



Ethnobotanical Survey of Mangroves and their associates in Uttara Kannada District, Karnataka State

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Abstract

The Mangroves are found in tropical tidal, estuarine and tidal mouth of river areas they provide valuable benefits for human being. Ethnobotanical studies, medicinal uses of Mangroves and their associates used by local inhabitants of Uttar Kannada district, Karnataka. The mangroves and mangrove associates their parts were uses in various diseases, such as Asthma, diabetes, rheumatism malaria, fever, hepatitis, piles, ulcers etc. The Ethnobotanical survey of mangrove and their associates in Uttara Kannada district 12 mangroves species belonging to 11 genera and 9 families studied detailed in present paper. This paper gain the knowledge about Mangroves and their associates, with their traditional uses and modern Ethnobotanical approach.

Keywords: ethnobotany, mangroves, Uttara Kannada

1. Introduction

Mangroves are typically salt-tolerant trees or large shrubs with world most productive ecosystem [1]. The Ethnobotanical studies of Mangroves and mangrove associates have been studied for decades by ecologists, botanists, pharmacists and marine researchers [2, 3, 4]. The coastal Karnataka is divided into three maritime Districts namely Uttara Kannada, Udupi and Dakshina Kannada. The Uttara Kannada lies between 13° 92' to 15° 52' N and Longitude 74° 08' to 75° 09' E and extends over an area of 10,327 Sq. km, Udupi district lies between 13° 04' to 13° 59' N and Longitude 74° 59.8' to 75° 06. 12 E, while Dakshina Kannada district lies between 12° 57' to 13° 50' N and Longitude 74° 00' to 75° 50' E. The dense vegetation of Mangroves and their associates are observed in some places viz. Aghanashini, Ankola, kumtha, Honnavar etc. The local people use some Mangroves for curing their disease, by traditional way. The local inhabitants depend on traditional herbal remedies for them own and livestock healthcare because they are easily available and cheaper [5]. Several researchers have been studied ethnomedicine of Mangroves. This paper describes the popular uses of medicinal plants.

2. Materials and Methods

The exploration studies of the Mangroves and their associates were conducted from September 2015 to November 2017. First-hand information regarding the plants in the selected sites and the conventional knowledge about the medicinal uses of Mangrove plants were obtained through interviews of local healers, traditional practitioners, footpath vendors and vaidyas, during field survey with data collection. The priority had given to the older people in the study sites for collecting exact traditional knowledge about the medicinal uses of mangroves and their associates. The collected information was correlated with the help of available literature. The voucher

specimens of Mangroves and mangrove associates are prepared and deposited at BAMU Herbarium.

3. Results and Discussion

The collected Ethnobotanical information of Mangroves and their associates species are presented in the Table 1.1. Total 12 different plant species were collected from selected study area belonging to 11 Genera and 8 families, out of which 9 true Mangroves and 3 mangrove associate species were recorded. Families of True Mangroves and associates are namely; Acanthaceae, Combretaceae, Euphorbiaceae, Myrsinaceae, Pteridaceae, Rhizophoraceae, Fabaceae, Aizoaceae.

The different Mangroves and their associates, their extract and bark also applied different medicinal purposes [1, 6]. The *Acanthus ilicifolius* L. is very useful species, used for skin disorders, diabetes and asthma. In the state of Maharashtra some Mangroves based remedy are used by traditional people along with estuaries [7]. *Excoecaria agallocha* L. latex is strongly used for paralysis, *Sesuvium portulacastrum* (L.) L. after boiled, plant helps to remove salt from body [8]. The fruits of *Avicennia Alba* Blume. Are applied on boils and tumors while the stem bark used for skin problems [9]. While *Avicennia marina* (Forssk.) Vierh leaves are used for treatments of joint pain and ulcers, *Rhizophora mucronata* Lam. bark extract used for controlling vomiting and diarrhea. Whole plant body of *Ipomoea pes-caprae* (L) R. Br. is extremely used for swelling of different body parts [10]. Leaves of *Lumnitzera recemosa* Willd. Applied on snake bites and Asthma, *Aegiceras corniculatum* (L.) Blanco. Removing fish poison. Bark of *Acrosticum aureum* L. used for wounds and boil. While *Clerodendrum inerme* (L.) Gaertn. Leaf extract given in Malaria, also treated on removing pain in jaundice. Leaf juice of *Ceriops tagal* (Griff.) Ding Hou diversely used to treat Malaria.

4. Conclusion

It was observed that local people of coastal Karnataka have common problems viz. Asthma, diarrhoea, headache, malaria, piles, ulcers, wounds, joint pain etc. They treat their disease and disorders by vaidyas and traditional practitioners who are using mangroves and mangrove associates in their treatments.

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Table 1: Ethnobotanical uses of Mangrove and mangroves associate

Sr/No	Name of the species	Family	Part used	Uses
1	<i>Acanthus illicifolius</i> L.	Acanthaceae	Leaves	Asthma, Diabetes, Rheumatism.
2	<i>Avicennia alba</i> Blume.	Acanthaceae	Leaves	Rheumatism, small pox, ulcers.
3	<i>Avicennia marina</i> (Forssk.) Vierh.	Acanthaceae	Leaves	Joints and Ulcers
4	<i>Lumnitzera recemosa</i> (Willd).	Combretaceae	Leaves	Snake-bite, Asthma
5	<i>Excoecaria agallocha</i> L.	Euphobiaceae	Latex	Milky latex used against Paralysis
6	<i>Aegiceras corniculatum</i> (L.) Blanco.	Myrsinaceae	Leaves	Leaves are used as fish poison
7	<i>Arcrostichum aureum</i> L.	Pteridaceae	Leaves and Bark	Applied on wounds and boils
8	<i>Ceriops tagal</i> (Perr) C.B.Rob.	Rhizophoraceae	Leaf juice	Malaria
9	<i>Rhizophora mucronata</i> Lam.	Rhizophoraceae	Leaf juice	Diarrhoea, and vomiting
10	<i>Sesuvium portulacastrum</i> (L.) L	Aizoaceae	Whole plant	Remove salt from body, high blood pressure
11	<i>Ipomoea pes-caprae</i> (L) R.Br.	Convolvulaceae	Whole Plant	Used for treat to swelling of body parts
12	<i>Clerodendron inerme</i> (L.) Gaertn.	Verbenaceae	Leaves	Leaf extract Applied on Malaria, also treated on removing pain in jaundice.

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