



UNCULTIVATED PLANTS OF NORTH EAST INDIA

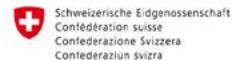
A Community Handbook

Developed by Agroecology Youth Leaders

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UNCULTIVATED PLANTS OF NORTH EAST INDIA - PART 1

A COMMUNITY HANDBOOK

Developed by agroecology youth leaders





PREFACE

This handbook is a heartfelt tribute to the rich biodiversity of Northeast India, created through the collective efforts of agroecology youth leaders of Assam and the generous support of students in botany, agroecology, and anthropology. It celebrates 20 uncultivated plants that thrive in our backyards and local landscapes, plants that are often overlooked but hold immense value for our communities.

For our elders, these plants represent a bridge to our cultural heritage and traditional knowledge. You have seen these plants grow wild and have known their uses for generations. This handbook is a way to honour and preserve your wisdom, ensuring it is passed down to future generations. We hope it brings back memories of the times when nature provided everything we needed, and we relied on the land for our food, medicine, and well-being.

For our young people, this handbook is an invitation to rediscover and reconnect with the natural world around you. Uncultivated plants are more than just weeds; they are a source of nutrition, health, and cultural significance. By learning about these plants, you can embrace sustainable practices that support our environment and community resilience. Agroecology teaches us to work in harmony with nature, promoting biodiversity and sustainable farming methods that respect the land and its resources.

We aim to inspire everyone to appreciate the treasures in our backyards and recognise the value of these uncultivated plants. Let this handbook be a guide to exploring and understanding the natural wealth that surrounds us. Together, let us cherish and protect the vibrant flora of Northeast India, fostering a legacy of ecological stewardship and resilience for generations to come.



DISCLAIMER

While every effort has been made to ensure the accuracy and reliability of the information presented in this handbook, we encourage readers to use this knowledge wisely and responsibly. The details about the 20 uncultivated plants of Northeast India have been carefully researched and verified. However, individuals are advised to exercise caution and consult local experts or authorities before consuming or using any plants, especially those with potential medicinal properties. The authors and contributors are not liable for any adverse effects or consequences resulting from the application or misuse of the information provided herein.



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The dedication and creativity of everyone mentioned have brought this handbook to life, making it a valuable resource for our communities. We thank them for their hard work and collaboration.



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1**Scientific Name: *Oxalis Corniculata* Linn****CREEPING OXALIS**

Kingdom : Plantae
 Phylum : Magnoliphyta
 Class : Magnoliopsida
 Order : Oxalidales
 Family : Oxalidaceae
 Genus : Oxalis
 Species : Corniculata

Tengesi Tenga (Assamese) / *Changeri* (Sanskrit) / *Amrulsak* (Hindi)

Description of the Plant: It has a thin, creeping stem that easily roots at the nodes. The leaves are made up of three rounded leaflets, similar to clover. The fruit is a narrow, cylindrical capsule that bursts open to release seeds.

Medicinal Value/ Benefits: The leaves are anti-scorbutic and are useful in the prevention and treatment of scurvy, a deficiency caused by a lack of vitamin C. A concoction of the leaves can be consumed for this purpose.

Life Cycle : Perennial

Red data book status:

LEAST CONCERN

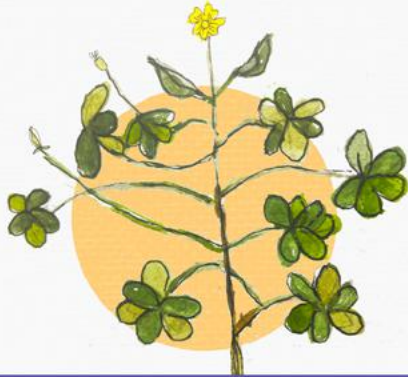
Found In and Around:

Cosmopolitan, Degraded forests and in plains, moist places

Nutritional Status: Tenegsi leaves or plant comprise many essential vitamins, namely Vitamin B9, Provitamin A, and Vitamin C. They also contain carbohydrates, fats, dietary fibre, proteins, iron, magnesium, sodium, potassium, calcium, and essential flavonoid antioxidants.

Edible part of Plant

Whole plant. We can have it raw or boiled.



Did You Know?

- 1) Creeping Oxalis is also known as **Sleeping Beauty**.
- 2) The species name Oxalis comes from the Greek word oxus, meaning “acidic” or “sharp.” The leaves of Creeping oxalis have a very tart flavour which makes them a tasty addition to salads. When dried, Creeping oxalis can be used to curdle milk for cheesemaking.
- 3) These plants are connected to fairies and woodland spirits. In Wales (UK constituent country), wood sorrel is called **fairy-bells**.
- 4) In the Victorian language of flowers, creeping oxalis represented **joy and motherly affection**.
- 5) The Ming dynasty used this plant to **locate underground copper deposits**.

2

Scientific Name: *Vitex Negundo***CHINESE
CHASTE TREE**

Kingdom	:	Plantae
Phylum	:	Tracheophyta
Class	:	Magnoliopsida
Order	:	Lamilales
Family	:	Lamiaceae
Genus	:	Vitex
Species	:	Negundo

Posotiya (Assamese) / *Nirgundi* (Sanskrit / Hindi)

Description of the Plant: *Vitex negundo* is a shrub or small tree that grows 2 to 8 metres tall. It has reddish-brown bark and leaves with slightly jagged edges.

Medicinal Value/ Benefits: The fruits, bark, leaves, and roots are all extremely medicinal. They are used in **treatments for regulating the menstrual cycle and as a cough remedy**. Additionally, they are used to protect stored garlic against pests. The plant can also be used as a condiment in fish cuisines.

Red data book status:

THREATENED

Found In and Around:

Moist and well drained soil.

Life Cycle : Perennial

**Edible part
of Plant :**

Fruits, bark,
leaf, roots.



Nutritional Status: The plant contains lots of antioxidants and is a good source of vitamin C.



Did You Know?

1) *Nirgundi* is a plant mentioned in Ayurveda (an ancient system of medicine). It's known for helping protect the body from diseases. According to the Charaka Samhita (a key text in Ayurveda), *Nirgundi* helps **remove worms and toxins from the body**. It has a strong, bitter, and drying taste and is considered hot in nature. It helps balance two of the body's energies (vata and kapha) but can increase another energy (pitta). *Nirgundi* is also known for **reducing fever, inflammation, and joint pain**.

