Pictorial Catalogue of Important Plants of Tripura

Prepared by

Tripura ENVIS HUB

Tripura State Pollution Control Board
Parivesh Bhawan, P.N.Complex, Gorkhabasti, Agartala, Tripura
1. Introduction

The Bio diversity indicates the diversity, found in living organisms in our Earth which includes plants, animals, bacteria, and fungi. Our Earth surface is covered and enriched with so many species of plants that many of them have yet discovered; among them some are being threatened due to human and manmade activities, which keep our Earth’s biodiversity at risk.

2. Geographical Profile of the State

Tripura is a small state in the North Eastern region of India. The total geographical area of the State is 10491 km² which is predominantly hilly area and is surrounded by Bangladesh by three sides of it. It shares 856 km of its border with Bangladesh, 53 km with Assam and 109 km with Mizoram. The forest cover of the State is mainly tropical evergreen in nature. 60% of the total geographical area of the State is covered with forest which is approximately 6294.287 km² in area. It is also interesting that a major part of the forest is covered by bamboo brakes.

3. Forest Cover

The forest of the State is a mixture of various types of forests, they are East Himalayan Lower Bhabar Sal, Cachar Tropical Evergreen Forest, Moist Mixed Deciduous Forest, Low Alluvial Savannah Woodland, Moist Mixed Deciduous Forests and Dry Bamboo Brakes, Secondary Moist Bamboo Brakes.

4. Bio-diversity of the State

The Bio-geographic zone of the North-East Hills are extremely enriched with bio-diversity but with passing years it is now under threatened which effects on the bio-diversity of the State. As the State is located in the Indian sub-region of Oriental Zoo-geographic region, the characteristics of flora and fauna of the State are very much identical with floral and faunal components of Indo-Malayan and Indo-Chinese sub-regions.

The researchers have identified various species of trees, shrubs, herbs, climbers, climbing shrubs, ferns, epiphytes and parasites out of them some are endemic and rare. Tree ferns which can be found in the State are also primitive and endangered. There are also various species of orchids in the forest of the State, among them Dendrobium has the highest species diversity. Endangered orchids like Blue vanda and Red vanda are found in the state.

The forest cover of the State is enriched with oldest, richest and most diverse species of plants which have high timber value, nutritional value, edible plants and high Fuel value. These species of plants have been using for so many years by the ayurveda practitioner. In this report various species of plants, which are found in the State have been documented.
Tree Species having high timber Value
Category-Tree
Common name- Andaman Padack
Scientific name- *Pterocarpus marsupium*
Family- Fabaceae
Uses- This plant is used for making Veneer, flooring, turned objects, musical instruments, furniture, tool handles, and other small specialty wood objects.

Category-Tree
Common name- Kaluwar
Scientific name- *Diospyros ebenum*
Family- Ebenaceae
Uses- This plant is used in the timber industry and it is a popular type of wood in areas where carpentry is practiced on a large-scale basis.
<table>
<thead>
<tr>
<th>Category</th>
<th>Tree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common name</td>
<td>Gamar</td>
</tr>
<tr>
<td>Scientific name</td>
<td><em>Gmelina arborea</em></td>
</tr>
<tr>
<td>Family</td>
<td>Lamiaceae</td>
</tr>
<tr>
<td>Uses</td>
<td>The root of this plant is stomachic, galactagogue laxative and anthelmintic; useful in hallucination, piles, abdominal pains, burning sensations, and urinary discharge etc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Tree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common name</td>
<td>Garjan</td>
</tr>
<tr>
<td>Scientific name</td>
<td><em>Dipterocarpus turbinatus</em></td>
</tr>
<tr>
<td>Family</td>
<td>Dipterocarpaceae</td>
</tr>
<tr>
<td>Uses</td>
<td>The bark of the plant is used in treating abscess, urinary tract infection and hearing disorders. Its oil is useful in skin disease.</td>
</tr>
</tbody>
</table>
Category - Tree
Common name - Koroi
Scientific name - *Albizia procera*
Family - **Fabaceae**
Uses - The bark of this plant can provide tanning material. It is used in India for tanning, dyeing and making furniture.

