



A HERBAL HANDBOOK
“SARVA AUSHADHA SAMHITA”
Excellent Herbs Ensure Health

Sponsored by

TAMILNADU FOREST DEPARTMENT



THE MINISTRY OF AYUSH -
NATIONAL MEDICINAL PLANTS BOARD



Published by

Environmental Science Department
The United Public School
Coimbatore

Name: _____

Grade: _____

INDIAN SYSTEMS OF MEDICINE:

India is one of the few countries to have a highly developed form of traditional medicine and healthcare. India has been practicing Ayurveda and Yoga since ages. These healthcare techniques that are now acknowledged and renowned globally, promote holistic development of the body and mind. In India, Ministry of AYUSH is the government body that deals with these traditional and indigenous healthcare systems.

1) AYSUH:

- *Meaning of the word Ayush:-*Traditional & Non-Conventional Systems of Health Care and Healing Which Include Ayurveda, Yoga, Naturopathy, Unani, Siddha, Sowa-Rigpa and Homoeopathy.
- Bringing AYUSH into the mainstream health care delivery system of the country has long been a major policy objective of the Ministry.
- The Ministry of AYUSH presents the “*Ayush Sanjivani*” mobile application for understanding the measures adopted by public for enhancing immunity and keeping themselves healthy in the difficult covid-19 situation.

2) ALLOPATHY

- ✓ The term "allopathy" was coined in 1810 by Samuel Hahnemann to designate the usual practice of medicine (allopathy) as opposed to homeopathy, the system of therapy that he founded.
- ✓ Allopathic medicine, or allopathy, refers to science-based, modern medicine, such as the use of medications or surgery to treat or suppress symptoms or the ill effects of disease.

Medicine that aims to combat disease by using remedies which produce effects that are different from or incompatible with those of the disease being treated

INTRODUCTION TO HERBAL PLANTS

1. Medicinal plants, also called medicinal herbs, have been discovered and used in traditional medicinal practices since prehistoric times.
2. Herbs have a variety of uses including culinary, medicinal, and in some cases, spiritual.
3. Herbs generally refer to the leafy green or flowering parts of a plant (either fresh or dried).
4. In most of the developing world, especially in rural areas, local traditional medicine is the only source of health care for people, while in the developed world, alternative medicine including use of dietary supplements is marketed aggressively using the claims of traditional medicine.
5. Medicinal plants are inseparable from local livelihoods because they have long been collected, consumed, and managed through local customs and knowledge.
6. To conclude, herbs make our lives simple and healthier!

HERBS AT A GLANCE

S.NO	NAME OF THE PLANT	PAGE NUMBER
1	ALOE VERA	5
2	BETEL LEAF	7
3	CAT WHISKERS	9
4	CREAT / GREEN CHIRETTA	11
5	HOLY BASIL	13
6	INDIAN BORAGE	15
7	STONE BREAKER	17
8	TANNER'S CASSIA	19
9	VELD GRAPE	21
10	VETIVER	23
11	WILLOW – LEAF – JUSTICIA	25
12	WINTER CHERRY	27

1. ALOEVERA

Scientific Name: *Aloebarbadensis* Miller

Tamil Name: சுற்றாழை



About the plant:

- **History:** The name Aloe vera derives from the Arabic word “Alloeh” meaning “shining bitter substance,” while “vera” in Latin means “true”
- The Egyptians called Aloe “the plant of immortality”. It also has common names like burn plant, lily of the desert and elephant’s gall
- **Climate:** Aloe vera grows in arid climates
- **Cultivation:** It is widely distributed in the dry regions of Africa, Asia, Europe and America. In India, it is found in Rajasthan, Andhra Pradesh, Gujarat, Maharashtra and Tamil Nadu
- **Medicinal Use:** The Aloe vera plant has been used for various purposes in dermatology

Anatomy:

- Aloe vera is a stem less or very short-stemmed plant growing up to 60–100 cm tall
- The leaves are thick and fleshy, bottle green to grey-green, which can grow to about 12-19 inches (30-50 cm) in length
- The margin of the leaf has small white teeth. Each leaf is full of a slimy tissue that stores water, which makes the leaves thick
- This slimy, water-filled tissue is the “Gel” we associate with Aloe vera products

