

# MEDICINAL PLANTS USED FOR RESPIRATORY PROBLEMS IN WEST BENGAL :A REVIEW

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UNDER THE SUPERVISION OF

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# INTRODUCTION

- Respiratory disease is a medical term that encompasses pathological conditions affecting the organs and tissues that make gas exchange possible in the body. They include conditions of the upper respiratory tract, trachea, bronchi, alveoli, pleura, and muscles of breathing.
- Respiratory diseases range from mild and self-limiting, such as common cold, to life-threatening conditions like bacterial pneumonia, lung cancer etc.
- Body cell continually use oxygen( $O_2$ ) for the metabolic reaction that release energy from nutrient molecules and produce ATP, at the same time , this reactions release carbon dioxide( $CO_2$ ).
- This system also participates in regulating blood pH. This system helps to contributes to homeostasis by providing for the exchange of gases oxygen and carbon dioxide between air, blood and tissue cells.
- The respiratory system consists of the lungs and air passage. The body has only a 4-6 min supply of oxygen, so the respiratory system must work continuously or death will occur.
- An increase in RR is a compensatory mechanism in DKA. Conversely, a reduced RR is often seen in CNS depression or opiate drug overdose.

# OBJECTIVES

To understand the uses of different medical plants of West Bengal employed in curing respiratory disorders.

To make a comprehensive and up-to-date review of published literature on medical plants of West Bengal used in respiratory disorders.

# METHODOLOGY - 1

GOOGLE SEARCH

KEY WORDS (medicinal plants, plants used in respiratory problems, types of respiratory disorders)

Published papers from PubMed Science direct, google scholarship, researched grade etc.

Freely Downloadable

Research Articles

Save & Study

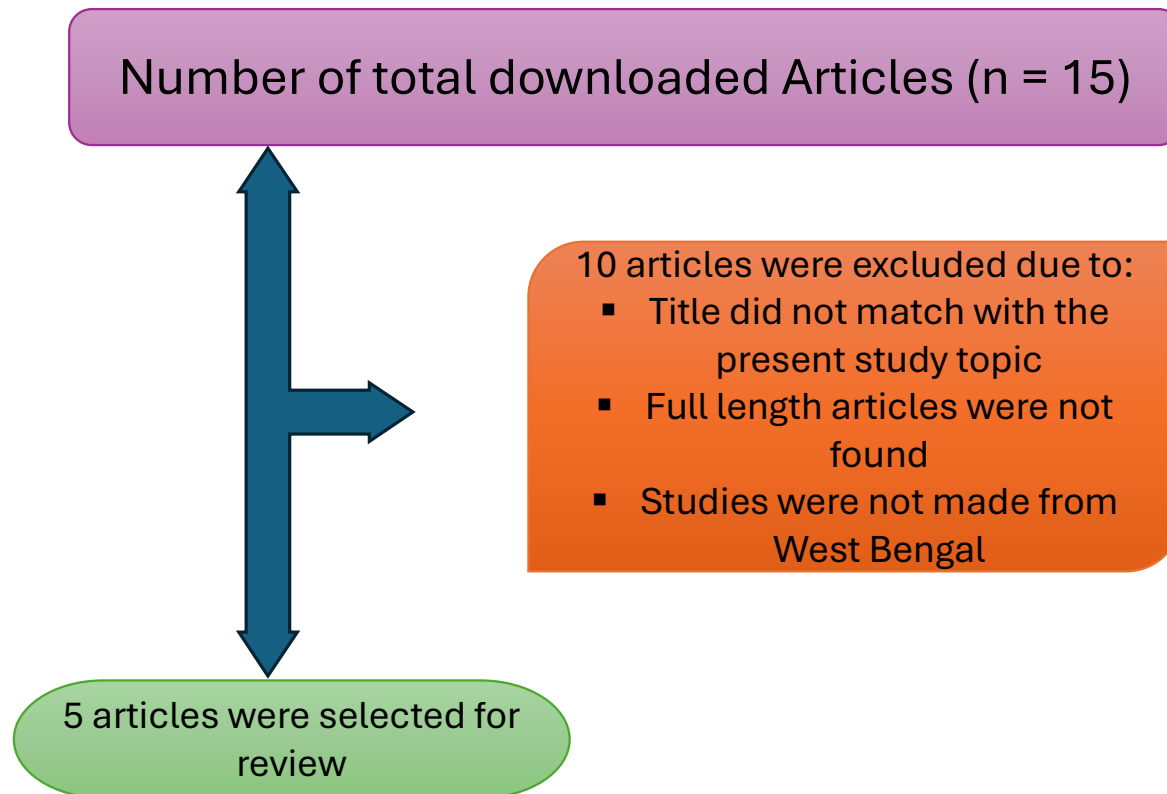
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## METHODOLOGY - 2



