

Traditional wild edible fruits for the forest dwellers of Tripura, India

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Abstracts

The present communication deals with the ethnobotanical observation of wild edible fruit plants of Tripura state. The state bearing a rich diversity of both wild and planted fruits, which are still consuming more or less by all traditional communities of the state. The present paper highlights on 86 species of wild edible fruits belonging to 63 genera and 37 families. Plants are enumerated in alphabetical order with their botanical names, habit, availability, local name(s), fruiting period and their mode of utilization by local people.

Key words: Wild edible fruits, forest dwellers, Tripura

INTRODUCTION

World over, tribal population still stores a vast knowledge on the utilization of local plants as food material and other specific uses (Sundriyal *et al.* 1998). Traditionally, local communities worldwide are extremely knowledgeable about the local plant resources on which they are so intimately and immediately dependent. Unfortunately much of this knowledge is lost today, as traditional cultures are getting eroded (Hamilton 1995). Among the strategies used by the rural people to overcome food shortage is tend to depend on wild food, including wild fruits. These edible plants may greatly contribute to the diet of rural people by providing rare nutrients and facilitating survival in time of famine (Guy-Alain & Francois 2001). Such wild edible plants not only supplement the food quantity but also make significant contribution to the population's nutrition throughout the year (Ogle Britta *et al.* 2003). Use of large number of wild species by the tribal to meet their diverse requirements is largely due to the prevalence of diversity of vegetation in an area (Katewa 2003).

Tripura is a small hilly state is located in the North-Eastern part of the country, surrounded by Bangladesh on three sides and rich diversity of both flora and fauna. Over 60% of the state is hilly and there are five distinct hill ranges running parallel to each other from north to south interspersed with valleys in between through which run all the rivers of the state, west ward till they meet the river Brahmaputra in Bangladesh. The total area of the state is 10,497.69 sq km and is located between 22° 56' to 24° 32' North latitude and between 90° 09' to 92° 20' East longitude. The climate is characterized by moderate temperatures that ranging between 10° C – 35° C and a highly humid atmosphere with the annual rainfall of about 247.9 cm. Forest covers an area of about 6292.681 sq km. This suitable tropical climate support luxurious growth of various types of forests scattered all over the state from hilly tract to plain. About 19 ethnic groups predominantly living in and around the forests of Tripura with cooperating nature, have their own language, culture, food-habit and socio-religious traditions. The sustainable utilization of wild plant in daily life for food, medicine, fodder, house building, craft and agriculture is an integral part of their traditional rich tribal culture. They collect many wild plants for sustaining their wide array of socio-economic and cultural life including food. The process also generates some income through the sale of their excess collections in the local market. Collection of many seasonal wild edible fruits available in the surrounding forests not only meets their daily requirement but also enhance their annual food storage. It is a traditional practice of seasonal gathering of nutrition and medicine. Considering this fact, an attempt has been made to document the edible fruits resources especially which are consumed raw and locally available in wild condition in different forests of Tripura.

In addition to the wild edible fruit yielding plants a good number of popular fruit-plants are also cultivated by these people in and around their home garden like *Anacardium occidentale* L., *Spondias axillaries* Roxburgh, *Litchi chinensis* (Gaertner) Sonnerat (Anacardiaceae), *Annona reticulata* L., *Annona squamosa* L. (Annonaceae) *Averrhoa bilimbi* L., *Averrhoa carambola* L.(Averrhoaceae), *Phoenix sylvestris* Roxburgh, *Cocos nucifera* L., *Borassus flabellifer* L.

(Arecaceae), *Carica papaya* L. (Caricaceae), *Carissa carandas* L. (Apocynaceae) *Cucumis melo* L., *Cucumis sativus* L., *Citrullus lanatus* (Thunberg) Matsumura & Nakai, *Citrullus vulgaris* Schrad. ex Eckl. & Zeyh. (Cucurbitaceae), *Citrus reticulata* Blanco., *Elaeocarpus floribundus* Blume (Elaeocarpaceae), *Manilkara zopota* (L.) Royen., *Mimusops elengi* L. (Sapotaceae), *Morus indica* L. (Moraceae), *Musa paradisiaca* L. (Musaceae), *Psidium guajava* L. (Myrtaceae), *Passiflora edulis* Sims (Passifloraceae), *Phyllanthus acidus* Skeels (Euphorbiaceae), *Prunus persica* (L.) Batsch (Rosaceae), *Punica granatum* L. (Punicaceae), and *Ziziphus marutiana* Lammers (Rhamnaceae).