Category - Tree
Common name - Mahogany
Scientific name - *Swietenia mahogony*
Family - **Fabaceae**
Uses - The bark is a source of tannins and has been used for dyeing and also used for making furniture.
Category - Tree  
Common name - Rose wood  
Scientific name - *Dalbergia latifolia*  
Family - *Fabaceae*  
Uses - The bark is used in traditional medicine in India to treat diarrhoea, indigestion, leprosy, and as a vermifuge
Category-Tree
Common name- Sal
Scientific name- *Shorea robusta*
Family- *Dipterocarpaceae*
Uses- The resin of the plant is used in the treatment of dysentery, gonorrhoea, boils and toothaches. The leaf juice is used in the treatment of dysentery.
Fast growing edible plants with nutritional value
Category-Tree  
Common name- **Drum stick**  
Scientific name- *Moringa oleifera*  
Family- *Moringaceae*  
Uses- It is used to protect and nourish skin and hair, treating edema, protecting the liver, preventing and treating cancer, treating stomach complaints, fighting against bacterial diseases, making bones healthier, treating mood disorders, protecting the cardiovascular system, helping wounds to heal, treating diabetes, treating asthma, protecting against kidney disorders, reducing high blood pressure, improving eye health, treating anemia and sickle cell disease.

Category-Tree  
Common name- **Tree Bean**  
Scientific name- *Parkia javonica*  
Family- *Fabaceae*  
Uses- It is mostly used for its antibacterial properties in traditional medicine to treat infections and stomach disorders.
Category-Tree
Common name- Bok Phool
Scientific name- *Sesbania grandiflora*
Family- **Fabaceae**
Uses- The leaves are aperients and diuretic. Crushed leaves are applied as a poultice to sprains and bruises of all kinds, swellings, rheumatism, itching etc. A tea made from the leaves is believed to have antibiotic, anthelmintic, antitumor and contraceptive properties.

Category-Tree
Common name- Kamranga
Scientific name- *Averrhoa carambola*
Family- **Oxalidaceae**
Uses- The fruit can be a laxative on account of the oxalic acid it contains. It is also used in traditional medicine for skin disorders and high blood pressure, whilst it is also said to reduce blood sugar levels and so is of help to diabetics.
Category-Tree
Common name- Kathal
Scientific name- *Artocarpus heterophylla*
Family- Moraceae
Uses- Fruit can be eaten as raw or cooked in a variety of ways. The ashes of leaves, with or without oil, are used to treat ulcers, diarrhoea, boils, stomach-ache and wounds. The pulp and seeds of the fruit are regarded as a cooling tonic. The seeds are said to be an aphrodisiac. The sap is an anti-syphilitic and a vermifuge.

Category-Tree
Common name- Amla
Scientific name- *Emblica officinalis*
Family- Phyllanthaceae
Uses- It is most commonly used for high cholesterol, abnormal levels of cholesterol or blood fats (dyslipidemia), and persistent heartburn. It is also used for diarrhea, nausea, and cancer, but there is no good scientific evidence to support these uses.
Category: Tree
Common name: Tetul
Scientific name: *Tamarindus indica*
Family: Fabaceae
Uses: Raw or cooked seedpod is acidic in flavor. Harvested when fully grown but still green and tender, they are used as a seasoning and also to make juices and paste. The immature pods are used in a variety of ways, being eaten fresh mixed with spices, pickled like green mango, or added whole to soups, stews and sauces.

Category: Tree
Common name: Ban Alu
Scientific name: *Dioscorea alata*
Family: Dioscoreaceae
Uses: Root is cooked, usually boiled or baked and used as a vegetable. The root needs to be properly cooked, it can be toxic if eaten raw. The plant produces aerial tubers and these can be eaten in the same way as the tubers.
Category-Tree
Common name- Satmuli
Scientific name- *Asparagus racemosus*
Family- *Asparagaceae*
Uses- It is the most important herb in Ayurvedic medicine for dealing with problems connected women's fertility. The rhizome is a soothing tonic that acts mainly on the circulatory, digestive, respiratory and female reproductive organs.

Category-Tree
Common name- Sonal
Scientific name- *Cassia fistula*
Family- *Fabaceae*
Uses- The bark is an ingredient in betel paste, the slightly narcotic masticatory that is popular in some areas of Asia. The flowers are edible, Leaves, Mildly laxative, Fruit pulp, A sweet taste with a mucilaginous texture, Mildly laxative. The pulverised seeds are used as a laxative. The fruit pulp contains derived anthracenes.
Category- Tree
Common name- Ban-tejpata
Scientific name- Cinnamomum obtusifolium
Family- Lauraceae
Use- Tejpatta is useful in diabetes due to its antioxidant and anti-inflammatory properties. Tejpatta prevents the damage of pancreatic beta cells and enhances insulin secretion. Thus, it lowers blood sugar levels
List of plants Endangered and Threatened with Extinction
Category-Tree
Common name- **Ramdala**
Scientific name- *Duabanga grandiflora*
Family- **Lythraceae**
Uses- The raw fruit is very acidic, it can be made into a refreshing drink. It is boiled and used as a vegetable.

