

CLASS-II

Lesson 3 Plants and Their Uses

Lesson 4 Swaras

Lesson 5 Folk Songs

Lesson 6 Kitchen World



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PLANTS AND THEIR USES

Plants are the very precious part of our earth. Earth is called a green planet because of the presence of plants. They are also the most essential part of the life of all the organisms living on the earth. They possess power of healing, source of energy, protect the ecosystem, balance nature with oxygen production, they are habitats for animal, shelter for man, beautification, and so on. In this lesson we shall learn about the importance of plants, and the medicinal properties of some of the plants growing in our neighborhood.



OBJECTIVES

After studying this lesson, you will be able to:

- describe the importance of plants
- identify the plants in your neighborhood; and
- enumerate the medicinal and commercial values of the these plants;

4.1 IMPORTANCE OF PLANTS

Plants grow in many different forms such as huge trees, others are herbs or some have bushy form. The basic food for all

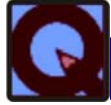


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organisms is produced by green plants. Plants help in maintaining oxygen balance, the most important gas that enables us to breathe. Animals emit carbon dioxide by taking in oxygen. This rise in carbon dioxide levels in the air is reduced by plants. It also maintains the ozone layer that helps protect Earth's life from damaging UV radiation. Humans directly or indirectly depend on plants for several of their needs.

Other than food and oxygen plants help to-

1. Control CO₂ level.
2. Check pollutions
3. Check soil erosion.
4. Diminish noise pollution (mango, neem, ficus)
5. Cure illness by their medicinal properties.
6. Be home to various animals and birds.
7. Provide aesthetic and recreational values.
8. Prevent flooding and soil erosion, absorbing thousands of litres of storm water.
9. Trees boost wildlife.
10. Strengthen communities - Trees strengthen the distinctive character of a place and encourage local pride. Trees are also invaluable for children to play in and discover their sense of adventure.
11. Develop the economy - People are attracted to live, work and invest in green surroundings.
12. They are also a source of furniture and shelter as they provide wood.



INTEXT QUESTIONS 4.1

State whether true or false

1. Trees boost wildlife.
2. Plants reduce the aesthetic and recreational values of the environment
3. Plants help in maintaining oxygen balance
4. Plants promote flooding and soil erosion
5. Plants like mango, neem diminish noise pollution .

4.2 THE PLANTS IN YOUR NEIGHBORHOOD

1. **Banyan Tree:** This huge type of tree has extensive branches having height more than 21 m. Leaves are of 10-20 cm long. Leaves are used as plates in India. Leaf, seeds and bark are useful for various diseases and disorders.



2. **Neem Tree:** The most common and popular tree. The neem tree has bright leaves and goes up to the height of 100 feet and has a straight and rough trunk. Each part of the Neem tree is useful. It's wood is used for furniture making. Neem is also used as fertilizer.



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3. **Peepal tree:** It is a fast-growing tree having heart-shaped leaves. It sheds its leaves in the month of March and April. Peepal tree is used for various purposes. The leaves are also used to decorative the homes on special occasions.



4. **Amla Tree:** This is about 8-18 meters tall. Spreading branches and crooked trunk are the prominent features of this plant. It has feathery and long, oblong shaped leaves that smell like lemon. Amla is highly rich in Vitamin C, thus used in common cold. This improves the immunity of our body and is useful for healthy hair.



5. **Eucalyptus:** The leaves of this evergreen kind of tree are of 6-12 inches long and 1-2 inches broad when they are adult. Height is nearly about 300 feet or more. Prominent bark appears as it ages. Fruit comes in a capsule. One of the main use of this kind of tree is plywood and for the manufacture of the paper.



6. Mahogany : Indian mahogany trees are found mostly all over India. They have symmetrically round crown growing up to 30-40 feet height. Furniture, boat, casket, musical instruments are generally made from the wood of mahogany.



