon and Khed Taluka, Sahyadri Ranges of Western Ghats, Pune district, in the western Indian state of Maharashtra in order mainly to protect the habitat of the Indian Giant Squirrel. It spreads through three district of Maharashtra that is Pune Raigad and Thane District. Geography: Formed entirely of basaltic rocks, Bhīma Shankar wildlife Sanctuary is dominated by Deciduous, Semi-evergreen, evergreen types of forests. The area received high rainfall in Monsoons and faces scarcity of water in summers. The climatic conditions of this area support high plant diversity and regarded a treasure house of traditional medicinal wisdom (Gazetteer of PUNE district,1984). The medicinal plants wealth of this area has not been explored to a desired level. Extensive study in relation to medicinal flora of the area has not been carried out so far, hence it is essential to document medicinal plants used for treatment of various kind of skin diseases

MATERIAL AND METHOD

The ethno-medicinal information was collected from local people of Bhīma Shankar during 2018-19 in different seasons of flowering or fruiting conditions with the help of well-designed questionnaire (Jain and Rao, 1976). The questionnaire information consists of Medicinal application, Parts used, dosage and location of plants were collected from tribal heads, local people and plants specimens herbaria were prepared according the methods All the plants specimens were identified using different flora and their identification was confirmed with the help of qualified taxonomists (Kulkarni and Kumbhojkar, 2002; Naikade and Rathod, 2014).

Enumeration:

The collected plants species were identified for their documentation and used in traditional healthcare

system against different skin diseases. The enumeration of plants contains Family Name, Botanical Name, and their ethno-medicinal uses.

Araceae: *Acorus calamus* Linn.

Uses: Grind the *Curcuma* aromatic rhizomes and *Azadirctia indica* leaves are applied twice a day, before bedtime and after bathing at least for one week against eczema.

Anacardiaceae: *Anacardium occidentale* Linn.

Uses: Powder bark of *Anacardium occidentale* mixed with honey is taken orally once a day for five to six month against leprosy.

Acanthaceae: *Andrographis paniculata* Nees

Uses: Cow milk with Leaf juice mixed and is taken orally twice a day for six to ten days to cure tinea cruris.

Acanthaceae: *Hygrophilla auriculata* (Schum) Heine

Uses: Dried leaf powder mixed with castor oil is applied twice a day till the recovery on the affected area to cure skin diseases.

Amaryllidaceae: *Crinum defixum* Ker

Uses: Grind bulb mixed with hit water and is given orally twice a day for two to three days for control of tinea cruris.

Apocynaceae: *Wrightia tinctoria* Roxb. R.Br.

Uses: The pounded leaves mixed with coconut oil and then applied twice a day against psoriasis.

Caesalpinaceae: *Cassia auriculata* Linn.

Uses: The dried leaves paste in vinegar is applied on skin diseases once a day till get it cured.

Caesalpiniceae: *Saraca asoka* (Roxb.) De Wilde

Uses: The paste of dried flower boiled with coconut oil and then cooled and is applied twice or thrice a day till cured scabies.

Combretaceae: *Terminalia bellerica* (Gaertn) Roxb.

Uses: The paste of seeds with the seeds of *Terminalia chebulla* and *Quercus infectoria* and mixed with coconut oil is applied twice a day against rash.

Cucurbitaceae: *Trichosanthes lobata* Roxb.

Uses: The entire plant paste is applied once a day for one year on the affected parts to cure leprosy.

Euphorbiaceae: *Euphorbia hirta* Linn.

Uses: Latex of *Euphorbia hirta* is applied against skin parasites twice a day till it get control.

Fabaceae: *Pongamia piñata* (Linn.) Pierre

Uses: Crushed the bark into paste, boiled in gingili oil and is applied on the affected parts twice a day for four days to cure rash.

Fabaceae: *Cassia alata* Linn.

Uses: Grind leaves with coconut oil and bee wax made into paste then is applied on the affected parts to cure tinea versicularis once a daily in night before bed time for four to five days.

Fabaceae: *Clitoria ternatea* Linn.

Uses: Leaf juice is given orally twice a day for six days to cure scabies.