Category-Tree
Common name- **Haludehaki**
Scientific name- *Adina sessifolia*
Family- **Lauraceae**
**Species-D. grandiflora**
Uses- The aqueous extract of the stem bark of the plant is widely used for varied medicinal purposes including effective treatment of gastrointestinal worm infections, malaria, fever, stomachache and liver disease.
Category: Tree
Common name: Champa Sundi
Scientific name: *Michelia montana*
Family: Magnoliaceae
Uses: Champak flowers are used to produce an essential oil for perfume.

Category: Tree
Common name: Duli champa
Scientific name: *Magnolia pterocarpa*
Family: Magnoliaceae
Uses: The oil of the flowers is used extensively in perfumes. The flowers are also used for perfuming clothes in storage, and decoration purposes during religious or social ceremonies.
Category: Tree
Common name: Halde simul
Scientific name: *Lochio spermum*
Uses: flowers are used to produce an essential oil for perfume

Category: Tree
Common name: Dhup
Scientific name: *Canarium strictum*
Family: Burseraceae
Uses: It is used for making incense, waxes and varnishes. The resin is traditionally obtained by cutting gashes in the lower part of the stem and then setting it on fire.
Category-Tree  
Common Name-Agar  
Scientific Name- *Aquiloria melacensnis*  
Family- *Burseraceae*  
Uses- The oil is also used in the production of traditional medicine as anti-asthma antitoxic, antioxidant, hypertension (anti-stress), hepatitis, sirosis, diuretic, painkiller, and many other diseases.

Category-Tree  
Common Name-Rakta Chandan  
Scientific Name- *Pterocarpus santalinus*  
Family- *Fabaceae*  
Uses- People use red sandalwood for conditions such as cancer, wounds, digestive tract problems, fluid retention, and many others, but there is no good scientific evidence to support these uses.
Category-Tree
Common Name- Chandan
Scientific Name- Santalum album
Family- Santalaceae
Uses- Sandalwood oil has a warm, woody odor and is commonly used as a fragrance in incense, cosmetics, perfumes, and soaps. It is also used as a flavor for foods and beverages. The wood has been valued in carving because of its dense character.

Category-Herb
Common Name- Sarpagandha
Scientific Name- Rauvolfia serpentina
Family- Santalaceae
Uses- It is a safe and effective treatment for hypertension
Category-Climber
Common Name- Lantana kalasi
Scientific Name- Dischidia raflosiana
Family- Apocynaceae

Category-Herb
Common name- Surja Sisir
Scientific name- Drosera burmanni
Family- Droseraceae
Uses- It is an important medicinal and carnivorous plant and used in medications for ailments like asthma, cough, ulcers besides being useful in homoeopathy.
Category: Tree
Common name: Laxmi am
Scientific name: Mangifera sylvatica
Family: Anacardiaceae
Uses: The small fruits are edible with a sweet and sour taste. The layer of pulp is rather thin. The unripe fruit is pleasantly aromatic and is used for making tarts, pickles and jellies. The yellow fruit is an ovoid drupe, beaked, smaller than the common mango containing a single, large seed.

Category: Fern
Common name: Fern
Scientific name: Angiopteris evecta
Family: Marattiaceae
Uses: The pith of the plant is rich in starch and is used as a source of food by native people.
Fuel Wood Species
Category-Tree
Common name- Indian tree of Heaven
Scientific name- Ailanthus excelsa
Family- Simaroubaceae
Uses- The gum and the bitter aromatic leaves have medicinal properties. The bark is febrifuge and tonic. It is used as a treatment against asthma, bronchitis and dysentery. The leaves and bark are in good repute as a tonic that is used after labour. The juice of the leaves and fresh bark is used as a remedy for after-pains. The wood may be used as a source of fuel.

Category-Tree
Common name- Pink shower Cassia
Scientific name- Cassia nodosa
Family- Fabaceae
Uses- It does not seem to possess much importance as a medicinal plant. The pods are used as a laxative. In southeast Asia the leaves are sometimes eaten even though they have purgative properties. The roots are high in saponins. The wood may be used as a source of fuel.
Category-Tree
Common name- Minuri
Scientific name- Cassia siamea
Family- Fabaceae
Uses- The young fruits and leaves are eaten as a vegetable. During preparation the cooking liquid is replaced 3 times to remove toxins. The flowers and young fruits are used in curries. In traditional medicine, the fruit is used to charm away intestinal worms and to prevent convulsions in children. The heartwood is said to be a laxative.

