

# Use Of Ethnomedicinal Plants For Traditional Purposes : Indians Who Depend On The Forests Of Northern Bengal

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## Abstract:

The traditional understanding of ethnomedicinal plants is gradually fading. The emphasis of this review article is for the rehabilitation and preservation of ethnomedicinal knowledge about plants and the conservation of these species for the greater good of human society, ethnobotanical resources must be explored, identified, and their use must be documented.

Key Words: ethnomedicinal plants, traditional medicines, preservation, globalization.

## Introduction:

Due to unsustainable human activity, natural resources are fast depleting as a result of globalisation and the green revolution. As a result, without putting enough attention on the richer localised natural resources, the main challenges facing human society are the constant change in climate, the decline in biodiversity, and the reliance on outside resources. Exploring indigenous knowledge is necessary in this situation to ensure ecological, economic, and environmental sustainability. Particularly, populations on the edges of forests depend on the forest to support their way of life. Since ancient times, people have used medicinal plants to treat a variety of illnesses [1]. A significant part of human culture is played by therapeutic herbs with a botanical origin [2]. The creation of new medications can benefit greatly from traditional medicine [3]. For the rehabilitation and preservation of traditional and indigenous knowledge, the research, exploitation, and protection of these ethnobotanical resources are crucial [4, 5]. It will be extremely important to utilise this newly gained plant knowledge in the near future [6]. Additionally, the trend in developing nations nowadays is to incorporate traditional medicines into the local healthcare system, and researchers' interest in exploring the enormous potential of ethnomedicinal knowledge for treating a variety of ailments has grown [7, 8].

People in distant and rural areas of India, especially West Bengal, still rely on traditional medicines to cure a variety of illnesses [9,10,11,12]. Due to a lack of access to modern medical facilities and their dismal socioeconomic situation, the indigenous Indo-Mongoloid population living in the Chilapatta Reserve Forest in the northern region of West Bengal still relies on goods derived from the forest for their healthcare requirements [10]. Elders worry that the propensity to lose interest in ancient customs will be a major factor in the loss of this richness of knowledge in the near future. Promoting study on these plants is essential in order to preserve traditional knowledge on ethnomedicinal plants, which is being lost as a result of acculturation, the loss of plant biodiversity, as well as indigenous people and their cultural heritage. [13, 14].

Ethnomedicinal studies contribute to the preservation of genetic and cultural variety as well as providing data and information for the protection and sustainable use of local wild plants. Without solid testimony from experts, the urban people will not embrace any new plant products, especially wild ones. Therefore, the current study was conducted in the forest fringe area of the Chilapatta Forest in West Bengal with the following objectives: (i) to document the ethnomedicinal plant species utilised by the community; (ii) to examine the

