

ETHNOBOTANICAL STUDY ON RESPIRATORY DISORDERS IN REGION OF NANDED DISTRICT, MAHARASHTRA, INDIA**V.D. Ambalwad¹, S.G. Tugaonkar² and G.M. Bhosale¹**¹Department of Botany, Mahatma Gandhi Mahavidyalaya, Ahmedpur Dist. Latur, MS, India²Department of Botany, Indira Gandhi Mahavidyalaya, CIDCO, Nanded, MS, India.¹vasundhara.ambalwad27@gmail.com**ABSTRACT**

The present study of highlights the medicinal plants used for respiratory disorders by the tribal and local people in region of Nanded District. This paper consists of the traditional uses of 30 plant species used especially for treatment of respiratory disorders. The plant habit, botanical name, local / vernacular name part of the plant used and mode of use of medicinal plants and its parts.

Keywords: *Ethnomedicinal, Respiratory disorders, Nanded, Tribal.*

Introduction

Ethnobotany is a branch of economic botany which deals with the role of plants in the life of tribal people. Ethnobotany is a multidisciplinary natural science, which deals with human plant relationship. Ethnobotany has been realized by the mankind by means of various uses of plants in their day - to- day life on the Earth. Man has been depended on plants for traditional medicines, since time immemorial. This knowledge of medicinal plants has been accumulated in the course of several countries forming the basis of medicinal systems such as Ayurveda, Unani and Siddha (Bopana and Saxena 2007). The use of medicinal plants as medicine is found in the Rigveda which was written between 45000 and 1600 BC (Balkrishnan et al, 2009). Traditional knowledge in this regard has been conserved for generations in different tribal communities in several parts of the world. Even after the induction of 200 years of modern systems of medicine about 90% people in rural India take the help of local practitioners for the treatment of various diseases. Respiratory disorders are quite common in the study area due to unscientific mining activities and some of the common respiratory problems prevailing in the study area are asthma, bronchitis, cold, cough, whooping cough, pneumonia, covid-19(SARA-coV-2) etc. According to World Health Organization (WHO) 2003, about 20 million people are estimated to suffer from asthma in India and about 150 million in the world. Nanded is rich in vegetation, valleys, and mountains with abundant forest (Kulkarni and

Sontakke 2020) hence, an ethnomedicinal survey was carried out in different regions of Nanded District of Maharashtra State India with an aim to document the information regarding traditional uses of folk drug plants in the study of respiratory disorders.

The Study Area of Ethnobotanical Survey

Nanded District having 16 talukas is situated between 180 15' to 190 55' North latitude and 770 to 780 25' East longitude. It covers an area of 63.22 sq.km. It is located in the South Eastern part of the state. Nanded is bounded on the North by Yavatmal district, on the Eastern side lies Adilabad, Nirmal Nizamabad and Kamareddy districts of Telangana state and on south lies Bidar of Karnataka state. Nanded district area presents undulating topography with uneven hills, plateau, gentle slope and valley planes. According to the 2011 Census, Nanded district has a population of 5,50,564. out of this inhabited by tribal population of aborigines like Andh, Bhil, Bhil Garasia, Arakh, Gond, Rajgond, Mannewar, Kolam, Koli Mahadev, Dongar koli. During period from 2019 -2021, ethnobotanical surveys were carried out in different localities, villages, bordering the region of Nanded district in order to collect as much information as possible about the use of medicinal plants used for treating respiratory disorders. Oral interviews were held in villages and derived information was recorded at the spot. Plant identification and nomenclature is followed as per the Flora of Marathwada (Naik 1998).

Table1: List of some ethnomedicinal plants used for respiratory disorders in region of Nanded District, Maharashtra.

Sr. No.	Plant Name	Local Name	Family	Plant Parts Used
1	<i>Acacia nilotica</i> L.	Babhul	Fabaceae	Whole Plant
2	<i>Acalypha indica</i> L.	Khokli	Euphorbiaceae	Leaf and Root
3	<i>Achyranthus aspera</i> L.	Aghada	Amaranthaceae	Leaf
4	<i>Adhatoda zelanica</i> L.	Adulsa	Acanthaceae	Leaf
5	<i>Argemone mexicana</i> L.	Pivala-Dhotra	Papaveraceae	Seed
6	<i>Bauhinia racemosa</i> L.	Apta	Caesalpiniaceae	Root
7	<i>Barleria prionities</i> L.	Katikoranti	Acanthaceae	Root
8	<i>Barleria cristata</i> L.	Nil Koranti	Acanthaceae	Whole plant
9	<i>Calotropis gigantea</i> L.	Ruchaki	Asclepiadaceae	Flower
10	<i>Cassia tora</i> L.	Takla	Caesalpiniaceae	Whole Plant
11	<i>Cordia dichotoma</i> Forst.f.	Bhokar	Boraginaceae	Tuber
12	<i>Cyperus rotundus</i> L.	Nagarmotha	Cyperaceae	Leaf
13	<i>Cyanodon dactylon</i> L.	Haryali	Poaceae	Whole Plant
14	<i>Datura innoxia</i> Miller	Dhotra	Solanaceae	Leaf
15	<i>Euphorbia hirta</i> L.	Dudhanali	Euphorbiaceae	Whole Plant
16	<i>Ficus benghalensis</i> L.	Vad	Moraceae	Tuber
17	<i>Glycyrriza glabra</i> L.	Jesthamadh	Fabaceae	Root
18	<i>Justicia adhatoda</i> L.	Adulsa	Acanthaceae	Whole Plant
19	<i>Madhuca longifolia</i> (J.Koing)J.F.Macbr.	Moha	Sapotaceae	Flower
20	<i>Nyctanthu arbor-tristis</i> L.	Parijatak	Oleaceae	Leaf
21	<i>Eucalyptus globulus</i> Labill.	Nilgiri	Myrtaceae	Leaf
22	<i>Piper longum</i> L.	Pimpili	Piperaceae	Leaf
23	<i>Semecarpus anacardium</i> L.f.	Bibba	Anacardiaceae	Root
24	<i>Solanum nigrum</i> L.	Kamanchi	Solanaceae	Fruit
25	<i>Terminalia chebula</i> Ret	Hirda	Combretaceae	Bark
26	<i>Tinospora cordifolia</i> L.	Gulwel	Menispermaceae	Stem
27	<i>Tylophora indica</i> (Burm.f.) Merr.	Antamul	Apocynaceae	Leaf and Root
28	<i>Vitex negundo</i> L.	Nirgundi	Lamiaceae	Leaf
29	<i>Withania Somnifera</i> L.	Ashwagandha	Solanaceae	Root
30	<i>Zingiber officinale</i> Roscoe	Ale	Zingiberaceae	Rhizome

Conclusion

The present study describes the ethnomedicinal plants for used respiratory disorders. The information gathered from aged medicinal practitioners of the region of Nanded District. There are various, genera are used by various tribal or local people for respiratory diseases in area around the region. The most of plants found from following families Acanthaceae, Apocynaceae, Euphorbiaceae Fabaceae, Menispermaceae, Solanaceae, Zingiberaceae. It was observed that most of the preparations include single plant species and in rare case two or more species. These medicinal plants used for respiratory disorders by local or tribal

people in region of Nanded District. However, the present study showed that tribal in region of Nanded District have detailed knowledge regarding medicinal plants and their use and significance for the betterment of human beings.

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