

Ethnobotany of fever controlling plant

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Abstract

Fever is the most common diseases in world including India, it is become sever in Jintur, Dist. Parbhani of Maharashtra. Several deaths occur due to fever throughout world, tribal control it by the application of native plant, they have vast knowledge and the practice of traditional medicine, it is easy and cheaper than other treatment. The tribal are completely depends on the plants for the treatment of fever and other all types of diseases. More than 75 % population uses the herbal medicine for cure diseases. The present study was there for undertaken with an objective to gather and preserve knowledge of tribal and develop a database for finding ant fever properties in future.

Keywords- Fever, tribal, Traditional plant.

Introduction

Fever is nothing but our body is fighting against the pathogen like bacteria viruses, symptom of fever is temperature 99 Degree Fahrenheit, illness, sweat, dehydration, pain etc[1-3]. The viral diseases are commonly occurring in Jintur area are Dengue, chikungunya, Malaria, Pneumonia etc. The uses of the plants and their parts, in the form of powder, extract, decoction etc. are mention in Ayurveda, Unani, Charka Samhita, Susruta Samhita etc. the plant compounds and secondary compounds are use alone or in a combinations of other plants compound for the treatment of fever [4-5]. According to WHO (World Health Organization) 80% of the population depends on the traditional medicine for their health care, because the plants are easily available in the nearby area [6-7].

Normally several medicinal plants reported in India, many plants nearby our locality are used as a grandmother's remedy for several diseases and disorders. India has a rich flora, and other natural resources, the Ayurveda and folk medicine of India have started gaining high appreciation and acceptance in the world. The study of wild medicinal plant is very important in the rural area because biodiversity is preserved in the rural parts of India along with Jintur taluka in Maharashtra. Tribe's learn medicinal properties of plant from their ancestors, socio religious ceremonies and continued to further generations. Plants and tribe's relationship are very close from ancient time [2, 8]. Normally all tribes of Jintur are depending on the medicinal plant for their diseases, disorders and other need like food, shelter, ornamental, vegetable etc.

Methodology

Jintur taluka having numbers of tribes and diverse geographical area, its belongings to Parbhani district of Maharashtra, India. Wild medicinal plants like boar, Biba, charuli, kar, karwandi, dhaman, yermuli, thembhri, jamun, bhoker, bartondi, awala, kawath, kamoni, katoli, kharbuj, khirni, hirda, bhehada, chich, tondli, padol, pimpal, bahala, bel, umber, kohala, bhopala, ran kanda, ran halad, ran mirchi, ritha, sarate, sagergota, aghada, yarand, tondale, kalingad, khirani, sitafal, sabja, [name in Marathi] etc. are grows naturally. The river Ddhudhana, Purna, Yeldari dam/ Dharan is the source of irrigation in the taluka [3, 4 5].

Local traditional healers having practical knowledge of plants in medicine were interviewed during 2019-2020. The four field trips were carried out in the study area during the study period. The informants were requested to collect specimens of the plants they knew or to show the plant species on site. These informants were traditional healers themselves or had tradition of healing in their families and had knowledge of the medicinal use of the plants. The medicinal plant knowledge among the people of this taluka is based on hundreds of years of beliefs and observations. This knowledge has been transmitted orally from generation

to generation. The questionnaires were used to obtain information on medicinal plants with their local names, parts of plants used, mode of preparation and administration [6, 7, 9]. They were selected based on their knowledge of medicinal plants either for self-medication or for treating others. Informants were asked to come and show the plant with local name; the species mentioned by the informants were taxonomically identified [10-11].

Preservation of plant specimen

Standard method was followed with regard to collection of plant materials, drying, mounting, preparation and preservation of plant specimens. Voucher specimens of medicinal plant in triplicates were collected, prepared and identified. The identification and nomenclature of the plant was based on The Flora of Marathwada and the Flora of British India [12-13].

Results and Discussions

1. Lasun (*Alium sativum*) Family- Liliaceae

Description- plant is annual glabrous bulbous herb with pungent odour, bulb consist of several short cloves. Leaves are flat, narrow with pointed apex. Garlic is antiviral due to the presences of Allin. it is antibacterial, it used to cure cough and influenza [flu, attack on nose throat, and lungs [13-16].

2- Lvang (*Syzygium aromaticum*) Family - Myrtaceae.

Description- it is ever green tree, leaves simple, lanceolate gland dotted, flower bud appears in cluster at the end of branches, fruits fleshy. It contains protein, carbohydrate tannin and eugenol. Flowers are antiviral due to presence of eugenol. It used in treatment of stomach-ache, fever antibacterial, skin diseases, asthma, cough etc.