METHODS OF SURVEY

Ethnobotanical study was conducted in various parts of the state during 2006 – 2008. Information regarding the utilization of wild edible fruits were obtained through semi-structured interview, field observation, group discussion and market survey from different tribal communities of Tripura (*Tripuri, Reang, Jamatia, Darlong and Santal* etc.). Specimens were collected by consulting with the local informants. Herbarium specimens were dried and preserved by adopting methodology proposed by Jain & Rao (1977). Plants were identified with the help of standard treaties viz. Hooker (1872 – 1897), Prain (1903), Kanjilal *et al.* (1934 – 1940) and Deb (1981, 1983). The voucher specimens are deposited in the Herbarium of the Department of Botany, Tripura University.

ENUMERATION

The wild fruit plant species are arranged below alphabetically along with their botanical name, family, local name(s), habit, availability, flowering and fruiting periods and their usage.

Aegle marmelos (L.) Correa [Rutaceae]; **Local Name:** *Bel*; Small deciduous tree.

Availability: Common; planted as well as wild. **Flowers & Fruits:** September to February.

Exsiccatus: *Datta 0116*.

Use: Sometimes unripe fruits after burn are eaten. Ripe fruit is eaten alone or either a special type of drink (*Bel Sarbat*) is prepared with salt, sugar and milk.

Alangium salvifolium (L.f.) Wang [Alangiaceae]; **Local Name:** *Ankura, Bagh-ankura*; Small deciduous tree. **Availability:** Occasional. **Flowers & Fruits:** April to August.

Exsiccatus: *Majumdar, 0126*.

Use: Only ripe black globose fruits eaten.

Ananas comosus (L.) Merrill [Bromeliaceae]; **Local Name:** *Anarosh, Anarosa*; Tufted stemless herb,

Availability: Very common; planted and naturalized. **Flowers & Fruits:** June to August.

Exsiccatus: *Majumdar, 0087*.

Use: Both unripe and ripe fruit is eaten with salt and green chillies. Sometime ripe fruits are also taken in the form of juice. Ripe fruits also cooked to prepare a special curry (*Anaros Tok*).

Antidesma acidum Retzius [Euphorbiaceae]; **Local Name:** *Iheri, Elna*; A small deciduous tree.

Availability: Common. **Flowers & Fruits:** December to February.

Exsiccatus: *Majumdar, 0136*.

Use: The small ripe fruit is eaten as raw, acidic in taste.

Antidesma bunius (L.) Sprengel [Euphorbiaceae]; **Local Name:** *Karanda, Malunga*; An evergreen shrub,.

Availability: Common. **Flowers & Fruits:** August to October

Exsiccatus: *Majumdar, 0129*.

Use: Ripe fruits are edible and acidic in taste.

Antidesma ghaesembilla Gaertner [Euphorbiaceae]; **Local Name:** *Khudijam*; A small deciduous tree.

Availability: Common. **Flowers & Fruits:** September to December.

Exsiccatus: *Majumdar*, 0133.

Use: Ripe fruits eaten.

Aphanamiixis polystachya (Wallich) R.N. Paker [Meliaceae]; **Local Name:** *Bagi-rata, Pitraj*; A medium tree.

Availability: Common. **Flowers & Fruits:** December to March. **Exsiccatus**

Exsiccatus: *Majumdar*, 0246.

Use: Ripe fruits edible; young fruits used as vegetable.

Artocarpus chaplasha Roxburgh [Moraceae]; **Local Name:** *Chamal, Chaplash, Cham, Thaichual*; Large deciduous tree.

Availability: Common. **Flowers & Fruits:** April to August.

Exsiccatus: *Datta*, 0132.

Use: Ripe fruits edible, pulp sweet to sour; dry seed eaten after roasting

Artocarpus heterophyllus Lamarck [Moraceae]; **Local Name:** *Kanthal, Kadal, Thaipung*; Large evergreen tree.

Availability: Very common; planted and wild. **Flowers & Fruits:** April to August.

Exsiccatus: *Majumdar*, 0219.

