

## Under Utilized and under exploited fruits of Tripura – A Review

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### ABSTRACT

*The state of Tripura weather is characterized by subtropical, warm and humid condition which favours the growth and development of various edible fruit crops. In addition to the major fruits grown (Mango, Litchi, Pineapple, Orange, Banana and Jackfruit) in this state, there are many edible fruits exist naturally in forest areas. Although these fruit plants are playing a vital role in providing nutritional and economic security but they are ignored. The present paper reviewed on wild edible fruits documented in different parts of Tripura.*

**Key words:** Tripura, Wild, Edible fruits

### INTRODUCTION

Tripura is one of the eight jewels of the North-Eastern States and the total geographical area of Tripura is about 10,491sq km of which 60 per cent constitute forest and remaining 40 per cent is available for cultivation. More than 75 per cent of the population either directly or indirectly depends on agriculture. The small and Marginal farmers contribute about 90 per cent of total farming community and the average size of land holding is 0.97 ha which is the lowest among the seven other North-Eastern states. So fruits were an important source of food for the people of Tripura. These wild fruits have played a very vital role in supplementing the diet of the people. Recently, the use of wild fruits as a food has decreased due to availability of improved commercially

cultivated fruit plants. Although the popularity of these wild forms of fruits has declined which has led to the threat of the extinction yet they are very rich source of some rare traits and special attention should be given in order to maintain its diversity. Tripura is located at 22°56' to 24°32' latitude and 91°10' to 92° 21' Longitude. The state weather is characterized by warm and humid subtropical climate with three distinct seasons, viz. summer, monsoon and winter. Tripura receives an average rainfall of 2065mm. the monsoon breaks in May-June and continues for about 4-5 months. The agro climatic conditions, fertile soils and good amount of rainfall favours the existence of large number of fruit crops in this region.

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There is a huge genetic diversity which should be trapped, conserved and utilized for sustainable development.

**Materials and methods:** Various journals and books from internet were used to study. Various publications dealing with wild edible fruit of Tripura. Various publications dealing with wild edibles, ethnography and botany was surveyed. All information summarized in this review. All information summarized in this review refers to use of wild edible fruits within the boundaries of Tripura, based on literature sources providing relevant information.

#### Under exploited fruits of Tripura

Chakraborty and Chaturvedi<sup>5</sup> reported a total of 61 wild fruit plants in different district of Tripura. Of the total 1 species belonged to herbs, 12 species to shrub, 45 to trees and 3 to climbers. It is found that all the enumerated plant species are very commonly used by the tribal population. The species recorded in study are found promising role as a dietary supplement in the food habits of the tribal and other ethnic communities. Out of these edible plants 8 species each belonged to family Moraceae and Phyllanthaceae, 7 to Rosaceae, 4 to Myrtaceae, 2 species each belong to Anonaceae, Arecaceae, Dilleniaceae, Elaeocarpaceae, Salicaceae, Rhamnaceae,

Malvaceae & Vitaceae and 1 species each belonged to Apocynaceae, Rutaceae, Sapotaceae, Passifloraceae, Solanaceae, Anacardiaceae, Caesalpiniaceae, Cornaceae, Ulmaceae, Oxalidaceae, Euphorbiaceae, Fagaceae, Rubiaceae, Sapotaceae.

Sankaran *et al.*<sup>3</sup> reported 40 fruits plants in West and South Tripura districts of Tripura. Out of 40 plants mentioned in their survey all are widely found in Tripura except *Borassus flabellifer*, *Feronia limonia*, *Manilkara achras*, *Phoenix sylvestris* and *Tamarindus indica* which are found in West Tripura only and *Mangifera sylvatica* is restricted to North Tripura. *Passiflora edulis* and *Phyllanthus acidus* are limited to West and South Tripura.

After survey by different authors in this present review we made a list of wild edible fruits of Tripura which is having the significant importance.

#### CONCLUSION

There are many wild fruits in the state of Tripura, there is no proper documentation. Hence emphasis should be given to collection, evaluation, conservation, nutritional and anti-nutritional properties and product development and marketing for sustainable development.

**Table 1: List of some underexploited fruits of Tripura**

Sl. No.	Family	Botanical Name	Common Name	Local Name(B)	Remarks /Uses
1.	Annonaceae	<i>Annona reticulata</i> L	Custard apple	Ata phal	Ripe and unripe fruit is edible.
2.	Annonaceae	<i>Annona squamosa</i> L	Custard apple	Sita phal	Fruits are edible, roots and seeds are medicinal.
3.	Arecaceae	<i>Borassus flabellifer</i> L.	Palmayra palm	Tal	Sap drink as palm wine. Ripe fruits and seed are edible. Leaves used in making hand fan.
4.	Apocynaceae	<i>Carissa carandas</i> L.	Karonda	Karamcha	Unripe fruit is used as vegetables and pickles.
5.	Arecaceae	<i>Phoenix humilis</i> Royle.	Date Palm	Khejur	Sap is used as palm wine. Ripe fruits are edible and used in jaggery
6.	Anacardiaceae	<i>Spondias dulcis</i> L.	Hogplum	Amra	Unripe fruits are used in pickles
7.	Burseraceae	<i>Protium serratum</i>	Indian Red Pear		Fruit is also used as a medicinal.
8.	Caesalpiniaceae	<i>Tamarindus indica</i> L.	Tamarind	Tetul	Ripe fruits are used in pickles.
9.	Cornaceae	<i>Alangium salviifolium</i>	Ankura	Ankura /bagh	Fruit is also used as a medicinal.
10.	Clusiaceae	<i>Garcinia pedunculata</i>		Baikal	Fruit is also used as a medicinal
11.	Capparaceae	<i>Stixis suaveolens</i> (Roxb.)Baill.	Karmal	Mooni madhumaliti	Fruit is also used as a medicinal
12.	Dilleniaceae	<i>Dillenia pentagyna</i> Roxb.		Chalta	Fruit is also used as a Pickle, different cultural Programme.