7. Indian Rosewood:

The rosewood is about 25 m and has a diameter of about 3 m., which grows straight. Flowers are of white and pink colours. The fruit is brown coloured and is



of very dry and hard. Crown part is oval in shape. It is used in furniture making, plywood, musical instruments, etc.

8. Sal Tree: Sal trees is a rare tree variety that is mainly found in the eastern regions of India like Bengal, Assam and others. It grows up to 30 m in height. Sal tree has a tough texture and leathery leaves. They never go completely leafless.





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- 9. Cork Tree:** This tall tree can grow to about 25 meters. The flowers are white tubular and consist of fragrance. The characteristic feature of this is that the flower grows at night and by itself shed it in the early morning. The corky bark and strong trunk are used mainly for its medicinal value.



- 10. Teak Tree:** The teak trees are very tall having a height about 30 meters and are evergreen. The larger leaves are of same the size of tobacco trees. The flowers are of white to bluish coloured. Teak is widely used in making furniture, boats, doors and windows of a house.



- 11. The Oak Tree:** Oak tree falls under the group of flowering plants. There are different types of oak trees present in nature. It has spirally arranged leaves. The bark of the white oak tree is usually dried and used for medical purposes. The bark of cork oak is used as a bottle stopper.



12. Cedar: This tree has a conical shape with a branched trunk and has flat leaves. This tree used as a medicine for cold, flu and fevers. Leaves of cedar tree are used to make tea which is high in Vitamin C.



13. Coconut tree: The slender, leaning, ringed trunk of the tree rises to a height of up to 25 metres (80 feet) from a swollen base and is surmounted by a graceful crown of giant featherlike leaves. Coconut tree has 13 to 20 inches long leave.



14. Khair Tree: It has rough bark which is dark gray brown in colour. It grows up to the height of 15 meter. The leave are 8-10 cm long. It has short curved stipular spines and rough grayish brown bark.



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15. Kikar Tree: Kikar is the small thorny tree. It grows to the height of 7 - 12 meter. It has yellow round head flowers. The bark is red -brown to blackish and rough. The leaves are light green and fern like.



16. Gulmohar tree: Gulmohar is most famous for its pretty looking flowers. In India, its flowering season is between April and June. Spotting this Indian tree is quite easy as it grows in dry as well as tropical conditions. This shade giving tree expands and offers a dense canopy. The flowers of this tree are large and orange-red in colour.



17. Ashoka Tree: This tree is an evergreen one and is known for its foliage and fragrant flowers. Its leaves are dark green in



colour and grow in bunches. Its leaves grow in dense clusters and are pointed from the top.

- 18. Arjuna tree:** Arjuna tree is generally found around river beds. It is not difficult to spot one. Arjuna exhibits yellow flowers from March to June. It has a woody fibrous fruit that appears between September and November.



- 19. Curry tree:** It is a small tree growing up to 6 metres. Its leaves are pinnate and have 11-21 leaflets. The plant produces



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small white flowers that self pollinate and produce small black berries.

Ayurveda, the ancient form of medicinal practice originating in India, is one of the most revered medicinal approach in the world. What once prevailed centuries ago still rules the world of science. Ayurvedic herbs are time tested for their health and other benefits.

4.3 MEDICINAL VALUES OF SOME COMMON PLANTS OF INDIA

Here is the list of Indian Medicinal Plants that you can grow at your home and they will keep your home always positive.

Ashwagandha

The benefits of ashwagandha are many. In addition to promoting fertility, aiding in wound care, and boosting the immune system, some other benefits are:





- Anti-tumor, pain relief
- Eye health
- Heart tonic
- Lowers cholesterol and regulates blood sugar
- Reduces depression and anxiety, combats stress

Tulsi/Basil

For over the centuries Tulsi (the queen of herbs) has been known for its remarkable healing properties.

- Tulsi is taken as the herbal tea.
- Its oil is also used against the insects and bacteria.
- Tulsi oil is also used as the ear drop.
- Tulsi helps in curing malaria.
- It is very effective against indigestion, headache, hysteria, insomnia and cholera.