Use: Ripe fruit is very popular in the state; tender fruits used as vegetable

Artocarpus lakoocha Roxb. [Moraceae]; **Local Name:** *Borta, Dephal, Deua*; A large deciduous tree.

Availability: Common. **Flowers & Fruits:** June to July.

Exsiccatus: *Majumdar*, 0126.

Use: Fruits are mostly eaten by children, sour in taste.

Baccaurea ramiflora Lour. [Euphorbiaceae]; **Local Name:** *Latkan, Bhubi, Puli*; A small tree.

Availability: Occasional. **Flowers & Fruits:** August to September.

Exsiccatus: *Datta*, 0139.

Use: Fruits are edible, when ripe turns into deep brown color and sweetish in taste.

Bischofia javanica Bl. [Euphorbiaceae]; **Local Name:** *Khungthi*; A large deciduous tree.

Availability: Occasional. **Flowers & Fruits:** March to April.

Exsiccatus: *Datta*, 0131.

Use: The brown fleshy globose berry are eaten when ripe and sweetish in taste.

Bridelia retusa (L.) Sprengel [Euphorbiaceae]; **Local Name:** *Kumkum, Kamkui*; A middle sized deciduous tree. **Availability:** Common. **Flowers & Fruits:** October to March.

Exsiccatus: *Majumdar*, 0112.

Use: Pulp are edible, slightly sweetish to astringent.

Bridelia stipularis (L.) Bl. [Euphorbiaceae]; **Local Name:** *Koilila lata*; A scandent shrub.

Availability: Very common. **Flowers & Fruits:** September to January.

Exsiccatus: *Majumdar*, 0144.

Use: The ripe bluish black fruits are mostly eaten by children, astringent.

Buchanania lanzan Spreng. [Anacardiaceae]; **Local Name:** *Piyal, Chironji*; A deciduous tree.

Availability: Rare. **Flowers & Fruits:** April to June .

Exsiccatus: *Datta*, 0319.

Use: Fruit is eaten after roasting.

Calamus erectus Roxb. [Arecaceae]; **Local Name:** *Bettoni, Raisok*; An erect cane.

Availability: Occasional. **Flowers & Fruits:** October to December.

Exsiccatus: *Majumdar, 0222.*

Use: Mesocarp of ripe fruits is eaten, sour to astringent in taste.

Calamus viminalis Willd. [Arecaceae]; **Local Name:** *Bet gota, Rigorusam*; A climbing cane.

Availability: Common. **Flowers & Fruits:** November to January.

Exsiccatus: *Majumdar, 0154.*

Use: Ripe fruit is eaten with salts and chilly, sour in taste.

Castanopsis tribuloides A.DC. [Fagaceae]; **Local Name:** *Bara hingra*; A middle sized evergreen tree. **Availability:** Occasional. **Flowers & Fruits:** June to September.

Exsiccatus: *Majumdar, 0237.*

Use: Nuts are edible

Citrus maxima (Burm.) Merr. [Rutaceae]; **Local Name:** *Jambura, Batabi, Jamura*; A small tree.

Availability: Common. planted as well as wild. **Flowers & Fruits:** August to November.

Exsiccatus: *Datta, 0211.*

Use: Vesicles of ripe fruit are eaten with salts and green chilly.

Citrus medica L. [Rutaceae]; **Local Name:** *Jamir, Pat lebu, Jamir*; A large shrub or small tree.

Availability: Common, planted as well as wild. **Flowers & Fruits:** June to September.

Exsiccatus: *Majumdar, 0161.*

Use: Mature fruit is eaten like *C. maxima*.

Crataeva religiosa Forster f. [Capparaceae]; **Local Name:** *Barun*; A small sized deciduous tree.

Availability: Occasional, planted as well as wild. **Flowers & Fruits:** August to October.

Exsiccatus: *Datta, 0146.*

Use: Tender and mature fruits are cooked; sometimes ripe fruit is eaten raw.

Croton oblongifolius Roxburgh [Euphorbiaceae]; **Local Name:** *Choka gota*; A small deciduous tree.

Availability: Common. **Flowers & Fruits:** November to February.

Exsiccatus: *Majumdar, 0076.*

Use: Ripe fruits are slightly acidic to tasteless.

