



Ethnobotanical survey of Thane district

ZAFAR S. KHAN

ABSTRACT

An ethno-botanical survey was carried out in six tehsils of Thane district, Maharashtra to acquire endogenous knowledge from local community and tribal people about their medicinal uses. The indigenous knowledge of aborigine people was documented through questionnaires and personal conversation at the time of field visit. Plants were correctly identified and arranged as botanical name, family name in parenthesis, local name, useful part and formulation used to cure various ailments. A total of 33 plant species used to cure different diseases discussed in this paper. The present study documented 34 species, 32 genera members of 30 families used to cure various ailments.

Key words : Ailments, Ethanobotany, Thane district, Tribes, *Tinospora cordifolia*.

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INTRODUCTION

Ethnobotanical study deals with the direct traditional and natural relationship between human and plants. It is playing important role in augmenting knowledge about the plants grow and used by native or tribal people. India is rich in ethanobotanical knowledge which is inherited from generation to generation among tribal people since ancient time.

As per 2011 census, Thane is highest populated district of India. This is situated in the western part of India (Maharashtra state). It is coordinate 19° 10' 21" N 72° 57' 25" E between 18° 42' N to 20° 21' N latitude and 72° 45' E to 73° 48' E longitude. The climate of this district is humid and cooled; range of temperature is 17.5 °C to 34.4 °C. And annual rainfall is more than 25000 mm. This district is a home land of various tribal community followed by different indigenous ethnic groups and subgroups. More than 1.5 million people living here are tribal such as Varali, Kokana, Mahadev Kohli, etc., of which Varali tribe are well known for their paintings throughout the world. Geographically Thane district cover an area 9,33,700 hectares of which 3,30,300 hectare covered with various common and endangered plant species.

MEMBERS OF THE RESEARCH FORUM

ZAFAR S. KHAN, SGVSSP's Arts, Commerce and Science College Onde, Vikramgad, THANE (M.S.) INDIA
Email : zfrkhan123@gmail.com

These people use the plants according to their knowledge and belief healing properties for various ailments, role in religious and social ceremonies which are manifested in their folk behavior. Thus indigenous community directly or indirectly helps in plant exploitation for herbal drugs for treatment of their different ailments.

Throughout the world, researcher tends to do ethanobotanical survey to procure knowledge from tribal and local communities about plants used to cure different diseases (Chak and Agrawal, 2008; Yadhav and Verma, 2010). Only six tehsils selected for study as Wada, Bhiwandi, Jawhar, Vikramgad, Mokhada and Dahanu. Most of the tribal people are living in these tehsils except Bhiwandi. The people developed their own traditional ways of diagnosis and treating various diseases by trial and error basis; which fulfills their basic need from the nearby forest. According to WHO, about 80 per cent population of world rely on traditional medicinal for their primary health care needs. These medicines have fewer side effects and men can get it easily from nature. By keeping in mind, this survey was carried out during 2011. It could be help to guide for the development of new drugs from plants.

MATERIALS AND METHODS

Extensive field survey of ethanomedicinal plants had

conducted in selected tehsils of Thane district during 2011. Information was documented through personal interaction, conversation, discussion during the field with Vaidyas visit, locals' traditional practitioners, aged men, local healers, etc. While ethnomedicinal plants were collected and correctly identified by referring standard literature (Naik, 2004). The information regarding identification, mode of administration of crude drug, local name, useful parts, methodology of preparation of crude drugs and time of collection were also recorded and documented.

RESULTS AND DISCUSSION

Ethnomedicinal plants were correctly identified and arranged as botanical name, family name in parenthesis, local name, useful part and formulation used to cure various ailments.

Lawsonia inermis L. (Lythraceae)

Local name : Mehdi
Part used : Leaves

Leaves decoction given orally to patient suffering from urinary stone for eight days. Leaf juice given orally to reduce jaundice, it also cures liability and fever.

Bozassus flabelliform L. (Arecaceae)

Local name : Tad
Part used : roots

Rounded tablets prepared from root pieces filling the gap between teeth to relief from toothache twice a day (*i.e.* at morning and evening).

Ocimum sanctum L. (Lamiaceae)

Local name : Tulas
Part used : Leaves, roots

Eating of leaves cures cough. Leaves juice given orally to asthma and vat patients. Eating of leaves cures mouth tartar. Leaves are used for water purification. Chewing of leaf enhance memory. Leaf juice with honey applied over face for fairness. Leaves are given orally to cancer patient for 4-5 months. Leaf extract applied over head to treat headache.

Syzygium cumini (L.) SKEELS (Myrtaceae)

Local name : Jambhul
Part used : Leaves and fruits

Fruit eating cures diabetes. Excess eating of fruit with curd and immediately salt drinking is beneficial to cure urinary stone and vat.

Aloe vera L. (Liliaceae)

Local name : Korfad
Part used : Leaf.

Middle portion of stem applied on skin to remove

pimples.

Tinospora cordifolia (Menispermaceae)

Local name : Gulvel
Part used : All parts
Plant juice is given orally to HIV patient.