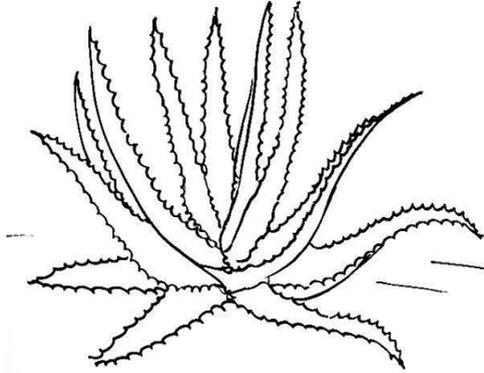
Uses:

1. Prevents wrinkles in skin and clears acne
2. Control cavity-causing oral bacteria in teeth
3. Used in cosmetics and personal care products like tooth paste, face wiping tissues, shampoo, moisturizer, makeup or sunscreen.
4. Heals Burns
5. Reduce constipation

*****நீரேவான்அமிழ்தம்*****

Exercise:

1. Colour and mark the parts of the plant



2. Mark and colour the **cultivating areas** in map



Meanings:

1. Arid – very dry, having little or no rain
2. Constipation – a condition in which there is difficulty in emptying the bowels, usually associated with hardened feces
3. Dermatology -branch of medicine dealing with the skin

2. BETEL LEAF

Scientific Name: *Piper Betle*

Tamil Name: வெற்றிலை



About the Plant:

- **History:** The word Betel means “leaf of an Asian evergreen climbing plant” is a vine of the family Piperaceae, which includes pepper and kava
- It is consumed as a 'Paan' along with 'Arcea Nut' or tobacco which is chewed as a mild stimulant
- It is consumed after a good meal and also has a significant place during religious rituals in India
- **Climate:** Betel leaf grows very well in tropical climate with high rainfall and shady places are the best for its vigorous growth
- **Cultivation:** It is cultivated mostly in South and Southeast Asia. Betel leaf is grown as a cash crop in southern parts of India, mostly in the states of Andhra Pradesh, Telangana, Karnataka, Kerala, and Tamil Nadu. Betel leaf is also cultivated in Bihar, Assam, Madhya Pradesh, Orissa, Maharashtra, Tripura, Uttar Pradesh, and West Bengal
- **Medicinal Use:** It is used for various purpose in oncology

Anatomy:

The betel plant is an evergreen and perennial creeper, with glossy heart-shaped / oval leaves and white catkin. Since it is a creeper, it needs a compatible tree or a long pole for support .In three to six months the vines reach 150 to 180 centimeters in height and they will branch

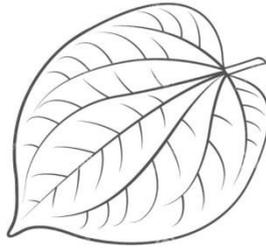
Uses:

- It is anti – cancer agent
- It has anti – microbial properties
- It helps cure asthma
- It is good for diabetes
- It helps improve skin quality and prevent wrinkles
- It lowers cholesterol
- It heals wounds and reduces depression
- It improves oral health and protects gastric system

*****யோகம்பழகு*****

Exercise:

1. Colour and mark the parts of the leaf



2. Mark and colour the **cultivating areas** in map



Meanings:

1. Catkin – a downy, hanging spike of trees such as willow
2. Oncology – study of cancer
3. Perennial –lasting or existing for long
4. Wrinkles – a slight line or fold on the skin

3. CAT WHISKERS

Scientific Name: *Orthosiphon Aristatus*

Tamil Name: பூனைமீசைமூலிகை



About the plant:

- **History:** Cat whiskers (Java Tea) is an evergreen member of the mint family and its showy white blossoms set it apart from the crowd
- The scientific name 'orthosiphon' refers to “upright tube shape of the flower” and 'aristatus' means 'with ears'
- **Climate:** The plant produces more flowers if grown in full sun in mild climates
- **Cultivation:** The Cat's whiskers are native to some tropical regions of Australia and South East Asia, spreading to East India, Indo China and Indonesia. It is also cultivated in Java and Sumatra
- **Medicinal Use:** It is used for various purpose in Urology and Rheumatology

Anatomy:

- Cat's Whiskers is a tall, slender evergreen perennial growing up to 1.5 meters including the flower stalks
- The spread is variable at 30 to 90cm per plant depending on home garden conditions
- The stems are brown, the leaves are dark green with 1inch, ovate, with serrated margins
- Flowers are white, occur at the branch end, at the middle of the flowers there is a bristle like part which resembles to cat's whiskers