Dillenia indica L. [Dilleniaceae]; **Local Name:** *Chalta*; A middle sized evergreen tree.

Availability: Common, wild as well as planted. **Flowers & Fruits:** August to April.

Exsiccatus: *Majumdar, 0135.*

Use: Mature fruit is eaten raw or prickled, sour in taste.

Diospyros peregrina Guerke [Ebenaceae]; **Local Name:** *Bon gab, Makur*; A middle sized evergreen tree.

Availability: Occasional. **Flowers & Fruits:** September to December.

Specimen Cited: *Majumdar, 0249.*

Use: Ripe fruit is eaten sweet to astringent.

Dryptetes assamica (Hooker f.) Paxton [Euphorbiaceae]; **Local Name:** *Jiaput*; A small evergreen tree.

Availability: Occasional. **Flowers & Fruits:** June to August.

Specimen Cited: *Majumdar*, 0541.

Use: Ripe fruit are eaten and sour in taste.

Elaeocarpus prunifolia Wallich ex Masters [Elaeocarpaceae]; **Local Name:** *Bon Jalpai*; A middle sized tree. **Availability:** Rare. **Flowers & Fruits:** September to November.

Specimen Cited: *Majumdar*, 0343.

Use: Fruit is eaten raw, sour in taste.

Emblica officinalis Gaertner [Euphorbiaceae]; **Local Name:** *Amloki, Amlai*; A small deciduous tree.

Availability: Common. **Flowers & Fruits:** March to October

Specimen Cited: *Datta*, 0249.

Use: Both tender and mature fruits are eaten and acidic in taste.

Eryoglossum rubiginosum (Roxburgh) Blume [Sapindaceae]; **Local Name:** *Muli*; A small tree.

Availability: Common. **Flowers & Fruits:** April to June.

Specimen Cited: *Majumdar*, 0224.

Use: Ripe brown to black fruit is eaten, sweet in taste.

Euryale ferox Salisbury [Nymphaeaceae]; **Local Name:** *Makhna, Pukhal*; An aquatic herb.

Availability: Common. **Flowers & Fruits:** October to February

Specimen Cited: *Datta*, 0117.

Use: Seeds are eaten raw or roasted, sometimes fruits used as vegetable.

Ficus hispida L.f. [Moraceae]; **Local Name:** *Damur*; A small tree.

Availability: Very common. **Flowers & Fruits:** Throughout the year.

Specimen Cited: *Majumdar*, 0055.

Use: Yellow receptacle sweet to astringent.

Ficus racemosa L. [Moraceae]; **Local Name:** *Jagga damur*; A large deciduous tree.

Availability: Common. **Flowers & Fruits:** August to October.

Specimen Cited: *Majumdar*, 0128.

Use: Red receptacle sweet to astringent.

Fissistigma verrucosum (Hooker f. & Thomson) Merrill [Annonaceae]; A woody climber.

Availability: Occasional. **Flowers & Fruits:** April to August.

Specimen Cited: *Majumdar*, 0289.

Use: Ripe capsule are eaten by children.

Flacourtia jangomas (Loureiro) Raeuschel [Flacourtiaceae]; **Local Name:** *Paniala, Peyala*; A small deciduous tree. **Availability:** Occasional. **Flowers & Fruits:** June to October.

Specimen Cited: *Dattar*, 0227.

Use: Only ripe fruit is eaten.

Flacourtia indica (Burman f.) Merrill [Flacourtiaceae]; **Local Name:** *Baichi*; A small deciduous tree.

Availability: Occasional. **Flowers & Fruits:** April to June.

Specimen Cited: *Datta*, 0171.

Use: Ripe fruits are sweet when ripe.

Garcinia cowa Roxburgh [Clusiaceae]; **Local Name:** *Kao, Cowa*; A middle sized deciduous tree.

Availability: Common. **Flowers & Fruits:** February to July.

Specimen Cited: *Majumdar*, 0152.

Use: Ripe yellow fruit is eaten and pulp sour in taste.

Garcinia lanceaefolia Roxburgh [Clusiaceae]; **Local Name:** *Bon kao*; An evergreen small tree.
Availability: Common. **Flowers & Fruits:** December to February.

Specimen Cited: *Majumdar*, 0229.

Use: Pulp of yellow ripe fruit is eaten, acidic to sweetish in taste.