2. In ancient times, this herb was known for **reducing sexual desire**. Roman wives would spread its aromatic leaves on their couches when their husbands were away. The name Monk's Berry or Monk's Pepper comes from the fact that monks used to chew the berries to reduce their sexual desire. The stem of the plant is beneficial for **hormone regulation**, particularly influencing the pituitary gland, which may help with fertility and reduce symptoms like breast tenderness before menstruation by affecting hormones like luteinizing hormone and prolactin.
3. The plant may also be used to **reduce hot flashes** due to reduced progesterone production during menopause and to regulate ovulatory cycles.
4. In earlier times, the oil obtained from plant leaves was used to **treat intense pain due to gout, rheumatism, sciatica, and general body aches**.

3**Scientific Name: *Boerhavia diffusa* Linn****PUNARNAVA**

Kingdom : Plantae
 Phylum : Magnoliophyta
 Class : Magnoliopsida
 Order : Caryophyllales
 Family : Nyctaginaceae
 Genus : Boerhavia
 Species : Diffusa

Ponownua (Assamese) / *Shothagni* (Sanskrit) / *Gadapurna* (Hindi)

Description of the Plant: *Boerhavia diffusa* is widely dispersed, occurring throughout India, the Pacific, and southern United States. Flowers are small, around 5 mm in diameter. Pollens are round, roughly 65 microns in diameter. This wide range is explained by its small fruit, which are very sticky and grow a few inches off the ground, ideally placed to latch on to small migratory birds as they walk by.

Medicinal Value / Benefits: It has been used in various formulations meant for **inflammation, jaundice, asthma, rheumatism, nephrological disorder, ascites, anaemia and gynaecological disorders.**

Life Cycle : Perennial

Red data book status: **LEAST CONCERN**

Nutritional Status: *Boerhavia diffusa* contains a variety of phytochemicals, including lignans, purine nucleosides, rotenoids, flavonoids, flavonoid glycosides, xanthones, ecdysteroids and steroids **which contribute to its antioxidant, anti-inflammatory, and health benefits.**

Edible part of Plant

Root , Stem,
Leaves



Found In and Around: Moist & dry deciduous forests and also in the plains.

Did You Know?

The entire *Boerhavia diffusa* plant, both fresh and dried, is the true source of the drug Punarnava, which is officially recognized in the Indian pharmacopoeia (the official list of medicines in India).

Punarnava is known for **helping with swelling, kidney problems, pain relief, and strengthening the immune system.**

The plant was named in honor of **Hermann Boerhaave**, a famous Dutch doctor from the 18th century.

4

Scientific Name: *Houttuynia Cordata***FISH MINT**

Kingdom	: Plantae
Phylum	: Magnoliophyta
Class	: Magnoliopsida
Order	: Piperales
Family	: Saururaceae
Genus	: Houttuynia
Species	: Cordata

Masondori (Assamese) / Maisundari (Sanskrit) / Simdalu (Hindi)

Description of the Plant: It is a herbaceous plant that grows between 0.1 to 1 metre tall. The lower part of the stem trails and produces roots, while the upper part grows upright. The leaves are heart-shaped and alternate, and the flowers are greenish-yellow.

Medicinal Value/ Benefits: It has anti-obesity, antiviral, anti-inflammatory, antimutagenic, antibacterial, anticancer, antidiabetic, and antioxidant properties.

Life Cycle : Perennial

Red data book status:

LEAST CONCERN

Found In and Around:

It grows in moist to wet soil or slightly submerged in water, as long as it is exposed partially or fully to the sun.

Nutritional Status: Rich in antioxidants such as quercetin, which protects hair follicles from oxidative stress and damage caused by free radicals.

Edible Part of Plant

Root, Stem, Leaves, Flower. It is used raw and boiled. It is commonly grown as a leaf vegetable, and is used as a fresh herbal garnish. It is eaten raw as a salad and cooked with fish in fish curry.



Did You Know?

- 1.The leaf has an unusual taste due to its volatile oil, decanoyl acetaldehyde (3-Oxododecanoyl), which is often described as "fishy," earning it the nickname "**fish mint.**"
- 2.In Northeast India, particularly in Meghalaya, it is locally known as **ja mardoh** and is used in salads or cooked with other vegetables.
- 3.In Manipur, it is called tokning-khok, and its leaves and roots are used as a garnish over **eromba** and **singju**, which are ethnic side dishes.
- 4.In Assam, it is known as **masunduri** and is popular mostly among the tribes. It is eaten raw as a salad and cooked with fish in fish curry.

5

Scientific Name: *Stellaria media* (L) Vill

CHICKWEED



Kingdom	:	Plantae
Phylum	:	Magnoliophyta
Class	:	Magnoliopsida
Order	:	Caryophyllales
Family	:	Caryophyllales
Genus	:	Stellaria
Species	:	Media

Moroliya (Assamese) / *Buch-Bucha* (Hindi)

Description of the Plant: These plants can be identified by a line of hairs running down their smooth, round stems. The stems are slender, grow in a sprawling manner, and sometimes have two lines of hairs. The flowers are small and whitish.

Medicinal Value/ Benefits: The leaves can be consumed as vegetables and it is good for treatment of **obesity, diabetes, dermal infections, inflammation, gastric ulcer, and stomach cramps.**

Life Cycle : Annual

Red data book status: **LEAST CONCERN**

Found In and Around: It is often found in cultivated fields, pastures, gardens, shady lawns, roadsides, and plantation crops and under trees and shrubs.

Season: Emerges in late summer (some emergence early in the spring), becomes dormant over the winter, sets seed in the spring/ early summer and dies. Can flower within a month and set seed within 2 to 3 months.

Did You Know?

1. Chickweed contains chemicals called saponins, which can be toxic to fish but are harmless to most land animals in small amounts. However, it is not recommended for pregnant or breastfeeding women.
2. This plant is believed to have medicinal properties and is used in folk medicine to treat **itchy skin, lung issues, and anaemia** due to its high iron content. It is also said to **help with joint pain, arthritis, and period pain**, though not all these uses are scientifically proven.
3. The plant was used by the Ainu (The **Ainu** are an ethnic group who reside in northern Japan) for **treating bruises and aching bones**. Stems were steeped in hot water before being applied externally to affected areas.
4. It is one of the ingredients of the symbolic dish consumed in the Japanese spring-time festival, *Nanakusa-no-sekku*.
5. The name *Stellaria* is derived from the word 'stella' meaning 'star', which is a reference to the shape of its flowers; media is Latin for 'between', 'intermediate', or 'mid-sized'.

Edible part of Plant: Stem, Leaves.

It is used in a salad. Can be boiled and fried.

Nutritional Status: It is rich in lipids, terpenoid, C-glycosyl flavones, flavonoids and phenolic compounds, saponins, alkaloids etc. It has also got a good amount of Vitamin C, which boosts immunity.