Aloe Vera/Ghritkumari

The sap from aloe vera is extremely useful to speed up the healing and reducing the risk of infections. It is used for :



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- wounds
- cuts
- burns
- reducing inflammation
- ulcerative colitis (drinking aloe vera juice)
- chronic constipation
- poor appetite
- digestive problems



Gotu Kola

The gotu kola acts on various phases of connective tissue development and stimulates healing of :

- ulcers
- skin injuries
- treat leprosy
- revitalize the brain and nervous system
- increase attention span and concentration



Fenugreek / Methi

Fenugreek seeds are nourishing and taken to:

- lower blood cholesterol levels
- treat inflammation and ulcers of the stomach and intestines
- poor digestion
- insufficient lactation
- painful menstruation
- freshen bad breath



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Marigold / gaenda

These plants not only keep your body healthy, but also help keep insects away. It has following benefits :

- Soothes skin and treats skin diseases
- Reduces inflammation
- Strong antibacterial and antiseptic properties
- Treats ear pain and infection
- Strengthens eyes



**Notes****Coriander/Dhania**

This herb makes a tasty tea and helps relieve tummy aches, nausea and muscle pain.

- Relieves allergies
- Soothes muscle pain
- Relieves headaches
- Reduces nausea, gas and indigestion
- Treats bad breath
- Highly antibacterial

**Brahmi**

Brahmi grows well in pots. But ensure that it is not exposed to direct sunlight. The leaves are used to improve memory and learning, to get rid of worms in the stomach and also as a remedy for skin related disorders.



Ajwain/Carum

Ajwain seeds are a rich source of protein, minerals, fiber, carbohydrates, calcium, phosphorus, iron, carotene, thiamin, riboflavin and niacin. Health benefits include:

- Improves digestive health
- Helps in curing common cold
- Relief from ear and toothach
- Lessen greying of hairs
- Relief from Arthritis pain



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Bael

Bael is one of the several medicinal plants available in India that you can use in order to benefit your health. It is a tree that many people are familiar with and its leaves are highly helpful in curing ailments such as diarrhoea, constipation, and dysentery.





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Ginger

The ginger root has many medicinal actions including antibacterial, antiviral and antioxidant. Some health benefits of Ginger are:



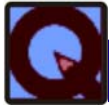
- Ginger juice can balance digestive process.
- Improves the nutrients absorption power of body.
- Anti-inflammatory properties of ginger can cure joint pain.
- Ginger could keep away nausea in post surgery.

Garlic

Garlic contains Vitamin C, Vitamin B6, Manganese and Fiber. The sulphur rich, strong pungent smell of garlic also can keep away insects and even snakes. Some health benefits of Garlic are:

- Provide better protection against cancer infections.
- Help to Improves your immunity.
- Balances the digestive system and improves nutrient absorption power of the body.
- Reduces blood pressure and reduce chances of cardiovascular problems.





INTEXT QUESTIONS 4.2

Fill in the blanks

1. Arjuna tree is generally found around ----- beds.
2. ----- has sulphur rich ,strong pungent smell
3. Bael is helpful in curing ailments such as----- , constipation, and dysentery.
4. The ----- from aloe vera is extremely useful to speed up the healing
5. Tulsi is known as the ----- of herbs,has been known for its remarkable healing properties.



WHAT HAVE YOU LEARNT

- Describe the importance of plants.
- Identify the plants in your neighborhood.
- Enumerate the medicinal and commercial values of the these plants.



TERMINAL QUESTIONS

1. List ten reasons for growing plants.
2. List and describe any 5 trees growing in your neighborhood.
3. List any 10 medicinal plants you can grow in your house.
4. What are the health benefits of the following plants:
 - i. Ashwagandha
 - ii. Mint



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- iii. Tulsi
- iv. Garlic
- v. Ginger



ANSWERS TO INTEXT QUESTIONS

4.1.

- 1. True
- 2. False
- 3. True
- 4. False
- 5. True

4.2.

- 1. River
- 2. Garlic
- 3. Diarrhea
- 4. Sap
- 5. queen