Garcinia paniculata Roxburgh [Clusiaceae]; **Local Name:** *Bara bon kao*; A middle sized evergreen tree. **Availability:** Occasional. **Flowers & Fruits:** April to June.

Specimen Cited: *Datta*, 0306.

Use: Pulp of yellow ripe fruit is eaten, acidic to and sweet in taste.

Garcinia xanthochymos Hooker [Clusiaceae]; **Local Name:** *Demphal, Tamal*; A middle sized tree.

Availability: Common. **Flowers & Fruits:** April to July.

Specimen Cited: *Majumdar*, 0192.

Use: Pulp eaten and very sour in taste.

Gardenia resinifera Roth [Rubiaceae]; **Local Name:** *Kathal chapa*; A small evergreen tree.

Availability: Common. **Flowers & Fruits:** September to January.

Specimen Cited: *Majumdar*, 0088.

Use: Ripe fruits are eaten raw.

Garuga pinnata Roxburgh [Meliaceae]; **Local Name:** *Neura, Chokka gota, Bombok, Engla*; A middle sized tree.

Availability: Common. **Flowers & Fruits:** June to October.

Specimen Cited: *Majumdar*, 0331.

Use: Ripe berry are eaten raw and sour in taste.

Grewia hirsuta Vahl [Tiliaceae]; **Local Name:** *Pichondi*; A large shrub.

Availability: Common. **Flowers & Fruits:** August to July.

Specimen Cited: *Datta*, 0125.

Use: Ripe radish brown fruits are mostly eaten by children.

Grewia sapida Roxburgh [Tiliaceae]; **Local Name:** *Pichondi*; A small shrub.

Availability: Common. **Flowers & Fruits:** August to July.

Specimen Cited: *Datta*, 0121.

Use: Ripe fruit is eaten and astringent in taste.

Haemotocarpus thomsonii Miers [Menispermaceae]; A climber.

Availability: Very rare. **Flowers & Fruits:** April to July.

Specimen Cited: *Datta*, 0336.

Use: Blood red like small fruit is sweetish and eaten as raw.

Hodgsonia macrocarpa (Blume) Cogniaux [Cucurbitaceae]; **Local Name:** *Makal*; A woody climber.

Availability: Occasional. **Flowers & Fruits:** November to February.

Specimen Cited: *Majumdar*, 0305.

Use: Fresh fruit is eaten raw rarely, mostly seeds eaten after roasting, slightly sweet in taste.

Mangifera indica L. [Anacardiaceae]; **Local Name:** *Am, Thichuk*; A middle sized evergreen tree.

Availability: Naturalized, very common. **Flowers & Fruits:** April to July.

Specimen Cited: *Datta*, 0075.

Use: Both ripe and immature fruit is eaten.

Mangifera sylvatica Roxburgh [Anacardiaceae]; **Local Name:** *Bon am, Uri am, Lakshi am, Thaichual*; A large evergreen tree. **Availability:** Very rare. **Flowers & Fruits:** April to June.

Specimen Cited: *Majumdar*, 0421.

Use: Ripe yellow fruit are eaten raw and sour in taste.

Melastoma malabthricum L. [Melastomaceae]; **Local Name:** *Phutki*; A bushy shrub.

Availability: Very common. **Flowers & Fruits:** Throughout the year.

Specimen Cited: *Datta*, 0058.

Use: Ripe fruit is eaten by children and sweet to astringent taste.

Memecylon umbellatum Burman f. [Melastomaceae]; **Local Name:** *Bon phukti*; A small tree.

Availability: occasional. **Flowers & Fruits:** July to September

Specimen Cited: *Datta*, 0311.

Use: Seeds of ripe fruit are eaten by children.

Meyna spinosa Roxburgh [Rubiaceae]; **Local Name:** *Monkanta, mongota*; A small deciduous tree.

Availability: Common. **Flowers & Fruits:** December to February.

Specimen Cited: *Majumdar*, 0123.

Use: Yellow fleshy ripe fruit is eaten, slightly sweetish.

Microcos paniculata L. [Tiliaceae]; **Local Name:** *Pichla, Pichandi*; A semi deciduous tree.

Availability: Very common. **Flowers & Fruits:** October to January.