6

Scientific Name: *Persicaria Chinensis***CREeping
SMARTWEED**

Kingdom	:	Plantae
Phylum	:	Angiosperm
Class	:	Angiosperm
Order	:	Caryophyllales
Family	:	Polygonaceae

Madhusoleng (Assamese)

Description of the Plant: *Polygonum chinensis* is a perennial climber that grows to 2–3 metres high. Its stems are glabrous and red-brown, with longitudinal stripes. Its leaves have oval blades.

Medicinal Value/ Benefits: Creeping smartweed has been traditionally used in herbal medicine. It is believed to have astringent, anti-inflammatory, and diuretic effects. Herbalists may use it to **treat conditions such as diarrhoea, urinary tract infections, and skin irritations.**

However, scientific studies validating these traditional uses specifically for creeping smartweed are limited, and its medicinal value should be approached with caution, consultation of a doctor and further research.

Life Cycle :
Perennial

**Red data
book status:**

LEAST CONCERN

Season: Creeping smartweed typically grows and flowers from late spring through early autumn, favouring moist habitats along the edges of water bodies.

Found In and Around

Creeping smartweed is commonly found in wetlands, along the edges of ponds, streams, ditches, and other moist habitats. It thrives in areas with consistent moisture and can tolerate a range of soil types from sandy to clayey.

Nutrition Status:

Contains vitamins, minerals, and phytochemicals typical of edible plants. These may include vitamins A and C, various B vitamins, calcium, magnesium, and potassium. The exact composition can vary based on factors like soil conditions and growing environment.

Edible part of Plant:

Stem, Leaves. It can be used raw and boiled.



Did you know?

This plant is adventive from South East Asia and was **originally collected in Illinois, United States** during the 1940's.



7

Scientific Name: *Alternanthera Sessilis* (L) R.Br:ex DC**DWARF COPPERLEAF**

Kingdom	: Plantae
Phylum	: Magnoliophyta
Class	: Magnoliopsida
Order	: Caryophyllales
Family	: Amaranthaceae
Genus	: Alternanthera
Species	: Sessilis

Matikaduri (Assamese) / *Gudrisag* (Hindi)

Description of the Plant: This is a plant that lives for many years. Its stems spread out along the ground and can grow roots where they touch the soil. The leaves are usually oval-shaped but can sometimes be narrow and pointed. They range in size from very small to about the length of your hand and may feel smooth or slightly hairy. The leaf stalks are very short.

Medicinal Value/ Benefits: As a herbal medicine, the plant has diuretic, cooling, tonic and laxative properties. It has been used for the treatment of dysuria and haemorrhoids. Also believed to be **beneficial for the eyes**, and **is used as an ingredient in making medicinal hair oils and kajal**.

Life Cycle : Annual

Red data book status:

LEAST CONCERN

Found In and Around: Wetlands, ponds, ditches, rice fields, and other moist or aquatic habitats.

Season: *Alternanthera sessilis* can grow year-round in tropical and subtropical climates, but it tends to thrive particularly during the rainy season when water is abundant.

Edible part of Plant

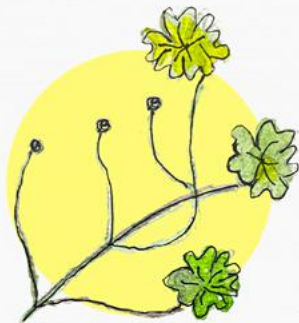
Stem and Leaves. It can be used boiled or fried.

Nutritional Status: Good source of Iron, calcium and fibre and vitamin C to boost the immune system. And other nutrients such as Vitamin A and Phosphorus.

Did You Know?

Alternanthera sessilis, commonly known as Ponnankanni in Tamil, holds a special place in Siddha medicine. Its name translates to "**Your body will gain a golden glow**," reflecting its believed ability to enhance skin and body vitality. The herb is considered a Kaya Kalpa (panacea) because it is thought to contain gold-like properties. It is rich in antioxidants and sterol compounds, has a **cooling effect on the body and eyes**, helps relieve neuritis, and is used to **treat various conditions, including 96 types of eye diseases**. Siddha practitioners believe it supports a disease-free, healthier life.



8**Scientific Name: *Hydrocotyle Sibthorpioides* Lam****LAWN
MARSHPENNYWORT**

Kingdom	: Plantae
Phylum	: Streptophyta
Class	: Equisetopsida
Order	: Apiales
Family	: Apiaceae
Genus	: Hydrocotyle
Species	: Sibthorpioides

Xoru Manimuni (Assamese) / Khulkhuri (Hindi)

Description of the Plant: It is a low-growing, perennial herb that often forms dense mats. It has small, round to kidney-shaped leaves with scalloped edges and long petioles. The plant produces tiny, white to greenish flowers in clusters.

Medicinal Value/ Benefits: It is believed to have anti-inflammatory, diuretic, and wound-healing properties. Some traditional uses include **treating skin conditions, wounds, and urinary tract infections.**

Life Cycle : Perennial**Red data book status:****LEAST CONCERN**

Season: It contains high amounts of Vitamin C . It has anti-inflammatory and antioxidant properties.

Found In and Around:

It is commonly found in moist, shaded areas such as lawns, gardens, and along the edges of ponds or streams. It thrives in moist, shady environments and can be invasive in lawns and gardens.

Edible part of Plant

Whole plant.

It can be used raw and cooked.



Nutritional Status:

It contains high amounts of Vitamin C. It has anti-inflammatory and antioxidant properties.

Did You Know?

- 1.This species is able to grow in a wide variety of habitats, from dry areas to locations that are occasionally submerged. It can also be found between sidewalk cracks, and is increasingly occurring as a lawn weed.
- 2.Many **tribes** in the world use this to treat fever, edema, dysentery, rheumatagia, whooping cough, **jaundice**, throat discomfort, psoriasis, herpes zoster infection, **hepatitis-B infection**, calming pain, dysmenorrhoea, and carbunculosis.
- 3.In **Assam**, it is also employed as a hepatoprotective agent, a brain tonic, and a **detoxifying agent**.
- 4.Bengal villagers use the entire plant for **bone fractures**.



9

Scientific Name: *Portulaca oleracea* L**LITTLE HOGWEED
/ PURSLANE**

Kingdom	: Plantae
Phylum	: Streptophyta
Class	: Angiosperm
Order	: Caryophyllales
Family	: Portulacaceae
Genus	: Portulaca
Species	: Oleracea

Maalbhok Xaak (Assamese) / *Lunia* (Hindi)

Description of the Plant: The plant grows up to 16 inches tall, with smooth, reddish stems that spread along the ground. The leaves are grouped at the ends of the stems. It has small yellow flowers that bloom for a few hours in the morning. Tiny seeds grow in a pod that opens when they are ready. Purslane has a main root with smaller roots growing from it.