Curcuma aromatica (Zingiberaceae)

Local name : Hadad
Part used : Rhizome

Boiled rhizome applied over the site of blood clotted area after injury and damaged body to reduce swelling. Rhizome powder or paste is used as remedy in healing wound.

Phyllanthus emblica (Euphorbiaceae)

Local name : Awla
Part used : Fruits

Fruit juice with sugar orally is given to cure acidity for two days.

Ficus racemosa L. (Moraceae)

Local name : Umbar
Part used : Fruits and leaf

Latex applied over swollen chick to reduce it. Latex applied over scorpion bite wound and over boil.

Cynodon dactylon (L.) Pors. (Poaceae)

Local name : Durva
Part used : Entire plant
Entire plant is used to stop cough.

Magnifera indica L. (Anacardiaceae)

Local name : Aamba
Part used : leaves

Leaf latex of the branch of mango tree which having large number of fruits applied over scorpion bites.

Annaona squamosa L. (Annonaceae)

Local name : Sitaphal
Part used : Seed
Boiled seed applied over scorpion bite site.

Trigonella foenum-graecum L. (Fabaceae)

Local name : Methi
Part used : All parts

Seed powder given to patient suffering from abdominal pain.

Trachyspermum ammi (L.) Spague. (Apiaceae)

Local name : Ova
Part used : seeds

Eating of seeds help indigestion and gastric disturbance.

Tectona grandis L. (Verbenaceae)

Local name : Sag

Part used : Bark

Powder of teak bark and wild okra (*Hibiscus* sp.) orally given to jaundice patient.

Acacia catechu (Mimosaceae)

Local name : Kath/Khair

Part used : Stem bark

Stem bark juice gargle to cure apathies.

Nelumbo nucifera Gaertn. (Nelumbonaceae)

Local name : Kamal

Part used : Flower, leaves.

Flower juice given orally to heart patient.

Allium cepa L. (Liliaceae/Alliaceae)

Local name : Kanda

Parts used : Bulb, seeds

Eating of white colored onion bulb enhance energy power and hunger.

Tagetes erecto L. (Asteraceae)

Local name : Zendo

Part used : Flowers, leaves

Flower juice (petals) with vegetable oil given orally to person having piles twice in a day.

Piper betle (Piperaceae)

Local name : Nagvalli

Part used : Leaf

Cold and hot juice of leaves is given orally to cure cold and headache.

Carica papaya L. (Caricaceae)

Local name : Papai

Part used : leaves and fruit

Homogenized mixture of latex and honey in double quantity of water after cooling, it is given orally to patients suffering from worms for 2-3 days.

Foeniculum vulgore Mill. (Apiaceae)

Local name : Badishop

Part used : Seed

Seed powder with hot water given orally to normal gastric disturbance.

Brassica juncea (L.) Zorn.EtCoss. (Brassicaceae)

Local name : Mohari

Part used : Seeds

Granule prepared from seed powder taking orally with vegetable oil to cure cold and fever.

Capsicum annum L. (Solanaceae)

Local name : Mirich

Part used : Fruit

Tablet prepared as one part of chilli powder and two part of jaggery is given orally in cholera and dysentery.

Calatropis procera (Asclepidaceae)

Local name : Rui

Part used : Whole part

Latex is used to remove thorn from body. Leaf is also used in thorn injury.

Cucumis melo (Cucurbitaceae)

Local name : Kakdi

Part used : Fruit

Eating of fruit with sugar is taken as remedy in irritation of skin.

Adhatoda zeylanica (Medic) L. (Acanthaceae)

Local name : Adulsa

Part used : leaf

Mixture of leaves and sugar juice is given orally to stop cough for two days. Leaf extract also cure cold, stop intestinal burning and chest pain.

Ficus bengalensis (Moraceae)

Local name : Wad

Part used : Flower

Juice prepared from tender flower buds given orally in worms.

Mirabilis jalapa L. (Nyctaginaceae)

Local name : Gulbaksh

Part used : Root

Root is used to treat typhoid.

Xanthium stramonium L. (Asteraceae)

Local name : Gochid

Part used : Leaves

Leaves are used for treatment of asthma.

Achyranthes aspera L. (Amaranthaceae)

Local name : Aghada

Part used : leaves

Leaf juice is given orally for blood purification.

Cassia tora L. (Caesalpinaceae)

Local name : Takla

Part used : Leaves

Leaves are used to treat ringworm and skin problems.

Nerium indicum Mill. (Apocynaceae)

Local name : Kaner

Part used : Root

Root bark applied to cure skin diseases.

The present paper documented 34 species, 32 genera members of 30 families. Out of 30 families, 26 were dicots and 4 families of monocots plants are used to cure various ailments. Most of the common diseases are skin diseases, scorpion bite, asthma, cough, cold, fever, stone, toothache, jaundice, diabetes, typhoid; even some plants are used to treat deadly diseases like HIV, cancer, etc. Among parts of the plant, leaves are widely used followed by fruit, root, seed and flower. Generally juice or particular plant part extract are used either individually or in combination with other plant products. The application of these crude juice or mixture is applying orally as well as externally. Though allopathic medicine is dominating in this modern era of medical fields but high class people are also fascinating towards traditional medicines due to no side effect, *chief*,

easily available in their town and promising results.

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