Specimen Cited: *Majumdar*, 0042.

Use: Small black ripe fruits are chewed by children, sweet in taste.

Micromelum integerrimum (Buchanon-Hamilton ex DC.) Wright & Arnott [Rutaceae]; **Local Name:** *Ban jamir, Karai*; Small evergreen tree.

Availability: Common; wild. **Flowers & Fruits:** March to June.

Specimen Cited: *Majumdar*, 0164.

Use: Small orange colour ripe fruit is eaten

Musa acuminata Colla. [Musaceae]; **Local Name:** *Bon kola, Thailik, Ramkala*; A stoloniferous herb.

Availability: Very common. **Flowers & Fruits:** Throughout the year.

Specimen Cited: *Majumdar*, 0401.

Use: Ripe fruit is eaten raw.

Nelumbo nucifera Gaertner [Nymphaeaceae]; **Local Name:** *Padda phul*; An aquatic herb.

Availability: Common. **Flowers & Fruits:** September to December.

Specimen Cited: *Datta*, 0221.

Use: The ripe carpels are eaten raw or cooked.

Paramignya scandens Craib [Rutaceae]; **Local Name:** *Bon nimbu*; A scandent shrub.

Availability: Rare. **Flowers & Fruits:** April to July.

Specimen Cited: *Majumdar*, 0567.

Use: Ripe globuse fruits are mostly eaten by children.

Passiflora foetida L. [Passifloraceae]; **Local Name:** *Jhumko lata, Bon komola*; A climber.

Availability: Common. **Flowers & Fruits:** June to August.

Specimen Cited: *Datta*, 0120.

Use: Orange colour ripe fruit is eaten, slightly sour to sweetish.

Parkia javanica (Lamareck) Merrill [Mimosaceae]; **Local Name:** *Pukkatetoi*, *Kukitetoi*, *Youngchak*; A middle sized tree.

Availability: Occasional, planted as well as wild. **Flowers & Fruits:** March to May.

Specimen Cited: *Majumdar*, 0327.

Use: Tender fruits are rarely eaten raw, mostly used as vegetable.

Pegia nitida Colebrook [Anacardiaceae]; **Local Name:** *Bon am*; A scandent shrub.

Availability: Occasional. **Flowers & Fruits:** April to June.

Specimen Cited: *Datta*, 0333.

Use: Ripe drupe is eaten, sour in taste.

Phoenix humilis Royle [Arecaceae]; **Local Name:** *Bon khejur*; A dwarf date palm.

Availability: Occasional. **Flowers & Fruits:** June to August.

Specimen Cited: *Majumdar*, 0245.

Use: Yellow ripe fruit is eaten raw and slightly sweetish in taste.

Protium serratum (Wallich ex Colebrook) Engler [Burseraceae]; **Local Name:** *Elna*; A large deciduous tree.

Availability: Occasional. **Flowers & Fruits:** May to October.

Specimen Cited: *Datta*, 0196.

Use: Pulp of the ripe fruit is eaten and acidic in taste.

Psidium guineense Swartz [Myrtaceae]; **Local Name:** *Bon peyara*; A small evergreen under shrub.

Availability: Rare. **Flowers & Fruits:** July to September.

Specimen Cited: *Majumdar*, 0177.

Use: A mature fruit is eaten and sweetish in taste.

Rubus niuevs Thunburgh [Rosaceae]; **Local Name:** *Beri*; A shrub.

Availability: Occasional. **Flowers & Fruits:** November to February.

Specimen Cited: *Majumdar*, 0481.

Use: Succulent black ripe fruit is eaten raw and slightly sour taste.

Sapium baccatum Roxburgh [Euphorbiaceae]; **Local Name:** *Puligota*; A middle sized tree.

Availability: Common. **Flowers & Fruits:** July to September.

Specimen Cited: *Majumdar*, 0193.

Use: The pulp of black ripe fruit is eaten raw and sweetish to astringent.

Securinega virosa (Roxburgh ex Wild) Baillon [Euphorbiaceae]; A small tree.

Availability: Occasional. **Flowers & Fruits:** November to February.

Specimen Cited: *Datta*, 0259.

Use: Ripe acidic fruit is eaten as raw by local tribes.

Semicarpus anacardium L.f. [Anacardiaceae]; **Local Name:** *Bhela*; A middle sized deciduous tree.