Medicinal Value/ Benefits: Purslane offers several health benefits. It may help improve bone health and is rich in antioxidants, which protect the body from damage. The plant **could also lower the risk of cancer and may assist in managing asthma symptoms.**

Additionally, purslane has potential benefits for people with diabetes, supporting overall well-being.

Life Cycle : Annual

Season : Summer

Red data book status:

LEAST CONCERN

Found In and Around:

Fields, meadows, roadsides, and other open areas with well-drained soil

Edible part of Plant

Stem, Leaves. It needs to be cooked.

Did You Know?

It is considered quite nutritious because it is unusually high in omega-3 fatty acids (found mostly in fish and flax seeds).

Nutritional Status:

The plant is highly nutritious, offering a range of essential vitamins like Vitamin B9, Provitamin A, Vitamin C, and minerals such as iron, magnesium, sodium, potassium, and calcium. It also contains carbohydrates, fats, dietary fibre, proteins, and essential flavonoid antioxidants. **This combination of nutrients helps boost immunity, promote healthy skin, support bone health, and improve overall bodily functions.**



10

Scientific Name: *Drymaria cordata* (L) Willd. Ex Schult

WEST INDIAN CHICKWEED



Kingdom	: Plantae
Phylum	: Streptophyta
Class	: Angiosperm
Order	: Caryophyllales
Family	: Caryophyllaceae
Genus	: Drymaria
Species	: Cordata

Laijabori (Assamese) / *Padyala* (Hindi)

Description of the Plant: It is a low-growing plant that can spread up to 50 cm wide or tall. It has many long, trailing stems that can root at the nodes. The leaves are opposite each other and are round or heart-shaped. The flowers are small and grow in clusters, and the fruit is a papery capsule. The plant spreads because its small, sticky fruits can easily attach to migratory birds as they pass by.

Medicinal Value/ Benefits: It is used in the treatment of **peptic ulcer, headaches, nephritis and female infertility, sleeping disorders, convulsions and febrile conditions in children.** The plant is also used in the treatments of various major or minor ailments including cold, headache, coryza, bronchitis, leprosy, tumours, etc.

Life Cycle : Annual

Red data book status:

LEAST CONCERN

Seasons: *Drymaria cordata* typically grows as a summer annual, meaning it completes its life cycle during the warmer months and often thrives in the summer.

Nutritional Status: The plant has been proved to contain chemical compound including alkaloids, flavonoids, tannins, saponins, phenols, terpenoids etc. it contains anti-bacterial, analgesic and antipyretic, anxiolytic, anti-diabetic, sinusitis, cytotoxic, anti-HIV and anti-fertility properties.

Found In and Around: It is commonly found in tropical and subtropical regions. It tends to grow in a variety of habitats, including disturbed areas, lawns, and garden beds.

Edible part of Plant Stem, Leaves. It can be eaten as it is cooked.



Did You Know?

It has been traditionally used in various parts of the world like Africa, and Asia as **folk medicine**. In tropical Africa, its preparations are used for the treatment of diverse ailments including cold, headache, coryza, bronchitis, as poultice on sore (to treat aching, inflamed or painful parts), leprosy, tumours, as fumigant for eye troubles, as cerebral stimulant and antifebrile agent. In west Cameroon, the plant is called **“Ton tchikou or Ndougo” (Bangangté) and “Mtokia” (Baham)** where it is respectively used to cure peptic ulcer, headaches or nephritis and female infertility. It is used in Nigerian folk medicine to treat sleeping disorders, convulsions, and febrile conditions in children. **It has been found that the local tribes from Garo Hills and Khasia of Meghalaya, India, use this herb as an antitussive** - a substance that helps to suppress or relieve coughing. = The herb is kept on some big leaves, folded, tied and put over fire and the inside material is heated, the vapour is then inhaled for the relief of cough and sinusitis or in acute cold attack. This herb is also used for **snake bites**, and is applied topically for burns and skin disease. In North East India, the plant has been traditionally used as an antidote, appetiser, depurative, emollient, febrifuge, laxative and stimulant in both human and animals.

11

Scientific Name: *Ipomea aquatica* Forssk**WATER SPINACH**

Kingdom	: Plantae
Phylum	: Tracheophyta
Class	: Magnoliopsida
Order	: Solanales
Family	: Convolvulaceae
Genus	: Ipomea
Species	: I. Aquatica

Kolmou Xaak (Assamese) / *Kalmi* (Hindi)

Description of the Plant: This plant grows in or near water and can float on the surface or grow underwater. Its hollow stems allow it to float and can grow as long as 3 meters. The leaves are heart-shaped or arrow-like, and about 5-15 cm long. It has trumpet-shaped flowers, usually white or pink with a darker center, that bloom in the morning.

Medicinal Value/ Benefits: This plant is beneficial for conditions like piles, jaundice, and high blood pressure. **However, it has the ability to absorb harmful metals such as lead, cadmium, and mercury from contaminated soil. Therefore, it's essential to ensure the plant is sourced from clean areas and properly washed before consumption to avoid any health risks.**

Edible Part of Plant: The young shoots and leaves are edible and are often used in stir-fries, soups, and salads.

Life Cycle : Perennial

Red data book status:

Season : Rainy

LEAST CONCERN



Did You Know?

Ipomoea Aquatica, commonly known as water spinach or kangkong, has a folktale associated with its Chinese name, kongxincai, which means "**empty heart vegetable.**" The name is derived from a 16th-century Chinese fable. The story tells of a government minister who was forced to gouge out his heart by one of the king's wives. After his death, the only plant that grew on his tomb was the kongxincai, **symbolising his empty heart.**

Found In and Around: It thrives in tropical and subtropical regions, commonly found in canals, ditches, ponds, and rice paddies

Nutritional Status: *Ipomoea aquatica* (water spinach) is a low-calorie, nutrient-rich plant. It provides 19 kcal of energy, 3.14 grams of carbohydrates, 2.1 grams of dietary fibre, and 2.6 grams of protein per 100 grams. It is also a good source of essential nutrients, including 315 μg of Vitamin A, 55 mg of Vitamin C, 77 mg of calcium, 1.67 mg of iron, 312 mg of potassium, and 71 mg of magnesium. These nutritional attributes make it a valuable and healthful addition to diets, especially in Southeast Asian cuisine.



12**Scientific Name: *Acalypha Indica L*****INDIAN
COPPERLEAF**

Kingdom	: Plantae
Phylum	: Streptophyta
Class	: Angiosperm
Order	: Malpighiales
Family	: Euphorbiaceae
Genus	: Acalypha
Species	: A. Indica

Hukloti (Assamese) / Kuppi (Hindi) / Harita Manjari (Sanskrit)

Description of the Plant: It's an upright annual plant, easily identified by the cup-shaped structures around its small flowers, which grow in clusters. The leaves are arranged in a pattern, and the stems are covered in hairs.