Uses:

- Is a diuretic and anti-fungal
- Treats kidney stone, liver problems, gallbladder problems, gout
- Cures urinary disorders
- Helps treat rheumatoid arthritis (joint pain)
- Helps treat jaundice and diabetes

*****பசியுள்ளவன்ருசிஅறியான்*****

Exercise:

1. Colour and mark the parts of the plant



2. Mark and colour the **cultivating areas** in map



Meanings:

1. Diuretic – causing increased passing of urine
2. Gout – disease that causes painful swelling in joints
3. Jaundice – a yellow tint to the skin or eyes caused by an excess of bilirubin
4. Rheumatoid – A chronic inflammatory disorder affecting many joints
5. Rheumatology - deals with the joints, soft tissues, autoimmune diseases and heritable connective tissue disorders
6. Urology –study of male and female urinary tract system

4. CREAT / GREENCHIRETTA

Scientific Name: *Andrographis Paniculata*

TamilName: சிறியாநங்கை



About the Plant:

- **History:** Green Chiretta is an annual herb which is extremely bitter– that is the reason it is called as “King of Bitters”
- **Climate:** The crop can be grown in areas having mild rainfall (100 cm) in rainy season and in areas with long cold winter, receiving snowfall frequently
- **Cultivation:** Green Chirettais largely found in India and Sri Lanka
- In India, it is distributed in Himachal Pradesh, Uttranchal, Jammu & Kashmir, Sikkim and Arunachal Pradesh
- **Medicinal use:**It is used for various purpose in Physiology and Hepatology
- Its leaves, roots are generally used for medicinal purposes, sometimes the whole plant is also used

Anatomy:

- The plant usually grows nearly 12-40 inches in moist and in shady places
- Its stem is dark green with straight leafy twigs
- Leaf of ‘Green Chirata’ looks like green chili leaf, but slightly longer
- The small flowers are pink and the fruit is a capsule around 2 cm (0.79 inches) long and a few millimeters wide. It contains many yellow-brown seeds
- The flowering time is September to December

Uses:

1. It helps in the regeneration of new liver cells
2. It helps as emergency medicine for treating snake bite
3. Helps prevent cold and flu
4. It helps treat diabetes
5. Reduces symptoms of rheumatoidarthritis

***** அதிகாலைஎழுந்திரு *****

Exercise:

1. Colour and mark the parts of the plant



2. Mark and colour the **cultivating areas** in map



Meanings:

1. Emergency – a serious event that needs immediate action
2. Flu – an illness that is like a bad cold but more serious
3. Hepatology – study of liver
4. Rheumatoid Arthritis - causing inflammation in the joints, especially in the fingers, wrists, feet, and ankles

5. HOLY BASIL

Scientific Name: *Ocimum Tenuiflorum*

Tamil Name: புனிததுளசி



About the Plant:

- **History:** Tulsi commonly known as holy basil or tulsi, is an aromatic perennial plant in the family Lamiaceae
- It is considered “The Queen of Herbs” and is revered as a sacred plant infused with healing power
- Tulasi or (Tulsi) means “The sacred basil”
- **Climate:** Tulsi plant can be grown in a wide variety of climates including tropical and subtropical conditions
- **Cultivation:** It is native to the Indian subcontinent and widespread as a cultivated plant throughout the Southeast Asian tropics
- **Medicinal Use:** It is used for various purpose in Gastroenterology

Anatomy:

- Tulsi is an upright bushy shrub that grows up to 18 inches
- Its hairy stems sprout oval leaves with serrated edges, and depending on the variety, range in color from light green to dark purple
- The tulsi plant blooms are purple or reddish flowers and produces tiny rust-colored fruit

Uses:

1. Aids in digestion
2. Helps improve respiratory disorders
3. Helps treat cold and cough
4. Helps fight cancer
5. Helps cure fever
6. Reduces Stress
7. Cures dental problem

*****நோயற்றவாழ்வேகுறைவற்றசெல்வம்*****

Exercise:

1. Colour and mark the part of the plant



2. Mark and colour the **cultivating areas** in map



Meanings:

1. Aromatic – having a pleasant and distinctive smell
2. Gastroenterology – study of digestive system
3. Respiratory – responsible for taking in oxygen and expelling carbon dioxide
4. Sacred - dedicated to a religious purpose
5. Tropics – region of earth surrounding the equator

6. INDIAN BORAGE

Scientific name: *Plectranthus Amboinicus*

Tamil Name: கற்பூரவல்லி



About the Plant:

- **History:** It is small green perennial plant in Africa that smells like oregano. It is the member of the mint family
- It is Sprawling large succulent herb
- It is also called as Mexican Mint, Spanish thyme, country borage, and others
- **Climate:** Indian borage ideally should be grown in a semi-shaded and moist location as the leaves will remain a beautiful jade-green colour
- **Cultivation:** It is native to Southern and Eastern Africa. It is widely cultivated in the tropics where it is used as a traditional medicine
- **Medicinal Use:** It is used for various purpose in otolaryngology

Anatomy:

- Indian borage plant grows up to 1m (3.3ft) tall and even more in width in the wild
- The stem is fleshy, about 30–90 cm (12–35 in), either with long rigid hairs (hispidly villous) or densely covered with soft, short and erect hairs
- The plant has fibrous root
- It is a large succulent herb which is fleshy and highly aromatic

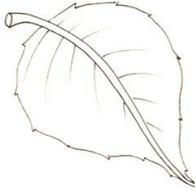
Uses:

1. Used in the treatment of cough, sore throat
2. Gives relief from hiccups
3. Promotes sweating and helps to reduce fever
4. Aids in treating breast cancer
5. Boosts immune system
6. Helps keep kidneys healthy
7. It provides relief from osteoporosis (weakness of bones) and arthritis (swollenness in the joints)

*****ஆரோக்கியமானவாழ்வு*****

Exercise:

1. Colour and mark the parts of the leaf



2. Mark and colour the **cultivating areas** in map



Meanings:

1. Hiccups – a sudden, usually repeated sound that is made in throat
2. Immune – having natural protection against a certain disease or illness
3. Oregano – an aromatic Eurasian plant
4. Otolaryngology - focus on the ear, nose, and throat (ENT)
5. Succulent – tender and juicy
6. Sprawling – spreading out over a large area in an untidy or irregular way

7. STONEBREAKER

Scientific Name: *Phyllanthus Niruri*

Tamil Name: சீழாநெல்லி



About the Plant:

- **History:** Stone breaker is an erect, slender, branched, annual herb under the name Chancapiedra
- *Phyllanthus Niruri* known by the common name gale of the wind, stonebreaker or seed-under-leaf
- **Climate:** It grows well in tropical rainforests, under partial shade conditions
- **Cultivation:** Keezhanelli originated in India
- *Phyllanthus Niruri* is a widespread tropical plant commonly found in coastal areas
- **Medicinal Use:** It is used for various purpose in Nephrology

Anatomy:

- It grows 50–70 cm (20–28 in) tall and bears ascending herbaceous branches.
- The bark is smooth and light green
- It bears numerous pale green flowers
- The fruits are tiny, smooth capsules containing seeds

Uses:

1. It provides relief from kidney stones
2. Keezhanalliis used to treat jaundice
3. It is used to cure metabolic abnormalities
4. It improves liver health
5. It helps protect against ulcers

***** அளவுக்குமிஞ்சினால் அமிர்தமும் நஞ்சும் *****

Exercise:

1. Colour and mark the parts of the plant



2. Mark and colour the **cultivating areas** in map



Meanings:

1. Erect – straight
2. Slender – gracefully thin
3. Liver – an organ that produces bio chemicals necessary for digestion and growth
4. Nephrology - study of kidney
5. Metabolic – necessary to maintain life

8. TANNER'S CASSIA

Scientific Name: *Senna Auriculata*

Tamil Name: ஆவரம்பட்டி

About the Plant:



- **History:** Sennais a large genus of flowering plants in the legume family
- Senna is a herb that comes from several different flowering species of the Cassia plants.
- It is commonly known by its local names **matura tea tree, ranawara** or **avaram**
- **Climate:** This diverse genus is native throughout the tropics, with a small number of species in temperate regions
- **Cultivation:** It occurs in the dry regions of India and Sri Lanka. It is common along the sea coast and the dry zone in Sri Lanka
- This herb is mainly cultivated in Southern **India**. The commercial **cultivation** of **Senna** is also being carried out in the states of Maharashtra, Rajasthan, and Gujarat
- **Medicinal Use:** It is used for various purpose in dermatology and epidemiology