Availability: Occasional. **Flowers & Fruits:** October to December.

Specimen Cited: *Majumdar*, 0186.

Use: Roasted nuts are eaten and sweet in taste.

Spondias pinnata (L.f.) Kurz. [Anacardiaceae]; **Local Name:** *Bon amrah*; A middle sized deciduous tree. **Availability:** occasional. **Flowers & Fruits:** May to September

Specimen Cited: *Majumdar*, 0148.

Use: Both ripe and unripe fruit is eaten raw and very sour in taste.

Sterculia indica Merrill [Sterculiaceae]; **Local Name:** *Bara udal, Lumbak*; A small deciduous tree.

Availability: occasional. **Flowers & Fruits:** February to April

Specimen Cited: *Majumdar*, 0163.

Use: Commonly roasted fruit is eaten, sometimes raw.

Stixis suaveolens Roxburgh [Capparaceae]; **Local Name:** *Madhumalati, Mooni*; A large woody climber.

Availability: Common. **Flowers & Fruits:** March to May.

Specimen Cited: *Datta*, 0342.

Use: Fleshy ripe fruit is eaten.

Streblus asper Loureiro [Moraceae]; **Local Name:** *Seora, Harka*; A small tree.

Availability: Common. **Flowers & Fruits:** August to October.

Specimen Cited: *Majumdar*, 0163.

Use: Yellow ripe fruit is eaten and sweetish in taste.

Syzygium cerasoides (Roxburgh) Chatterjee [Myrtaceae]; **Local Name:** *Bhuti jam*; A middle sized evergreen tree.

Availability: Common. **Flowers & Fruits:** April to July.

Specimen Cited: *Majumdar*, 0125.

Use: Ripe berry is eaten raw, sweet to astringent in taste.

Syzygium cumini (L.) Skeels [Myrtaceae]; **Local Name:** *Kalo jam, Bor jam*; Large evergreen tree.

Availability: Common. **Flowers & Fruits:** March to July.

Specimen Cited: *Majumdar*, 0168.

Use: Ripe brown to black berry sweetish in taste.

Syzygium fruticosum DC. [Myrtaceae]; **Local Name:** *Bon jam*; A small tree.

Availability: Common. **Flowers & Fruits:** March to May.

Specimen Cited: *Majumdar*, 0232.

Use: Small berry is eaten.

Syzygium jambos (L.) Alston [Myrtaceae]; **Local Name:** *Golap jam*; A middle sized evergreen tree.

Availability: Occasional, wild as well as planted. **Flowers & Fruits:** May to July

Specimen Cited: *Datta*, 0149.

Use: Yellow ripe fruit is eaten and sweetish in taste.

Syzygium syzygioides (Miqel) Merrill & Perry [Myrtaceae]; **Local Name:** *Panijam*; Small evergreen tree.

Availability: Common. **Flowers & Fruits:** April to June

Specimen Cited: *Majumdar*, 0145.

Use: Ripe globuse fruit is eaten, sweetish in taste.

Tamarindus indica L. [Caesalpiniaceae]; **Local Name:** *Tentul*; A middle sized evergreen tree.

Availability: Common, planted and naturalized. **Flowers & Fruits:** December to February.

Specimen Cited: *Datta*, 0137.

Use: Pericarp is eaten of both ripe and unripe fruit; dried fruit are preserved for prickles.

Terminalia bellirica Gaertner [Combretaceae]; **Local Name:** *Bahera, Boirah*; A large deciduous tree.

Availability: Common. **Flowers & Fruits:** November to February.

Specimen Cited: *Majumdar*, 0278.

Use: Drupe is eaten raw or dried and bitter in taste, sometimes the inner cotyledon is eaten raw or roasted, tasteless.

Terminalia chebula Retzius [Combretaceae]; **Local Name:** *Haritoki*; A middle sized deciduous tree.

Availability: Occasional. **Flowers & Fruits:** October to January.

Specimen Cited: *Majumdar*, 0193.

Use: Both raw and dried fruit is taken and preserved, bitter in taste.

Tetrastigma bracteolatum (Wallich) Planchon [Vitaceae]; A small climber.

Availability: Common. **Flowers & Fruits:** April to June

Specimen Cited: *Datta*, 0251.