Medicinal Value/ Benefits: It is used to **treat asthma and bronchitis**. It has anti-inflammatory properties and is used to reduce swelling and pain. The plant has antimicrobial properties, making it useful in **treating skin infections and wounds**. It acts as a diuretic, helping to increase urine production and cleanse the urinary system, as a natural laxative to treat constipation, help in reducing oxidative stress and promoting overall health, effective in expelling parasitic worms from the body.

Life Cycle : Annual

Season: Rainy

Red data

book status:

LEAST CONCERN

Found in and around: It grows in disturbed places such as waste lands, road sides, crevices in walls. It also grows in rocky hillsides, forest edges and river banks. It prefers moist and shaded places.

Nutritional Status: It is known for its medicinal properties rather than its nutritional content.

Flavonoids: These compounds have antioxidant properties. **Tannins:** Known for their astringent and anti-inflammatory effects. **Saponins:** These can have antimicrobial and anti-inflammatory effects.

Edible Part of Plant:

Stem, Leaves. It can be eaten raw, boiled, and fried.

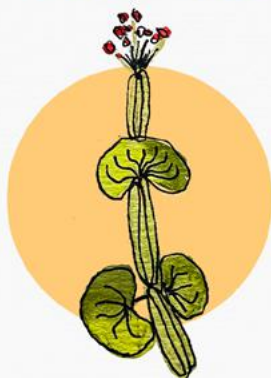
Did you know?

1.It is often featured in local folklore and traditional medicine stories. One such folktale from India involves its use in healing and protection.

In some Indian traditions, it is believed that the **plant has protective qualities against evil spirits and misfortune**. It is sometimes planted around homes or used in rituals to safeguard the household. The leaves are used in various traditional remedies and are thought to bring **good luck and ward off negative influences**.

2.Used in traditional animal husbandry. In some rural areas, the plant's leaves are **fed to livestock to improve their health and manage parasites**. It's believed to have beneficial effects on digestion and can help in controlling internal parasites in animals.



13**Scientific Name: *Cissus Quadrangularis* L****VELDT GRAPE**

Kingdom : Plantae
 Phylum : Streptophyta
 Class : Equisetopsida
 Order : Vitales
 Family : Vitaceae
 Genus : Cissus
 Species : C quadrangularis

Harjora Lota (Assamese) / *Hadjod* (Hindi)

Description of the Plant: This perennial plant from the grape family (Vitaceae) has a distinctive fleshy, four-angled stem that can grow up to 1.5 metres. The stems are often winged with sharp edges. Its simple, opposite leaves are heart-shaped or ovate. Small greenish-white or yellowish flowers bloom in clusters, followed by globular fruits that ripen to red or black.

Medicinal Value / Benefits: It is often used to **aid in bone healing and to support joint health**. It has anti-inflammatory properties that may help reduce swelling and pain in conditions such as arthritis. It is used to **treat digestive issues**, including indigestion and constipation. Some believe it may aid in weight loss by increasing fat metabolism and reducing appetite. It has antioxidant properties, which can help protect cells from damage caused by free radicals.

Red data book status:

LEAST CONCERN

Life Cycle: Perennial

Found In and Around: The plant typically thrives in tropical and subtropical climates and can be found growing in rocky or sandy soils, often in open areas or along the edges of forests.

Edible part of Plant:

The tender shoots and stems can be consumed. They are sometimes used in salads or cooked as a vegetable. The leaves can be eaten raw or cooked. The small berry-like fruits can be eaten when ripe

Nutritional Status: This plant is rich in essential amino acids, Vitamin C, Vitamin A, and minerals like Calcium, Phosphorus, Iron, and Magnesium. It also contains phytochemicals such as flavonoids with antioxidant properties, saponins that boost immunity, tannins with astringent effects, and steroids that may have anti-inflammatory benefits.

Did You Know?

It is known for its use in traditional medicine and has various folktales associated with its healing properties, particularly in Ayurvedic tradition. One such folktale is from India, where the plant is often referred to as "Hadjod, (In Assamese Harjora)" meaning "**bone-setter.**"

Folktale: The Bone-Setting Plant

In ancient Indian villages, there was a healer renowned for his ability to mend broken bones without any modern tools. His secret was a mysterious plant that grew in the wild, known to locals as "Hadjod." The healer would prepare a paste from the plant's crushed stems and leaves and apply it to the broken bones of his patients. Miraculously, the bones would heal faster than expected, and people believed the plant had magical properties. One day, a young boy from a nearby village fell from a tree and broke his leg. His family, desperate and unable to afford the journey to a distant doctor, decided to seek the help of the healer. They found him in his humble hut, surrounded by lush greenery. The healer listened to their plight and went into the forest to collect the Hadjod plant. After applying the plant paste to the boy's leg, he wrapped it with cloth and instructed the family to return in a week. To everyone's amazement, the boy's leg healed rapidly, and he could walk again without pain. The villagers attributed this miracle to the mystical powers of the Hadjod plant, and the story of its healing abilities spread far and wide.

14

Scientific Name: *Leucas aspera* (Willd.) Link**THUMBA**

Kingdom	:	Plantae
Phylum	:	Streptophyta
Class	:	Equisetopsida
Order	:	Lamiales
Family	:	Lamiaceae
Genus	:	Leucas
Species	:	<i>L. Aspera</i>

Durun Bon (Assamese) / *Guma* (Hindi)

Description of the Plant: The plant grows about 30-60 cm tall, with upright, branching stems covered in tiny hairs. The leaves are usually green, oval or lance-shaped, rough to the touch, and aromatic. The flowers are small, tubular, and white or pale lavender, blooming in clusters at the top. It also produces small, nut-like fruits that aren't very noticeable.

Medicinal Value/ Benefits: It is used to reduce inflammation and pain, especially in conditions like arthritis. **It has been traditionally used to treat infections due to its antibacterial and antifungal properties.** It is used to alleviate symptoms of respiratory issues such as coughs and colds. The plant is something used to aid digestion and treat gastrointestinal disorders.

Life Cycle: Annual**Red data book status:** **LEAST CONCERN**

Season: The Thumba plant (*Leucas aspera*) typically grows during the rainy season or monsoon period, which varies depending on the region.

Edible part of Plant: In traditional practices, the leaves are sometimes used in cooking and as a flavouring agent. They are considered edible and can enhance the flavour of various dishes.



Found In and Around: It thrives in a variety of environments, including. The plant prefers sunny locations and well-drained soils but is adaptable to various conditions.

Grasslands: Often found in open, grassy areas.

Roadsides and Disturbed Areas: Commonly grows in areas with disturbed soil or along roadsides.