Anatomy:

- Avaram senna is a much branched shrub with smooth cinnamon brown bark and closely pubescent branchlets
- It grows up to 1.25 meters (4 feet) high and has showy spikes of yellow flowers.
- The leaves are alternate, stipulate, paripinnate compound, very numerous, closely placed and slender
- Its flowers are irregular, bisexual, bright yellow and large (nearly 5 cm), and 2.5 cm long

Uses:

1. It boosts our body's natural defenses
2. It is natural source of anti –oxidants
3. It helps to boost the insulin levels in the body naturally
4. It helps regulate blood sugar level
5. It has hydrating properties thus reduces excessive thirst

பசித்தபின்

பசி*****

Exercise:

1. Colour and mark the parts of the plant



2. Mark and colour the **cultivating areas** in map



Meanings:

1. Epidemiology- study and analysis of the distribution, patterns and determinants of health
2. Insulin – a hormone which regulates the amount of glucose in the blood
3. Pedicels –a small stalk bearing an individual flower in an inflorescence

9. VELD GRAPE

Scientific name: *Cissus Quadrangularis*

Tamil Name: பிரண்டை



About the Plant:

- **History:** *Cissus Quadrangularis* is a perennial plant of the grape family
- It is commonly known as veldt grape, devil's backbone, adamant creeper, asthisamharaka, hadjod and pirandai
- **Climate:** The climate for veld grapes is generally one in which winters are fairly mild
- **Cultivation:** Veld Grape is native to Bangladesh, India and Sri Lanka, but is also found in Africa, Arabia and southeast Asia. In India it is widely distributed in Tamil Nadu, Andhra Pradesh, Punjab, Haryana where peak production is during March-April months
- It is believed to be native to Bangladesh, India and Sri Lanka.
- **Medicinal Use:** It is used for various purpose in Osteology

Anatomy:

- Succulent vine with tendrils, fleshy 3-lobed leaves and quadrangular 4-winged stem and grape-shaped leaves 2 inches long (5 cm)
- The flowers typical of the grape family are greenish white and come at the end of the summer
- A tendril climber with stout fleshy quadrangular stem

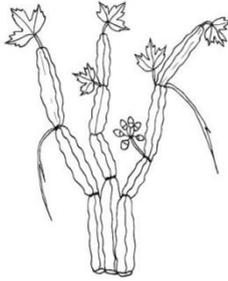
Uses:

1. Helps keep the bones strong, heals bone fracture
2. Used to treat gastric ulcer
3. Used to treat constipation
4. Helps treat obesity problem
5. Cures eye diseases, piles and anaemia

*****ஞானம் கேள்*****

Exercise:

1. Colour and mark the parts of the plant



2. Mark and colour the **cultivating areas** in map



Meanings:

1. Anemia – not enough red cells in blood
2. Fracture – a break in a bone or other hard material
3. Gastric – involving the stomach
4. Obesity – the state of being over weight
5. Osteology - study of Bones

10. VETIVER / KHUS-KHUS

Scientific Name: *Chrysopogon Zizanioides*

Tamil Name: வெட்டிவேர்



About the Plant:

- **History:** Vetiver, (*Chrysopogonzizanioides*), also called khus-khus, perennial grass of the family Poaceae
- The scent has often been compared to the sharp smell of uncut grass on a warm day
- **Climate:** It requires a hot and humid climate. It is adaptable to a wide range of soil and climatic conditions
- **Cultivation:** Vetiver is native to tropical Asia and has been introduced into the tropics of both hemispheres. In India it is cultivated in the states of Rajasthan, Uttar Pradesh, Karnataka, Tamil Nadu, Kerala and Andhra Pradesh
- **Medicine:** It is used in various purpose of Osmics and Aromology

Anatomy:

- Vetiver is a large tufted bunchgrass and can reach up to 1.5 metres (5 feet) in height
- The thin leaves and stems are erect and rigid, and the plant bears small brown-purple flowers in long spikes
- The fragrant roots grow downward in the soil and can attain depths of more than 3 metres (10 feet)
- The fragrance is closely related to other fragrant grasses such as lemongrass and citronella

Uses:

1. Vetiver oil is used in aromatherapy
2. Used as an insect repellent and also in perfume industry
3. Oil extracted from its roots is used to treat insomnia
4. Applying vetiver oil promotes sleep
5. It is used to prevent erosion and stabilize the soil

*****தண்ணீர் சேடி*****

Exercise:

1. Colour and mark the parts of the plant



2. Mark and colour the **cultivating areas** in map



Meanings:

1. Aromology – study of fragrance
2. Aromatherapy – usage of aromatic materials for physical well-being
3. Insomnia – poor sleeping habits / lack of sleep
4. Osmics - science that deals with smell

11. WILLOW-LEAFJUSTICA

Scientific Name: *Justicia Gendarussa*

Tamil Name: வாடாக்கொடி



About the Plant:

- **History:** *Justicia Gendarussa*, commonly known as willow-leaved justicia is a small erect, branched shrub.
- It may have the potential to be the basis for a birth control pill for men
- **Climate:** This Variegated Willow Leaf Shrimp Plant requires 80-100% sunlight. Willow Leaf Shrimp Plant should be brought indoors or protected during the winter months
- **Cultivation:** *Justicia Gendarussais* native to china. It is commonly found throughout the greater part of India and Andaman Islands. In India it is cultivated in Arunachal Pradesh, Delhi & Dehradun
- **Medicine:** It is used for various purpose in pulmonology

Anatomy:

- Willow-Leaf Justicia is an erect, branched, smooth under shrub 0.8-1.5 m tall
- The leaves are lance-shaped, 7-14 cm long, 1-2.5 cm wide, and pointed at the ends
- The rather small flowers are borne in 4-12 cm long spikes, at the end of branches or in leaf axils
- The teeth of the sepal's cup are smooth, linear, and about 3 mm long
- The flowers are about 1.5 cm long, white or pink, with purple spots
- The capsule is club-shaped, about 1.2 cm long, and smooth

Uses:

1. It treats pulmonary infections
2. It is used to treat respiratory disorders
3. It treats cough and cold and throat infections
4. It treats allergic disorders like bronchial asthma

***** மகிழ்ச்சி பெருக்கு *****

Exercise:

1. Colour and mark the parts of the plant



2. Mark and colour the **cultivating areas** in map



Meanings:

1. Allergic – a damaging immune response by the body to a substance, especially a particular food, or dust, to which it has become hypersensitive
2. Bronchial asthma – person's airways become inflamed, narrow and swell and produce extra mucus which makes it difficult to breathe
3. Pulmonary – connected with lungs

12. WINTER CHERRY

Scientific Name: *Withania Somnifera*

TamilName: அஸ்வகந்தா

About the Plant:



- **History:** Winter cherry is an evergreen herb plant in the Solanaceae or nightshade family
- The name ashwagandha describes the smell of its root (like a horse)
- *Withania Somnifera*, known commonly as ashwagandha, Indian ginseng, poison gooseberry, or winter cherry
- **Climate:** It prefers dry stony soil with sun to partial shade. Propagation can be through seed in the early spring, or from greenwood cuttings in the later spring
- **Cultivation:** It grows in central and southern Europe, Iran, China, and Southeast Asia
- Rajasthan, Punjab, Haryana, Uttar Pradesh, Gujarat, Maharashtra and Madhya Pradesh are major ashwagandha growing states in India
- **Medicinal Use:** It is used for various purpose in Psychology and Osteology

Anatomy:

- Winter cherry species is a short, tender perennial shrub growing 35–75 cm (14–30 in) tall
- Tomentose branches extend radically from a central stem. Leaves are dull green, elliptic, usually up to 10–12 cm (4 to 5 in) long
- The flowers are small, green and bell-shaped. The ripe fruit is orange-red

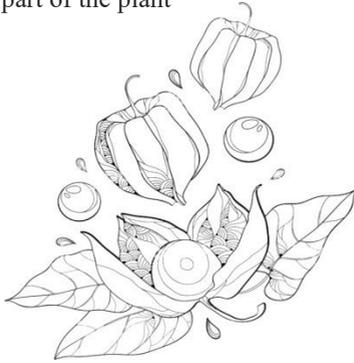
Uses:

1. It gives relief from joint pain
2. It can reduce blood sugar levels
3. It has anti-cancer properties
4. It can reduce cholesterol levels
5. It may help reduce stress and anxiety

*****விவசாயம் காப்போம்*****

Exercise:

1. Colour and mark the part of the plant



2. Mark and colour the **cultivating areas** in map



Meanings:

1. Anxiety – a feeling of worry or fear, especially about the future
2. Cortisol level – helps body to respond to stress, regulate blood sugar and fight infections
3. Psychology - Deals with mind
4. Stress – worry and pressure that is caused by having too much to deal with

HERBS PLANTED IN UPS HERBAL GARDEN

Latin / Common Name	Scientific Name	Tamil Name
Aloevera	<i>Aloe Barbadosensis Miller</i>	கற்றாழை
Ayampana	<i>Eupatorium</i>	மிருதசஞ்சீவினி
Betel Leaf	<i>Piper Betle</i>	வெற்றிலை
Black Pepper	<i>Piper Nigrum</i>	மிளகு
Brahmi Leaves	<i>Bacopa Monnieri</i>	வல்லாரைகீரை
Bryophyllum	<i>Bryophyllum Pinnatum</i>	ரணகள்ளி
Burflower tree	<i>Neolamarckiacadamba</i>	கரநபராக்கியம் / கடம்ப மரம்
Cat whsikers	<i>Orthosiphon Aristatus</i>	பூனை மீசைமூலிகை
Cinnamon	<i>Cinnamomumverum</i>	இலவங்கப்பட்டை
Climbing Brinjal	<i>Solanum Trilobatum</i>	தூதுவளை
Clove	<i>Syzygiumaromaticum</i>	கிராம்பு
Crape Jasmine	<i>Tabernaemontanadivaricata</i>	பாரிஜாதம்
Curry Plant	<i>Murrayakoenigii</i>	கறிவேப்பிலை
Datura	<i>Datura Stramonium</i>	ஊமத்தை,
Dwarf Cooper Leaves	<i>Alternanthera Sessilis</i>	பொன்னாங்கண்ணி
False Daisy	<i>Ecliptaprostrata</i>	கரிசலாங்கண்ணி
Garden Rue	<i>Rutagraveolens</i>	அருவதாமூலிகை
Ginger	<i>Zingiber Officinale</i>	இஞ்சி
Goose Berry	<i>Ribesuva-Crispa</i>	நெல்லிக்காய்
Green Chiretta	<i>Andrographis Paniculata</i>	சிறியாநங்கை
Heart leaf moon seed	<i>Tinosporacordifolia</i>	அம்ருதபள்ளி
Henna	<i>Lawsoniainermis</i>	மருதாணி
Holy Basil	<i>Ocimumtenuiflorum</i>	புனித்துளசி
Indian Borage	<i>Plectranthusamboinicus</i>	கற்பூரவல்லி
Indian Cooper Leaf	<i>Acalyphaindica</i>	குப்பைமேனி
Indian Headache Tree – Arani	<i>Premnaserratifolia</i>	பச்சைமுல்லை
Indian Lead Wort	<i>Plumbago Indica</i>	கொடுவெளி
Indian telegraph plant	<i>Kala Bansa</i>	தொழுக்கண்ணி
Indian Tree of Heaven	<i>Ailanthus Excelsa</i>	பீ நாரிமரம்