# RESULT AND DISCUSSION

Total number of plants species used in respiratory problems = 86 plants

- Total number of family = 43
- Most important family in terms of number of species = Solanaceae(5 spp.), Liliaceae(4 spp.), Zingiberaceae (4 spp.)
- Less important family = (each consisting one or two sp.) Malvaceae, Papilionaceae, Fabaceae, Caricaceae, Apiaceae , Punicaceae, Sapindaceae, Cucurbitaceae
- Number of different respiratory disease treated = 10
- West Bengal – 86 plants curing 10 respiratory disorders.

## TABLE :

SL. NO.	SCIENTIFIC NAME	LOCAL NAME	FAMILY	PARTS USED	DISEASES TREATED	REFERENCE
1	<i>Abrus precatorius</i> L.	Kunch, Kawet	Papilionaceae	Leaves, fruits, root	Sore throat, asthma, cough, chest pain	Alamgir et.al, 2018
2	<i>Andrographis paniculata</i> Wall ex.Ness	Kalmegh	Acanthaceae	Whole plants	Scalp, leprocy, whooping cough, dysentery	
3	<i>Aloebarbade ns is mill</i>	Ghritakumari	Liliaceae	Leaves	Headache	
4	<i>Asparagus racemosus</i> wild	Shatamuli	Liliaceae	Root	Cough, bronchitis, tuberculosis	
5	<i>Annona sqamose</i> L.	Custard apple	Annonaceae	Seeds	Abortifacient	
6	<i>Aerva lanata</i> L.	Chaya, daya	Amranthaceae	Root	Cough, blood sugar	
7	<i>Acacia nilotica</i> L.	Babul	Apocyanacea	Flower	Asthma	
8	<i>Allium cepa</i> L.	Onion	Apiaceae	Stem, leaves	Cough	

9	<i>Allium sativum</i> L.	Vellaipondu	Liliaceae	Garlic leaves	Cough	Moktan Sourav et.al 2021
10	<i>Abrus precatorius</i> L.	Gunja	Fabaceae	Leaf	Bronchitis, cough, asthma	
11	<i>Acalypha indica</i> K.	Copper leaf	Euphorbiaceae	Whole plant	Asthma	
12	<i>Agremome Mexicana</i> L.	Sialkata	Papaveraceae	Root	Inflammation	
13	<i>Achyranthes aspera</i> L.	Devils horsewhip	Amaranthacea	Whole plant	Cold and cough	
14	<i>Agle marmelos</i> ex. Nees	Bael	Rutaceae	Fruit	Against constipation	
15	<i>Alangium chinese</i> Har ms.	Belkel phange	Alangiaceae	Leaves	Pain, inflammation	
16	<i>Alstonia scholaris</i> L.	Chattim	Apocyanacea	Stem, bark, leaves, latex	Heart diseases, asthma, inflammation	





*Andrographis paniculata*(kalmegh)



*Alstonia scholaris*(chattim)



*Abrus precatorius* (kunch)



*Asparagus racemosus*(shatamuli)





*Acacia nilotica* (babul)



*Abrus precatorius* (gunja)



## CONCLUSION

A total of 86 plants used to cure 10 different types of respiratory problems in West Bengal. Taxa under family Asteraceae is cited mostly for curing such diseases which shows further scopes for research with the reported plants under its family. Highest number of species documented from West Bengal is most prone to respiratory problems among the other states. This review finally meet the gap of earlier studies and it will help to create database on medicinal plants to cure respiratory disorders.

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# REFERENCE

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