Cultivated Land: Can be found in agricultural fields and areas with frequent human activity.

Nutritional Status: It is rich carbohydrate, protein, iron, calcium and vitamins such as vitamin C, vitamin D, and vitamin E.

Did You Know?

Folktales related to the Thumba plant (*Leucas aspera*) are often tied to its traditional uses and cultural significance in South Asia. One notable folktale from India is that Thumba is considered a protective plant against evil spirits and misfortune. **In some regions, it is believed that planting Thumba around one's home or in sacred areas can ward off negative influences and bring good luck.** This is used in the traditional medicine of the Philippines to **treat scorpion bites.**

15**Scientific Name: *Kalanchoe pinnata* (Lam.) Pers****MIRACLE LEAF**

Kingdom : Plantae
 Phylum : Streptophyta
 Class : Angiosperm
 Order : Saxifragales
 Family : Crassulaceae
 Genus : Kalanchoe
 Species : K pinnata

Dupor Tenga (Assamese) / *Patthar Chatta* or *Paan Patta* (Hindi)

Description of the Plant: Also called "**Mother of Thousands**", Miracle Leaf is a small succulent plant with thick green leaves, sometimes with red or purple shades. The leaves are round or oval with wavy edges. It grows 1–2 feet tall and has pink or red bell-shaped flowers in clusters on thin stalks.

Medicinal Value/ Benefits: It is often used in poultices for **joint pain and skin inflammation**. Topically, it promotes wound healing and treats cuts and bruises, with the sap sometimes applied directly to wounds. In some traditional practices, it is **used to address digestive issues, including ulcers and gastritis**. Additionally, it may help combat oxidative stress in the body.

Red data book status:

LEAST CONCERN

Life Cycle : Perennial

Season: The Miracle Leaf plant grows year-round in tropical and subtropical climates. In temperate regions, it may be grown as an indoor plant or during the warmer months.

Edible part of Plant: Most commonly used edible part is the leaf. The leaves are sometimes consumed raw or cooked, and often used in traditional medicine and culinary practices. They can be incorporated into salads, soups, or teas.

Found In and Around: Native to Madagascar, widely distributed in tropical and subtropical regions. Thrives in warm, humid environments, seen around disturbed areas.

Nutritional Status: The nutritional status of the Miracle Leaf plant, also known as the "life plant" or "air plant," is impressive due to its rich content of several vital nutrients and bioactive compounds. Rich in Vitamin C, Minerals such as Calcium, Magnesium, potassium and iron. It has flavonoids, tannins, saponins, alkaloids and glycosides.

Did You Know?

The miracle leaf is surrounded by numerous folktales and traditional beliefs, particularly in African, Indian, and Caribbean cultures. **One popular folktale comes from the Yoruba people of Nigeria where the Miracle Leaf is often associated with stories of healing and protection.** One such tale involves a wise old healer in a small village who was renowned for her knowledge of plants and their medicinal properties. One day, the village was struck by a mysterious illness that left many of its inhabitants weak and bedridden. The healer, guided by her ancestral knowledge and spiritual insight, ventured into the forest in search of a cure. After days of searching, she came across the Miracle Leaf plant, which she had never seen before. Trusting her intuition, she harvested the leaves and prepared a concoction for the villagers. Miraculously, those who consumed the healer's remedy began to recover swiftly. The plant was henceforth regarded as a divine gift, and the healer taught the villagers how to use it for various ailments. **The Miracle Leaf became a symbol of hope, healing, and the interconnectedness of nature and humanity.**

WATER HYSSOP



Kingdom	: Plantae
Phylum	: Streptophyta
Class	: Equisetopsida
Order	: Lamiales
Family	: Plantaginaceae
Genus	: Bacopa
Species	: B Monnieri

Brahmi xaak (Assamese) / *Brahmi* (Hindi)

Description of the Plant: Typically grows to a height of about 6–12 inches. The leaves are oblong and succulent, with a bright green colour. They are arranged oppositely on the stem. stems are soft, hairy, and can root at the nodes, flowers are small, white, or light blue with five petals.

Medicinal Value / Benefits: It is commonly known as **Brahmi** and is well-known for **improving memory and cognitive function**, enhancing blood flow to the brain, and protecting neural structures. It helps the body adapt to stress, reduces anxiety, and protects cells from damage caused by free radicals. **Research has indicated its potential in protecting against diseases like Alzheimer's and Parkinson's.** It may also help in managing epilepsy.

Life Cycle : Perennial

Red data book status:

LEAST CONCERN

Season: It typically grows in warm and tropical climates and can be found year-round in such environments. However, its growth is most vigorous during the warmer months.



Edible Part of Plant: Leaves and Stem, can be eaten raw in salads, can be added to soups, stews and dishes.

It's important to ensure that the plant is harvested from a clean environment, free from pollutants and contaminants, before consuming it.

Found In and Around: Prefers moist or wet soil and is often found near streams, ponds, or other bodies of water, thrives in tropical and subtropical climates.

Nutritional Status: It contains vitamin C and A, minerals such as Calcium, Magnesium and Iron. Contains Bacosides an Antioxidant known for their cognitive enhancing and neuroprotective properties. Additionally, it has fibre and protein.

Did You Know?

An interesting fact about Water Hyssop (*Bacopa monnieri*) is that it has been used in traditional Ayurvedic medicine for over 3,000 years. Known as "Brahmi" in Ayurveda, it is considered a "*medhya rasayana*," which means it is used to improve memory and intellect. **Ancient texts describe its use by scholars and students to enhance cognitive function and mental clarity, highlighting its long-standing reputation as a brain tonic.**

A Folktale: In traditional Ayurvedic lore, Water Hyssop is often referred to as "Brahmi," a name derived from Brahma, the Hindu god of creation. According to legend, Brahma, seeking a way to enhance human intellect and spiritual insight, blessed the Water Hyssop plant with special properties. The plant, with its creeping stems and small, delicate flowers, was said to embody the divine essence of wisdom and clarity. It was believed that consuming the plant or using it in rituals could bestow the blessings of Brahma, enhancing memory, intelligence, and spiritual insight. The traditional ayurveda texts often mention Brahmi (Water Hyssop) as a revered herb for cognitive function and spiritual well-being. The association with Brahma highlights its cultural and spiritual significance in Indian folklore and traditional medicine.

BILIMBI

Kingdom	:	Plantae
Phylum	:	Streptophyta
Class	:	Angiosperm
Order	:	Oxalidales
Family	:	Oxalidaceae
Genus	:	Averrhoa
Species	:	A Bilimbi

Bilombi Tenga (Assamese)

Description of the Plant: This tropical fruit tree is known for its sour fruits. It grows 10-15 metres tall with a wide canopy and leaves made up of 5-7 smaller leaflets. The green, elongated fruits have a star shape when cut across and may turn yellowish-green when ripe. It also produces small pink or reddish star-shaped flowers in clusters, usually on the trunk and older branches.