13.	Elaeocarpaceae	<i>Elaeocarpus floribundus</i> <i>Blume</i>	Wild olive	Jalpai	Unripe fruits are used in pickles and Ripe fruits edible.
14.	Euphorbiaceae	<i>Bridelia stipularis</i> (L.)Bl.Bijdr.		Kolia lata	Fruit is also used as a medicinal
15.	Elaeagnaceae	<i>Elaeagnus conferta</i> Roxb.			Olive oil is extracted from fruit
16.	Fagaceae	<i>Castanopsis tribuloides</i>		Bara hingari	Fruits locally used
17.	Moraceae	<i>Artocarpus chalpasha</i> Roxb.		Chamal	Table fruit, consumed by the local people
18.	Moraceae	<i>Artocarpus heterophyllus</i> Lam.	Jack Fruit	Khatal	Unripe fruits are used in pickles and ripe fruits edible. Seeds used in vegetables
19.	Moraceae	<i>Ficus carica</i> L.	Fig	Goolar	Ripe fruit and processed fruit
20.	Moraceae	<i>Ficus hispida</i> L.		Dumur dhaugri	Fruit is edible.
21.	Moraceae	<i>Morus australis</i> Poir.		Tut	Ripe fruit is eaten.
22.	Moraceae	<i>Artocarpus lacucha</i>		Dhemphal	Fruit is also used as a medicinal.
23.	Moraceae	<i>Ficus oligodon</i> Miq. Ann.		Jamrul	Fruit is also used as a medicinal.
24.	Moraceae	<i>Ficus rumphii</i> Bl. Bijdr.		Bhali jum	Fruit is also used as a medicinal.
25.	Myrtaceae	<i>Syzygium samarangense</i>		Kala jam	Fruit is used as table fruit and have also medicinal value
26.	Myrtaceae	<i>Syzygium nervosum</i>		Golap jam	Fruit is also used as a medicinal.
27.	Myrtaceae	<i>Syzygium cumini</i> (L.)	Black Plum		Ripe fruit is eaten. Seeds are useful in controlling diabetes.
28.	Oxalidaceae	<i>Averrhoa bilimbi</i> L.		Bilimbi	Fruit is also used as a Vegetable and Pickle.
29.	Passifloraceae	<i>Baccaurea ramiflora</i>			Fruit is also used as medicinal.
30.	Phyllanthaceae	<i>Passiflora edulis</i>			Juicy Fruits are edible and leaves are used in vegetables
31.	Phyllanthaceae	<i>Phyllanthus acidus</i>			Unripe fruits are used in pickles and medicine
32.	Phyllanthaceae	<i>Antidesma acidu</i>			Ripe fruit are used as a pickle
33.	Phyllanthaceae	<i>Antidesma buniu</i>			Ripe fruit are used as a pickle
34.	Phyllanthaceae	<i>Antidesma montanum</i>			Ripe fruit are used as a pickle
35.	Rosaceae	<i>Eriobotrya japonica</i>	Loquat	Loquat	Ripe fruit is used as a table purpose and process product also prepared
36.	Rosaceae	<i>Prunus domestic</i>	Plum	Plum	Fruit is heaving commercial value, used as a table fruit.
37.	Rosaceae	<i>Prunus persic</i>	Peach	Peach	Fruit is heaving commercial value, used as a table fruit.
38.	Rosaceae	<i>Rubus ellipticu</i>	Raspberry	Raspberry	Fruit is heaving commercial value, used as a table fruit.
39.	Rhamnaceae	<i>Ziziphus mauritian</i>	Ber		Ripe fruit are eaten and dried fruits are used for making pickels
40.	Rhamnaceae	<i>Ziziphus oenopolia</i>			Ripe fruit is eaten.
41.	Rhamnaceae	<i>Rubus moluccanu</i>	Molucca bramble		Fruit is used as a medicinal purpose.
42.	Salicaceae	<i>Flacourtia jangomas</i>		Tekroi	Ripe fruit I is eaten
43.	Sapotaceae	<i>Chrysophyllum cainito</i>	Star apple		Ripe fruit is eaten
44.	Vitaceae	<i>Tetrastigma lanceolarium</i>		Krishna	Fruit is used as a climber

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