

Traditional Medicinal Knowledge of Underutilized Minor Fruits as Medicine in Northeast India: A Preview

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ABSTRACT

Northeast India is gifted with a high genetic diversity of fruits. The Hindustan centre represents as high as 344 species of fruits. Northeast India contains 136 horticultural species. More than 75 percent of the total population of northeast are directly or indirectly depends on agriculture. Wild fruits becomes an important source of food for the peoples this region. This wild fruits are mostly underutilized which are believed to be a major source for the raw material of many drugs and traditional medicines. The underutilized fruit products are of excellent quality in terms of medicinal, nutritional, and economic value but Very Little information is known to the researchers and locals about cultivation practices varieties, yield and quality of these underutilized fruit crops. Hence domestication of potential underutilized species, production of quality planting materials, improvement of vegetative propagation methods in order to reduce the gestation period, standardization of post harvest management and processing needs to be encouraged.

Keywords: Horticulture; Underutilized fruits; Medicinal value; Conservations

DESCRIPTION

India is gifted with a high genetic diversity of fruits. The Hindustan centre represents as high as 344 species of fruits. The Northeast India is one of the 18 mega biodiversity of the world which consist of Indo-Malayan and Indo-Chinese biogeographical areas [1-5]. These region contains 136 horticultural species specially 17 citrus species with as many as 53 varieties. The Northeast region of India comprises of eight states namely Arunachal Pradesh, Assam, Manipur, Mizoram, Nagaland, Sikkim and Tripura, lies between 21°57' and 29°28' north latitude and 89°40' to 97°50' east longitude. The total geographical area of the region is 2.55 lakh km² comprises of about 8 percent of the total area of the country. Hilly region consists of about 65 percent and the valley and plateau accounts for about 35 percent. The climate of the northeast region is very unique which offers a suitable condition for cultivation of all most all the fruit crops makes this region very rich in the genetic diversity for all the horticulture crops [6-10].

More than 75 percent of the total population of northeast are directly or indirectly depends on agriculture. The small and

Marginal farmers contribute about 85%-90% of total farming community with a low percentage of land holdings, so the cultivated and wild fruits becomes an important source of food for the peoples of hilly region. Being rich in minerals, vitamins and antioxidant properties, these wild underutilized fruits have played a very important role in supplementing the diet of the people of these regions. Though recently the consumption of the wild fruits has decreased due to the availability of the cultivated commercial fruits but many of the people are still using those underutilized fruit plants for their medicinal value [11-13].

Many of major and minor fruits have been originated from the Northeast region of India. A part from major fruits a large number of underutilized fruits also originated from these area but most of them remained unexploited due to lack of knowledge about their uses and cultivation practices. These underexploited fruits are rich in minerals, vitamins and antioxidant properties, most of these plants have the worth to be used for medicinal value [14].

Underutilized fruits are believed to be a major source for the raw material of many drugs and traditional medicines. It is now

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Received: February 26, 2021; **Accepted:** March 12, 2021; **Published:** March 19, 2021

Citation: Paul JR, Panda AK (2021) Traditional Medicinal Knowledge of Underutilized Minor Fruits as Medicine in Northeast India: A Preview. J Hort. 8: .

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widely known that the underutilized fruit products are of excellent quality in terms of medicinal, nutritional, and economic value. Many of the underutilized fruits are the important source of modern medicine such as cancer, diabetes, jaundice etc. In India, the fruit of aonla and bahera are used in 219 patented drugs where as Bael is entering in to 60 patented drugs. Aonla is used for making of Ayurvedic medicine chyavanprash, jamun seeds for treating the diabetes. Beside all this Underutilized fruits are associated with reduced risk of cancer, heart disease and other chronic diseases. These fruits are also associated with high antioxidants and also help to modify the metabolic activation [15,16].

There is no appropriate estimation on the area and production of underutilized fruit crops in the northeast region. Underutilized fruit crops are collected from forest and natural habitat to meet family needs. Very Little information is known to the researchers and locals about cultivation practices varieties, yield and quality of these underutilized fruit crops. But now researches and scientist have been developing many ways to maximize their economic value and uses. Many underutilized fruit crops have been domesticated and cultivation practices and the postharvest practices have also been developed [17-19].

CONCLUSION

The northeast states are blessed with a high genetic diversity of plants specially underutilized fruit plants. Northeast states has great potential in development of enterprises based on these underutilized fruits that can be that can be linked with conservation. These crops are playing a vital role in providing the food, nutrition, economic and medicinal value to the people of northeast. Very Little information is known to the researchers and locals about cultivation practices varieties, yield and quality of these underutilized fruit crops. In today's time the main concern is that farmers or poor people prefer the commercial crop over those underutilized crops causing a loss to the valuable resources. Hence there is a need to restructure the strategies to make aware the people about the value of these underutilized fruit crops along with the government assistance to the grower of these crops. The government should come up with new schemes, policy reforms and market development which will protect the underutilized crops along with benefiting the farmers who are willing to grow these crops. Further domestication of potential underutilized species, production of quality planting materials, improvement of vegetative propagation methods in order to reduce the gestation period, standardization of post harvest management and processing needs to be encouraged.

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