Medicinal Value/ Benefits: It can reduce oxidative stress and may reduce the risk of chronic diseases, and **can help in managing inflammation**. The extract from its fruit has antimicrobial properties and **can be used in treating infection**. It might help regulate blood sugar levels, aid digestion and in treating acne and eczema.

Red data book status: **LEAST CONCERN**

Life Cycle : Perennial

Season: The Bilimbi plant typically fruits year-round in tropical climates, though it may have peak seasons depending on local conditions.

Edible part of Plant: Fruit, leaves and flowers. Fruits are eaten raw, made pickle, sauces and chutneys. Flowers are used for garnish.

Found In and Around: It is native to Southeast Asia and is widely found in tropical and subtropical regions. Bilimbi is grown both in home gardens and on farms, often in areas with tropical climates and well-drained soil.

Did You Know?

In Filipino folklore, there's a story about the Bilimbi plant that ties into its cultural significance. According to the legend, the Bilimbi tree **was once a beautiful maiden who was transformed into a tree as a result of a curse**. The tree's sour fruit symbolises her tears of sorrow. The story often reflects themes of **transformation, unrequited love, and the connection between nature and human emotions**. Such folktales emphasise the deep cultural roots of plants like Bilimbi in the societies that cultivate them.

Nutritional Status: It has Vitamin C, Minerals such as Calcium, Potassium and Magnesium. The fruit is rich in Antioxidants such as flavonoids and polyphenols. And also provide dietary fibre.



BALLOON VINE

Kingdom	:	Plantae
Phylum	:	Streptophyta
Class	:	Equisetopsida
Order	:	Sapindales
Family	:	Sapindaceae
Genus	:	Cardiospermum
Species	:	C. Halicacabum

Kopalfuta (Assamese) / *Kopalfudi* (Hindi)

Description of the Plant: It is a fast-growing tropical vine with unique balloon-shaped seed pods. The vine can grow up to 10 feet or more and has pinnate leaves with 3 to 5 leaflets, often lobed or serrated. Small white or greenish-white flowers appear in clusters. The most distinctive feature is the inflated, papery seed pods that look like balloons, turning brown as they mature.

Medicinal Value/ Benefits: Its extract are believed to **reduce swelling and pain in case of arthritis**. It prevents chronic diseases. It is also used in treating infections. It is used as diuretic to promote urine production and manage conditions like edema.

Life Cycle : Annual

Red data book status:

LEAST CONCERN

Found In and Around: Often found in areas with warm, humid conditions and can grow in a variety of environments, including forests, fields, and disturbed areas. **It is considered an invasive species in some locations.**

Nutritional Status: It is not widely recognized for its nutritional value compared to other plants. Its primary use is more for medicinal and ornamental purposes. Limited information is available on its specific nutritional content. However, some traditional uses suggest that it contains various bioactive compounds that could have health benefits. The plant leaves may provide some vitamins and minerals.

Edible part of Plant: Leaves , Leaves are cooked to reduce toxicity and enhance digestibility.

Season: It typically grows as a summer annual in temperate regions and can be found year-round in tropical and subtropical climates.



Did You Know?

In some Indian traditions, Balloon Vine is **believed to have magical properties**. The balloon-shaped seed pods are often associated with protection and good fortune. It is said that placing the dried seed pods around one's home can ward off negative energies and bring prosperity. Additionally, the vine's rapid growth and ability to spread are sometimes interpreted as a symbol of abundance and resilience.

Its unique seed pods, which are not only distinctive in appearance but also have an intriguing mechanism for seed dispersal. The seed pods are inflated and papery, resembling balloons. **As they mature, they dry out and eventually burst, releasing the seeds in a dramatic fashion.** This explosive dispersal mechanism helps scatter the seeds over a wider area, facilitating the plant's spread. It is grown for **Ornamental purpose**.

TURKEY BERRY



Kingdom	:	Plantae
Phylum	:	Streptophyta
Class	:	Equisetopsida
Order	:	Solanales
Family	:	Solanaceae
Genus	:	Solanum
Species	:	S Torvum

Bhekuri (Assamese) / Sulhara or Bhootia Bean (Hindi)

Description of the Plant: It is a perennial shrub or small tree. It typically grows between 1.5 to 3 metres in height. The plant has spiny stems and oval-shaped leaves. Its small, white to purple flowers give way to green berries that turn yellow or orange as they mature.

Medicinal Value/ Benefits: It can **help reduce inflammation and pain**. It can be used for **treating bacterial and fungal infections**. It can help in **treating diabetic and improve insulin sensitivity**.

Used for curing gastrointestinal issues and sometimes used to support heart health and manage hypertension.

Life Cycle : Perennial

Red data book status: **LEAST CONCERN**

Found In and Around: The plant often thrives in disturbed areas, such as roadsides, fields, and forest edges. It can also be found in home gardens and agricultural areas due to its hardy nature. And are often found in tropical and subtropical regions.

Edible part of Plant:

Fruit (Immature state)
They can be cooked, pickled, or used in stews, curries, and soups.

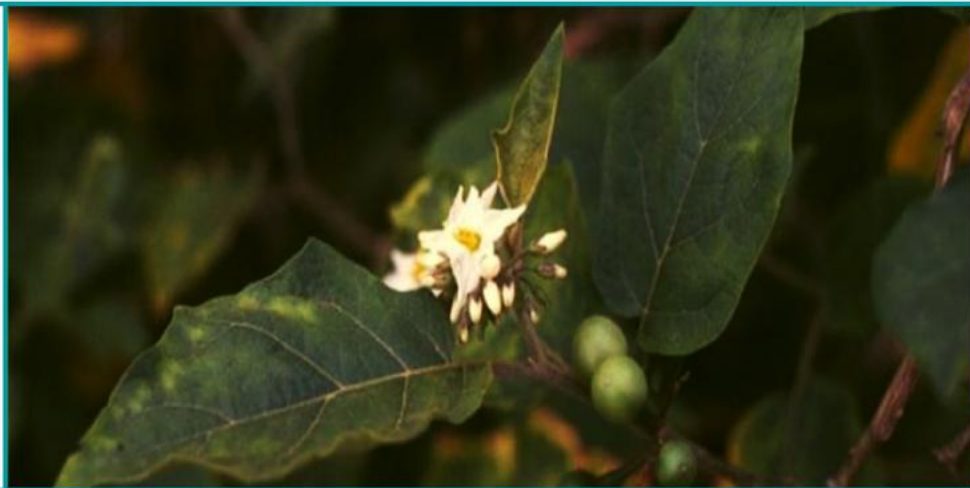
Did You Know?