3-Adrak (*Zingiber officinale*) Family -Zingiberaceae.

Description- plant is perennial rhizomatic herb, leaves linear sessile flower yellow. Fruit is capsule. It contains curcumin, it carminative, stomachic, asthma, cough, cholera etc [13, 17-19].

4-Haldi (*Curcuma longa*) Family- Zingiberaceae.

Description- it is perennial rhizomatic herb, leaves are sheathed large.

it contains curcumin, zinziberene etc. it used in jaundice, ulcer hepatitis etc [13,20].

5- Gulbas (*Mirabilis jalapa*) Family-Nyctaginaceae

Description- it is perennial herb, stem is quadrangular, flowers are different in colour.

Root, leaf, stem inhibit effect of plant virus activity.it is used in headaches, leprosy, diarrhoea, syphilis etc [5, 13, 21].

6- Dudhi (*Euphorbia hirta*), Family- Euphorbeaceae.

Description- it is erect annual or perennial plant leaves oval and cluster of small flowers.

Chemical contain- it contains flavonoids, alkanes, choline etc [6, 13].

It is used in asthma, breathing disorders, respiratory disorders, dengue fever.

7- Kalmegh (*Andrographis paniculate*) Family - Acanthaceae

Description- it is erect annual herb, stem is quadrangular with opposite leaves, flower is with pink spot.

It contains glucosides, andrographolide, etc.

It is anti-bacterial, it used in fever, cough sore throat, tonsil, snake bit etc [13, 22-23].

8- Neem (*Azadirachtolide indica*) Family - Meliaceae.

Description- it is medium to large tree, leaves are compound, fruits are one seeded drupe.

It contains tannin, gum, nimbin etc.

It is used in several diseases and disorder so called as kalpverkshya. Some of them are like skin diseases, anthelmintic, leprosy, malarial fever, ulcer, burning, tumour, cough, intestinal worm, [13, 24-27].

9- Papai (*Carica papaya*) Family- Caricaceae.

Description- it is small soft wooded short-lived tree, leaves occurs at the top, with deep lobed, petiole long and hollow. Plant bear unisexual flowers, fruit is one chamber.

Leaf extract used against dengue fever, for increasing platelet [13, 28-29]. It is also used in stomachic, carminative anthelmintic, antifungal, ring worm, leprosy etc.

10- Kerela (*Momordica charantia*) L. Family - Cucurbitaceae.

Description- plant is herbaceous vine with tendril, levees are simple, alternate deep palmate lobed. Fruit a pepo seed embedded in reddish pulp.

It contains vicine, cucurbitane, momarcharside etc.

It is used as antiviral mostly against dengue, it also used in leprosy, ulcer, diabetes etc. [3, 5, 13, 30-31].

11- Tulsi (*Ocimum sanctum*) Family- Lamiaceae.

Description- an erect much branched undershrub leaf is simple, opposite elliptical entire, serrate hairy, inflorescence verticillate.

It contains eugenol, methyl chvicol, cineol etc.

Extract of leaves are used as antiviral specially in dengue, fever, cardiopathy, asthma, hiccough, skin diseases [13, 21-22].

12- Meera (*Piper nigrum*) Family- Piperaceae.

Description- climbing perennial plant inflorescences is drooping spike berry globular red after ripe turning black after drying.

It contains piperine, alkaloids, chavicine etc.

It used as anti - dengue, anti- mosquito, antibacterial, toothache, insecticide etc [4, 13, 22].

13- Pudina (*Mentha arvensis*) Family- Lamiaceae.

Description- perennial herb, stem quadrangular, erect and prostrate, leaves opposite,

It contains L methanol, L- menthone etc.

It has anti-oxidant, digestive, antiseptic and anti-inflammatory, antibacterial, properties. It used against fever, headache, cough, diarrhoea etc [7, 13, 23].

14- Gulvel (*Tinospora cordifolia*) Family- Menispermaceae.

Description- it is twiner with succulent stem and papery bark. Leaves simple cordate, fruit red when mature.

It contains tinosporin, columbin, chasmanthin etc.

It used in chronic fever, leprosy, cough, asthma, jaundice, seminal weakness, antilminitic [5, 13,22].

Conclusion

The present investigation has covered only 13 plants used to control the fever. The study highlights the information about botanical description, chemical contents and uses of the plant in the treatment of fever and some other disorders. There are several others plants have not fully studied regarding their medicine application; the study indicates that knowledge and practices regarding traditional medicines for fever has significantly declined in the region of Jintur. For determination of the more anti-viral plants extensive study is essential. Such investigation may lead to the development of highly efficient and safe anti-viral treatments.

Conflicts of interest: The authors stated that no conflicts of interest.

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