Category-Tree
Common name- Subabul
Scientific name- Lucaena leucocephala
Family- Fabaceae
Uses- Young leaves, pods and flower buds - raw, steamed, in soups, with rice or mixed with chillies and other spices. Seeds - raw or cooked. They are often eaten raw as a snack when working in the field. The unripe seeds are mixed with grated coconut, wrapped in banana leaves and cooked. The dried seed can be roasted and used as a coffee substitute. An edible gum obtained from the plant is used in sauces.
Category-Tree
Common name- Akashmani
Scientific name- *Acacia auriculiformis*
Family- Fabaceae
Uses- The bark contains sufficient tannin for commercial exploitation. A natural dye, used in the textile industry, is also extracted from the bark. The wood is hard, has a high density and is excellent for turnery articles, toys, carom coins, chessmen and handicrafts. Also used for furniture, joinery, tool handles, and for construction, if trees of suitable girth are available. The wood is also extensively used for paper pulp.

Category-Tree
Common name- Radha chura
Scientific name- *Peltoforum*
Family- Fabaceae
Uses- The bark is used in the textile industry and also used for turnery articles, toys, carom coins, chessmen and handicrafts. Also used for furniture, joinery, tool handles, and for construction, if trees of suitable girth are available. The wood is also extensively used for paper pulp.
Category-Tree
Common name- Maha Neem
Scientific name- *Melia azadirach*
Family- **Meliaceae**
Uses- The cooked leaves are bitter in flavour. The leaf juice is anthelmintic, antilithic, diuretic and emmenagogue. The leaves are used externally to treat skin conditions such as scabies and itch. The root bark is emetic, emmenagogue, purgative and vermifuge. It is highly effective against ringworm and other parasitic skin diseases. The pulp is used as a vermifuge. The seed is antirheumatic.

Category-Tree
Common name- Mangium tree
Scientific name- *Acacia mangium*
Family- **Fabaceae**
Uses- The germinating seeds can be cooked and eaten as a vegetable. The bark contains greater or lesser quantities of tannins are astringent. Astringents are often used in the treatment of diarrhoea and dysentery and can also be helpful in the cases of internal bleeding. They are used to treat wounds, skin problems, haemorrhoids, perspiring feet, some eye problems and as a mouth wash etc.
Medicinal Plants
Category-Herb
Common name- Green chiretta
Scientific name- Andrographis paniculata
Family- Acanthaceae
Uses- It is used to treat Common cold, Osteoarthritis, Infection of the throat and tonsils (tonsillopharyngitis), ulcerative colitis etc.

Category-Tree
Common name- Agar Wood
Scientific name- Aquillaria malaceensis
Family- Thymelaeaceae
Uses- Agar wood is an astringent, stimulant, tonic herb that relieves spasms, especially of the digestive and respiratory systems, and antipyretics.
Category-Tree
Common name- Satawari
Scientific name- *Asparagus racemosus*
Family- Asparagaceae
Uses- It may improve conditions such as hormonal imbalances and polycystic ovary syndrome (PCOS). It is a combination of herbal medicines, including A. racemosus which may reduce the symptoms of menopause. Antioxidants also fight against oxidative stress. Shatavari supplements have also traditionally been used to combat anxiety and depression.

Category-Herb
Common name- Brahmi
Scientific name- *Bacopa Monnieri*
Family- Plantaginaceae
Uses- It is used for Alzheimer's disease, improving memory, anxiety, attention deficit-hyperactivity disorder (ADHD), allergic conditions, irritable bowel syndrome, and as a general tonic to fight stress.
Category-Herb
Common name- Thankuni
Scientific name- Centella asiatica
Family- Apiaceae
Uses- It has a variety of benefits for the body. It is used to repair nervous tissue due to spinal injury, neuromuscular disorders, and to increase general brain function and memory. It is also used in skin treatments for a wide spectrum of skin conditions.

Category-Shrub
Common name- Indian Sarsaparilla
Scientific name- Hemidesmus indicus
Family- Apocynaceae
Uses- The root is a valuable alternative medicine for blood purifier, demulcent, diaphoretic, diuretic and tonic. It is used in the treatment of appetite loss, dyspepsia, fever, skin diseases, syphilis, leucorrhoea, genitourinary diseases and chronic coughs. A paste of the roots is applied externally to swellings and rheumatic joints.
Category: Shrub  
Common name: **Indrajao**  
Scientific name: *Holarrhena pubescens*  
Family: **Apocynaceae**  
Uses: The stem bark and root bark of this plant is used in the treatment of amoebic dysentery.