An interesting fact about Turkey berry (*Solanum torvum*) is that it's sometimes used as a **natural pest repellent**. The plant's leaves and berries contain compounds that can deter pests, making it a useful companion plant in gardens. *In various cultures, Turkey berry (*Solanum torvum*) is associated with local folktales and traditional beliefs.

Folktale: In Ghana, there is a folktale that describes how Turkey berry's thorns were believed to have been a **gift from the gods to protect people from evil spirits**. According to the story, the thorns of the plant were **placed around villages** to create a barrier that would ward off malevolent forces. This tale highlights the plant's revered status in local traditions and its symbolic importance in protecting communities.

Nutritional Status:

It is a good source of vitamins and minerals and contains several bioactive compounds. It is rich in Vitamin A and C, Minerals like Calcium, Iron and Potassium. It has Antioxidants like flavonoids and alkaloids in addition to dietary fibre.



CULANTRO



Kingdom	: Plantae
Phylum	: Streptophyta
Class	: Equisetopsida
Order	: Apiales
Family	: Apiaceae
Genus	: Eryngium
Species	: E Foetidum

Maan Dhoniya (Assamese) / *Kalonji Patta* (Hindi)

Description of the Plant: It features long, serrated leaves that resemble a saw blade, and the plant can grow up to 12–18 inches tall. The leaves are green and have a strong, pungent flavour.

Medicinal Value / Benefits: It protects against oxidative stress, **helps reduce inflammation, and can alleviate digestive issues like bloating and gas.** It also treats infections, acts as a diuretic, promotes urine production, and helps reduce fluid retention.

Life Cycle: Perennial

Season: Culantro grows year-round in tropical and subtropical climates.

Red data book status:

LEAST CONCERN

In temperate regions, it is typically grown as an annual, and it thrives during the warmer months.

Found in and around: Culantro thrives in warm, tropical, and subtropical environments. It prefers hot humid, well drained soil with acidic to neutral pH. It needs full sun and consistent moisture.

Nutritional Status: It is a source of vitamins A and C. The leaves contain minerals like calcium, potassium, and iron. It also contains antioxidants.

Edible part of Plant: Leaves. They are used fresh or cooked in various dishes and have a strong, distinctive flavor. The leaves are commonly.

Did you know?

Culantro is featured in various Caribbean and Latin American folk traditions, particularly in herbal medicine and culinary practices. In some Caribbean cultures, it is believed to **have protective and cleansing properties**. For example, it's used in traditional remedies to **ward off "evil spirits" or to bring good fortune**, reflecting its important role in local herbal lore and daily life.

An interesting fact about culantro is that it has a strong, sharp smell similar to cilantro but a much stronger taste. This is because it has **more of certain natural chemicals, like aldehydes and esters**, that give it its intense flavor.



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We hope this handbook has inspired you to explore and appreciate the uncultivated plants around us, and maybe even talk to an elder who can give you more insights. If any part of this resource resonated with you, or if you have suggestions for improvement, we'd love to hear your thoughts. Please reach out to us at saloni@commutiny.in — your feedback helps us continue to improve and share this knowledge.

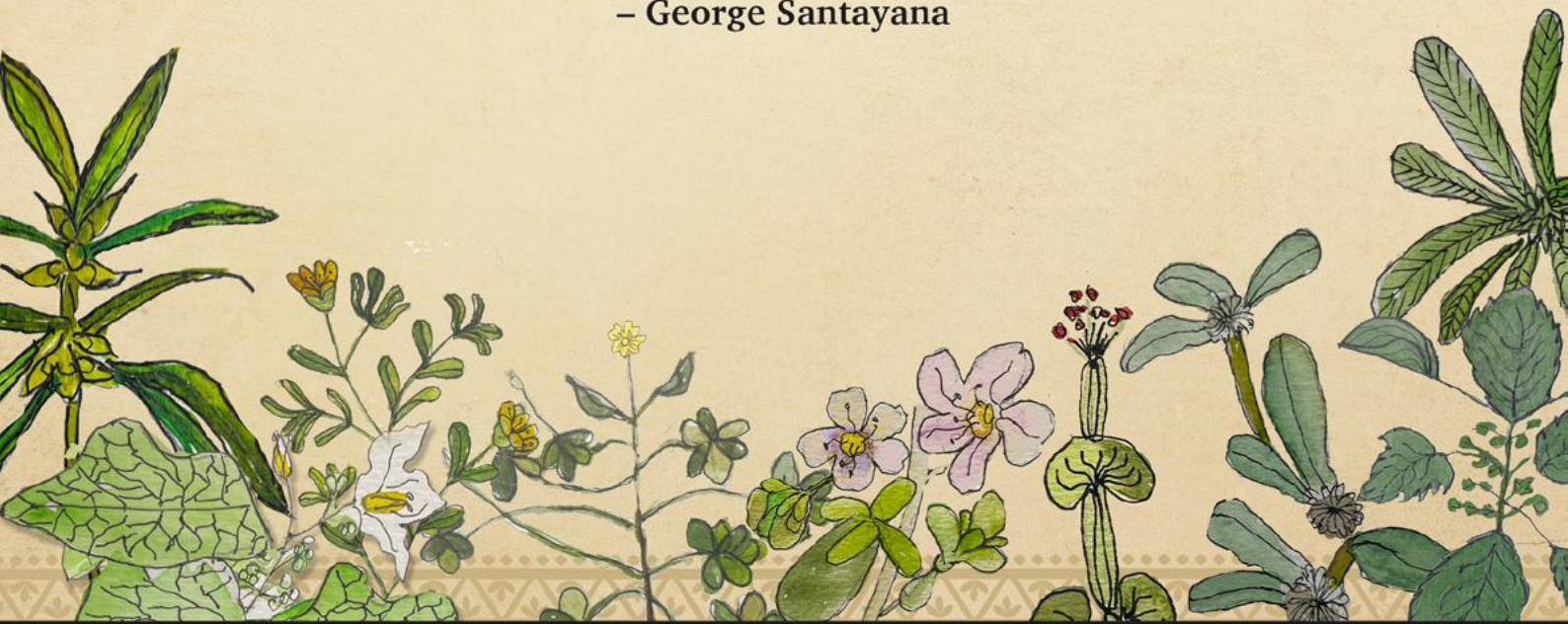
If you're an organization working with communities in Northeast India and would like to adapt this information into a toolkit for your groups, we'd be excited to collaborate! Let's create something fun and impactful together.

We, the youth leaders, thank you for joining us on this journey into the world of uncultivated plants. Together, we can continue to learn, grow, and preserve the wisdom of nature for future generations.



“The earth has music for those who listen.”

– George Santayana



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