Indiravalli	<i>Cardiospermumhalicacabum</i>	முடக்கொத்தான்
Insulin Plant	<i>Chamaecostuscuspidatus</i>	கோஷ்டம்
Karun Kurunji	<i>Strobilanthesheyneanus</i>	கருங்குறிஞ்சி
Lemon Balm	<i>Melissa Officinalis</i>	தழுதாழைசெடி
Lemon Grass	<i>Cymbopogon</i>	எலுமிச்சைப்புல்
Malabar Nut	<i>Justicia Adhatoda</i>	ஆடாதோடை
Mint Leaf	<i>Mentha</i>	புதினா
MuyalCheviyan	<i>Emilia Sonchifolia</i>	சுவர்முள்ளங்கி
Periploca of the woods	<i>Gymnemasyvestre</i>	சிறுகுறிஞ்சா / கோகிலம்
Purple Lippa	<i>Phyla Nodiflora</i>	பொடுதலை
Red Flame Ivy	<i>Hemigraphiscolorata</i>	முறிகூட்டி
Rose Periwinkle	<i>Catharanthus Roseus</i>	நித்திய கல்யாணி
Rosemallows	<i>Hibiscus Rosa-Sinensis</i>	செவ்வந்தி
Sabja Seed Plant	<i>Ocimumbasilicum</i>	சப்ஜா விதை
Starvation Fruit	<i>Morindacitrifolia</i>	நோனி
Stone Breaker	<i>Phyllanthus Niruri</i>	கீழாநெல்லி
Sweet Flag	<i>Acorus Calamus</i>	வசம்பு
Sweet Leaf Bush	<i>Sauropusandrogynus</i>	தவசிமுருங்கை
Tanner's Cassia	<i>Senna Auriculata</i>	ஆவாரம்பூ
Thumbai	<i>Leucas Aspera</i>	தும்பை
Thuthi	<i>Abutilon Indicum</i>	துத்திக்கீரை
Turmeric	<i>Curcuma Longa</i>	மஞ்சள்
Veld Grape	<i>Cissusquadrangularis</i>	பிரண்டை
Vetiver Khus-Khus	<i>Chrysopogonzizanioides</i>	வெட்டிவேர்
Wild Egg Plant	<i>Solanum Torvum</i>	கத்திரிக்காய்
Willow – Leaf – Justicia	<i>Justicia Gendarussa</i>	வாடாக்கொடி
Winter Cherry	<i>Withaniasomnifera</i>	அஸ்வகந்தா
Y – Throned Carissa	<i>Carissa Bispinosa</i>	பிறந்தபிளம் / நாட்டல் பிளம்

UPCOMING INITIATIVE OF UPS

By
Department of Environmental Science

“HARITAVANAM”
A GREENHOUSE PROJECT

GREEN HOUSE

A **greenhouse** (also called a **glasshouse**, or, if with sufficient heating, a **hothouse**) is a structure with walls and roof made chiefly of transparent material, in where plants such as flowers and vegetables are grown

It usually has a *glass* or translucent plastic roof. Many greenhouses also have *glass* or plastic walls. Having a greenhouse project in the school is one of the best ways to kindle their curiosity, imagination, and creativity as well as integrating lessons. Showing them the mechanics and advantages of the greenhouse and making them take over the maintenance encompasses a broader scope of learning skills to include:

1) Science lessons

Students will be made aware of the things happening in the world today like climate changes, global warming, and the way it affects plants. Learning about plants' reaction to light, heat, and cold and the measures to counter them with the use of the greenhouse are invaluable lessons for all students.

With a greenhouse at the school, kids get to learn biology in reality by investigating different plant types, the anatomy of plants, photosynthesis, soil, and watering needs.

The advantage of having a greenhouse to have a garden for all seasons will put across the message of planting and producing food. Often, students are only involved in the seeding stage. They never get to the harvesting part when plants die off during the winter. The greenhouse will effectively include them in the process of planting and growing.

2) Math lessons

What better way to teach math than doing them in a greenhouse classroom setting. Graphing, temperature setting, data collection, width and height measurements are part and parcel of a functioning greenhouse. Math becomes an easier subject when it is taught in a greenhouse setting. Selling off their produce also teaches them important lessons about cost management as well as marketing skills as they learn to promote their products as well.

3) Language lessons

Learning new words can often be tough for students. However, it becomes more interesting when these new words are used to describe and explain the various ways to grow and nurture plants. Encouraging students to express how they feel about the greenhouse project by way of writing teaches them valuable language arts skills.

4) Art lessons

The varied colors given by the various plants and flowers is a lesson in creativity especially when they are encouraged to draw them. This also stimulates students to appreciate nature's natural beauty. Landscape and greenhouse design and architecture are some of the excellent art lessons students will be able to learn from a greenhouse project.

5) Home Economic Class

The produce coming from your school greenhouse can be used in Home Ec classes. The students will also see the critical impact plants have on everyday living and taught healthier dishes. This will make them see the big difference between fresh produce from the garden against the products sold in groceries and supermarkets. Additionally, the inclusion of ideas involving off-grid food production will emphasize the importance of climate change prevention.

On top of that, this can also teach them better ways of home management, maintenance work on the greenhouse, composting and so on.

Moreover, Greenhouse classroom setting has become the popular choice for imparting important life lessons about planting and growing your own products. This makes it doubly important to choose the best greenhouse design conducive to learning.

Exposure to gardens and further active interactions and participation with nature provide mental and physiological advantages that improve healing and therapy.