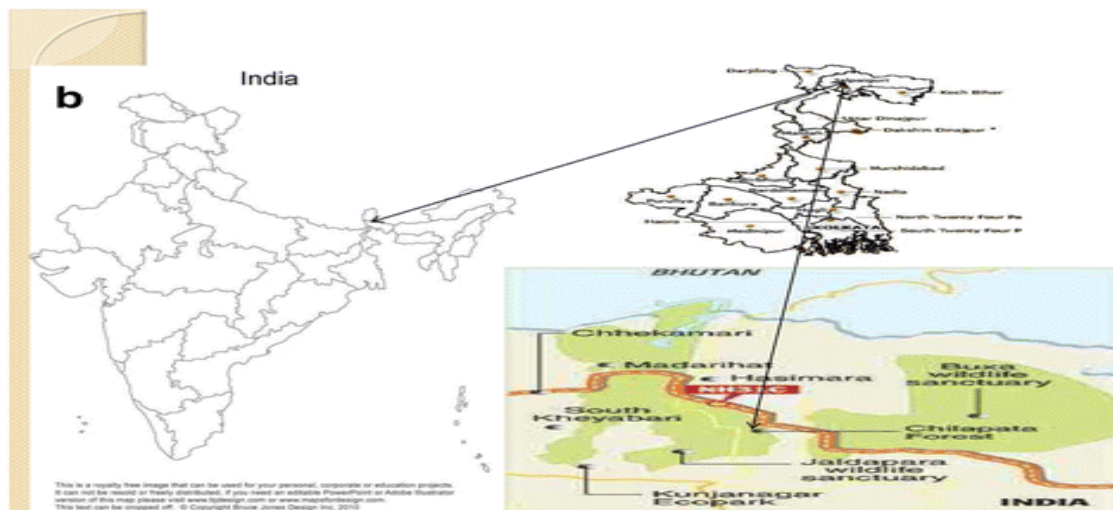
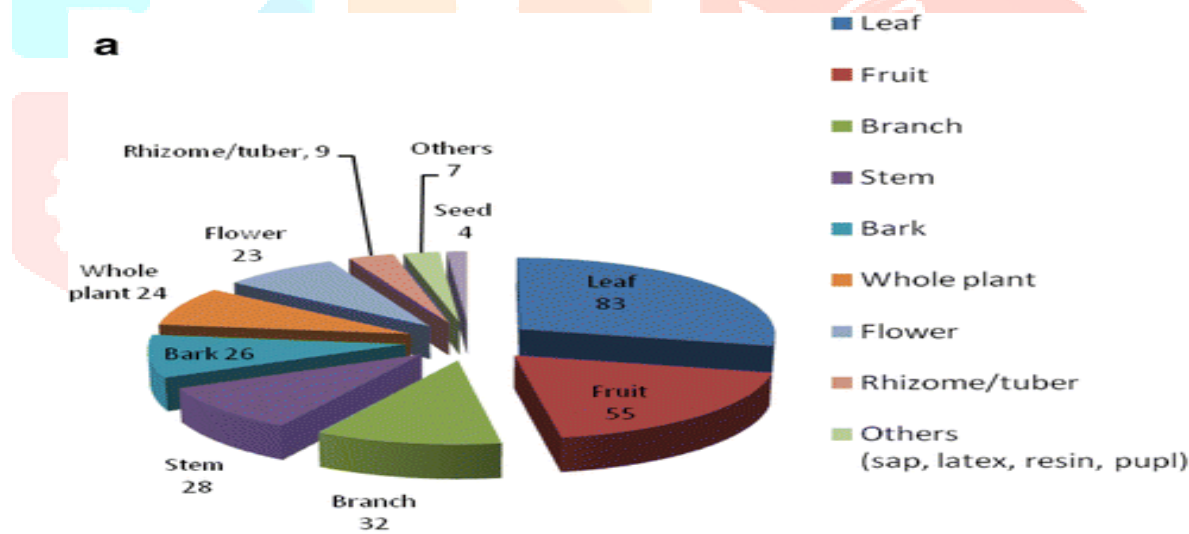
pattern and usage of traditional medicines; and (iii) to compare the reported uses with those described in other publications.

**Methods:**

From December 2014 to May 2016, the study was carried out in Chilapatta Reserve Forest's periphery sections, which are located in the foothills of the eastern sub-Himalayan mountain range in West Bengal, India. The area was chosen using a deliberate sampling technique. 400 respondents, including traditional healers, were chosen at random from this region's indigenous Indo-Mongoloid population for scheduled personal interviews using an open-ended questionnaire. Aspects including plant species used as ethnomedicines, plant components used, dosage and therapeutic procedures, and more were covered in the questionnaire.

**Results:**

140 ethnomedicinal species in all were reported, with trees dominating the lists (55), followed by herbs (39) and shrubs (30). 52 species were planted, 62 were growing naturally or were harvested from the forest for use, and 26 were both wild and planted of the total planted species used for ethnomedicine. In comparison to the 17 planted species recorded in an ethnomedical study ten years ago, 61 more planted species were documented in the current investigation. Nine species were utilised to treat eight diseases or ailments in domestic animals, while the reported species were used to treat 58 human diseases or ailments. Maximum number of plants (40 species) were used to treat stomach-related issues, followed by cuts and wounds (27 plant species), and least amount (one species each for 17 diseases or disorders). *Melia azedarach* was the plant that successfully treated the most illnesses—12—followed by *Centella asiatica* and *Rauvolfia serpentina*, which both successfully treated 11 illnesses.



## Conclusions:

The list of 140 plant species shows how diverse the ethnobotanical plant species are in the Chilapatta Reserve Forest and its surrounding areas. According to its highest use value, *Rauvolfia serpentina* was the most valued species. The documentation of 78 species kept in the backyard gardens shows that the community is aware of the importance of conserving these ethnobotanical species. Improved methods for cultivating economically viable ethnobotanical species, capacity building, timely policy action, and strong market links should all be used to support the communities. This will guarantee the creation of income, the enhancement of livelihoods, and ultimately the preservation of these species.

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