Category: Herb  
Common name: **Chaulmugra**  
Scientific name: *Hydnocarpus kurzii*  
Family: **Flacourtiaceae**  
Uses: It is used as powder, oil, emulsion, or ointment on the skin to treat skin problems including psoriasis and eczema.
Category-Shrub
Common name- Vasaka
Scientific name- Justicia adhatoda
Family- Acanthaceae
Uses- The whole plant is anti inflammatory, antispasmodic, febrifuge and pectoral. It is used to remove phlegm and as a treatment for excessive menses. The roots and leaves are widely used in the Ayurvedic and Unani systems of medicine in India for treating bronchitis, asthma, fever and jaundice.

Category-Fern
Common name- Water Clover
Scientific name- Marsilea minuta
Family- Marsileaceae
Uses- The extract of whole plants is used as aphrodisiac and to increase fertility. The leaves are pounded, cooked with rice and then eaten as a treatment for indigestion. The leaf juice is used to stop nose bleeding.
Category-Herb
Common name- Tulsi
Scientific name- *Ocimum tenuiflorum*
Family- Lamiaceae
Uses- A pungently aromatic, warming, antiseptic herb; it induces perspiration; lowers fevers; relaxes spasms; eases pain; clears bacterial infections; strengthens the immune and nervous systems; reduces inflammations; and benefits the digestive system. It has the ability to lower blood sugar levels. The essential oils from the leaf have shown antibacterial and antifungal activity. They contain methylchaviol, eugenol and other volatile, commercial oils.

Category-Shrub
Common name- Tita Basak
Scientific name- *Phlogacanthus thyrsiflorus*
Family- Marsileaceae
Uses- This plant has been known to possess antibacterial, antifungal, anti diabetic, anti-inflammatory, anti cancerous, hypolipidaemic and hepatoprotective activity
Category-Shrub
Common name- **Sarpagandha**  
Scientific name- *Rauvolfia serpentine*  
Family- **Apocynaceae**  
Uses- The roots are hypnotic, hypotensive and sedative. They are used particularly in the treatment of hypertension, where they are said to cause a lowering of the blood pressure without dangerous side effects. The juice of the leaves is used to remove opacities of the cornea of eyes and also to treat wounds and itches.

Category-Shrub
Common name- **ashoka tree**  
Scientific name- *Saraca asoca*  
Family- **Fabaceae**  
Uses- It is a very popular medicinal herb in Ayurveda, where it is said to be particularly useful for treating a range of conditions related to the female reproductive system. It is strongly astringent uterine sedative and is said to have a stimulating effect on uterine and ovarian tissue.
Category - Tree
Common name - Bahera
Scientific name - *Terminalia bellirica*
Family - Combretaceae
Uses - The fruit contains anthraquinones and tannins. It is anthelmintic, astringent (especially when ripe), digestive, tonic and laxative (especially when unripe). The fruit is used internally principally in the treatment of digestive and respiratory problems.

Category - Tree
Common name - Chebulic myrobalan
Scientific name - *Terminalia chebula*
Family - Combretaceae
Uses - It is used as a prime remedy for all manner of digestive problems.
Category-Shrub
Common name- **Nisinda**
Scientific name- *Vitex negundo*
Family- **Lamiaceae**
Uses- It is widely used in Chinese herbal medicine and considered as the second most important treatment for chronic bronchitis

Category-Shrub
Common name- **Goda**
Scientific name- *Vitex peduncularis*
Family- **Verbenaceae**
Uses- The plant is widely recommended as a febrifuge
Earth Provides Enough
to Satisfy Every Man’s Needs,
But Not Every Man’s Greed

.....Mahatma Gandhi
Plants are biological resource which is more valuable than all the money that we have – let’s work towards a Green Environment by protecting them.

Advisor:
Prof. Basant Kumar Agarwala
Hon’ble Chairman
Tripura State Pollution Control Board
Parivesh Bhawan, P.o-Kunjaban
Agartala, Tripura (west), Pin: 799006

Write To:
Sri Dipak Rudra Paul
Junior Scientist & ENVIS Coordinator
Tripura State Pollution Control Board
Parivesh Bhawan, P.o-Kunjaban
Agartala, Tripura (west), Pin: 799006

Published by
Tripura ENVIS HUB
Tripura State Pollution Control Board
Parivesh Bhawan, P.O-Kunjaban, Agartala, Tripura (w), 799006