Use: Ripe succulent fruit is eaten.

Tetrastigma lanceolarium Planchon [Vitaceae]; A large climber.

Availability: Common. **Flowers & Fruits:** March to June.

Specimen Cited: *Datta*, 0166.

Use: Yellow globuse fruit is eaten.

Trapa natans var. *bispinosa* (Roxburgh) Makino [Trapaceae]; **Local Name:** *Singera, Paniphal*; An aquatic annuals. **Availability:** common. **Flowers & Fruits:** November to March

Specimen Cited: *Datta*, 0166.

Use: Seed of spiny fruit are eaten, sweetish in taste.

Turpinia pomifera (Roxburgh) Wallich ex DC. [Staphyleaceae]; **Local Name:** *Jonaki jam*; A small tree.

Availability: Occasional. **Flowers & Fruits:** January to April

Specimen Cited: *Datta*, 0339.

Use: Pericarp is eaten, astringent in taste.

Willughbeia edulis Roxburgh [Apocynaceae]; **Local Name:** *Lathi am*; A woody climber.

Availability: Occasional. **Flowers & Fruits:** February to April.

Specimen Cited: *Majumdar*, 0307.

Use: Flashy ripe fruit is eaten raw, sweetish in taste.

Xeromphis spinosa (Thunbergh) Keay [Rubiaceae]; **Local Name:** *Bilomi, Biolom*; A shrub.

Availability: Common. **Flowers & Fruits:** June to August.

Specimen Cited: *Majumdar*, 0327.

Use: Fleshy berry is eaten.

Zizyphus funiculosa Buchanon-Hamilton ex Wallich [Rhamnaceae]; **Local Name:** *Ban barai, Kalo boro*; A scrambling shrub.

Availability: Common. **Flowers & Fruits:** September to November.

Specimen Cited: *Majumdar*, 0146.

Use: Yellow ripe drupe is eaten, slightly sour to sweet.

Zizyphus oenoplia (L.) Miller [Rhamnaceae]; **Local Name:** *Chiyakul*; A struggling shrub.

Availability: Common. **Flowers & Fruits:** October to December.

Specimen Cited: *Dattar*, 0214.

Use: Black ripe berry is sweetish in taste.

Zizyphus rogusa Lamarck [Rhamnaceae]; **Local Name:** *Anneri*; A small tree.

Availability: Common. **Flowers & Fruits:** September to November.

Specimen Cited: *Majumdar*, 0118.

Use: Ripe berry is sweetish in taste.

Zizyphus zylopyra Willdenow [Rhamnaceae]; **Local Name:** *Bon boroi*; A small tree.

Availability: Occasional. **Flowers & Fruits:** October to January.

Specimen Cited: *Majumdar*, 0310.

Use: Ripe fruit is eaten, sour to tasteless.

DISCUSSION

The present communication recorded 86 species of wild edible fruits belonging to 63 genera and 37 families. Diverse kinds of wild fruits are sold in remote village markets depending on seasonal availability. These are source of variation in test and spice besides their direct nutritional contributions.

The utilization of wild fruits continues to benefit society even to-day, from processes mostly involving local experimentation through indigenous and local knowledge. The availability of such edible fruits in good amount helped these people to depend on the the indigenous plant resources of Tripura as integral part of their livelihood. Such dependence is predominant in areas where there are easily accessible communal area resources, in conjunction with limited economic options, mostly in the remote hilly areas of the state. This also expresses the rich biodiversity of Tripura forests. Very little is known about the holistic value of wild edible fruits as a second supplementary food to the forest dwellers in most tropical and deciduous ecosystem. Thus they are not just about growing cash or staple crops, raising livestock and participating in the mainstream cash economy only, but are tied to a complex network of dependence on marketable and non-marketed wild fruits that are not captured in macroeconomic analyses. Wild edible fruits are an integral part of Non Timber Forest Produces (NTFPs) in the village ecosystems that are mostly with no formal markets. Thus sustainable utilization of wild edible fruits may provide an effective incentive to conserve those wild races and forest ecosystem and will enhance species community structure and composition. The need to treat such ecosystems as unique key to maintain biological diversity whilst conserving soil and providing livelihood services. The situation is further aggravated by the fact that commencement of cultivation of those wild fruits in domestic environments.

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