Fabaceae: *Indigofera aspalathoides* Vahl.

Uses: Powder bark of *Indigofera* mixed with coconut oil is applied twice a day for six months on the affected parts to cure leprosy.

Fabaceae: *Glycerrhiza glabra* Linn.

Uses: Paste of stem and *Withania somnifera* roots is applied on the affected parts once a day for one year to cure leucoderma and other skin diseases.

Liliaceae: *Asparagus racemosus* Willd.

Uses: Tuber along with the leaves of *Plumbago indica* made into paste is applied on skin diseases once a day till get cured.

Lythraceae: *Lawsonia inermis* Linn.

Uses: Leaf paste is applied twice a day till it is cured on the affected parts to cure impetigo.

Lamiaceae: *Ocimum tenuiflorum* Linn.

Uses: Leaves of *Ocimum tenuiflorum* pounded with *Curcuma aromatica* rhizomes are applied on the affected parts once a day before bed times to cure tinea versicularis.

Meliaceae: *Azadirachta indica* A. Juss

Uses: Flowers boiled with in *Sesamum indicum* oil and is applied on head against dandruff once a day in the morning after taking bath till get recovery.

Piperaceae: *Piper betle* Linn.

Uses: Leaves grinded with *Allium sativum* bulbs and is applied on the affected area once a day in the morning after bath to cure tinea versicularis.

Poaceae: *Cynodon dactylon* (Linn.) Pers.

Uses: Pounded leaves boiled with coconut oil and is applied once a day till the cure for various kinds of skin diseases.

Papaveraceae: *Argemone mexicana* Linn.

Uses: The seeds along with rhizome of *Curcuma aromatica* and *Acorus calamus* made into paste and are applied on all kinds of skin diseases twice a day till it controls.

Rutaceae: *Aegle marmelos* (Linn.) Corr. Uses: Crushed the fruits with seeds of *Pongamia piñata* *Strychnos nux-vomica*, and boiled with coconut oil is applied on the affected parts to cure scabies and other similar skin diseases twice or thrice a day, till get cured.

Solanaceae: *Datura metel* Linn.

Uses: Leaf juice of *Datura* along with *Curcuma aromatica* rhizomes made into a paste is applied against swelling for fast relief till the swelling completely reduces.

Sapotaceae: *Madhuca longifolia* (Koenig) Macbride

Uses: Pounded seeds mixed with leaf extract of *Ocimum tenuiflorum* are applied on the affected parts twice a day to control the skin diseases.

Verbenaceae: *Clerodendron inermis* Gaertn.

Uses: Leaves juice mixed with bee wax, resins of *Vatica indica* and seeds of *Nigella sativa*, made into a paste is kept in a hot water bath and cooled before use. It is applied once a day before bed time till the recovery to cure various skin diseases.

Zingiberaceae: *Curcuma aromatica* Sal

Uses: Rhizome of *Curcuma aromatica* and *Terminalia chebula* seeds made into paste is applied on the affected area twice a day till get recovery to cure impetigo.

RESULTS AND DISCUSSION

During the surveyed and investigation, it was found that 29 plants species are used as herbal medicine for the remedy against skin diseases. Out of 28 genera and 20 families of angiosperms, 11 species were trees, 5

shrubs, 9 herbs and 4 climbers. The family Fabaceae with 5 species ranked first and followed by Caesalpiniaceae and Acanthaceae then all others. Majority of the family were mono-specific. *Saraca asoka* was found vulnerable species. The flower of *Saraca asoka* is mostly used in skin diseases among the indigenous people. The reduced population of *Saraca asoka* may be attributed to the poor seed set affected by collection of flowers, and the difficulties in propagation. Most of the species used in various kinds of skin diseases.

CONCLUSION:

As per the surveyed it was found that the herbal Ethno-medicine have more potentiality to control various kind of skin diseases. The 80% of people depends on the traditional health care system in our nation and using herbal medicine to cure different types of skin diseases. The study area is a hot –spot of medicinal plants.so there is a lot of scope to gather the information of medicinal plants for next generation

Conflicts of Interest: The authors declare no conflict of interest.

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