
Plants

Plants

Plants are the green- coloured organisms which provide us with fruits, vegetables and flowers. For example:- Marigold, Rose plant, Money plant, etc.

Parts of Plant

Plants constitute of different parts and each part play crucial role in their growth. Different parts of the plants are - Root, Stem, Fruit, Flower, Leaves.

- **Roots**

Roots are lowest part in a plant's body that grow inside the soil surface. These help the plants to stay firm in the soil.

- **Stem**

Stem is a part that grows above the surface of the soil and holds leaf, flower and fruit. It gives strength and support to the upper part of a plant.

- **Flower**

You may have noticed colorful part in the plants of various shapes, size and colours. These parts are called flowers. Flowers after the maturation are turned into fruits.

- **Leaves**

The green coloured part in the plants with a tiny plate like appearance is called a leaf. Leaves are the kitchen of a plant as food is made in the leaves only. They are also of varying sizes, shapes and colours.

- **Fruits**

The fleshy and edible part of a plant is called a fruit. Mango, Apple, Water-Melon, etc all are the fruits only.

Types of plants

Plants are classified into 4 major categories :

1. **Trees** - Trees are large plants with a single strong woody stem. Their stem is covered by bark. e.g. Neem, Mango, Banyan, Deodar, etc. There are few trees with a non-woody stem. Banana and papaya trees have a non-woody stem.
2. **Shrubs** - Shrubs are bushy plants. Many strong stems grow near the ground. They are generally smaller than trees. e.g. rose, lemon, etc.
3. **Climbers** - Climbers or creepers are plants with a weak stem. They cannot stand straight and thus grow along with other plants, walls or on the ground. (A climber climbs and a creeper creeps on the ground). Examples of climbers are grapevine ,moneyplant ,peas ,beans ,cucumber etc. Example of creepers are pumpkin ,watermelon etc.
4. **Herb** - Herb are small plants and known for their aromatic and medicinal usages. e.g. spinach, coriander and mint, etc

Note. Some single seed fruits are apricot , mango, peach, plum, coconut, and avocados. Coconut is the largest seed fruit. Some fruits have seeds outside the fruit like strawberry and cashew. Some fruits do not have seeds in it like banana and pineapple.

Herbs



Shrubs



Climbers



Trees



Useful herbs :



Aquatic Plants :

Aquatic plants are the plants which grow in water. E.g. Water hyacinth, water lettuce, lotus and fanwort.

Weed plants :

Weed plants are undesired plants. They are unwanted plants in farm fields. They can grow and spread anywhere without any care. They cause harm to crops as they extract water and minerals from soil meant for crops. They can be removed manually or by using herbicides.

Food items obtained from the plants

Plants provide us with fruits, vegetables and grains.

Vegetables - These are the edible parts of the plants which can be eaten either in raw or cooked form. Potato, Onion, Lady- Finger, Brinjal, etc are the vegetables only.

Fruits- Fruits are the part of the plants that we eat. For example- Watermelon, Apple, Mango, Banana, Pineapple,Guava, etc.

Grains- These are the seeds obtained from the plants and can be eaten only after cooking. Rice, wheat, maize are some grains we get from plants.

Characteristics of plants

Plants play an important part in our life. They are living things like us. Without plants we cannot even think of survival on earth. Plants give us the oxygen we breathe, wood that we eat, wood and several other things.

Following are some of the **properties of plants**:

1) Plants cannot move from one place to another but their parts show movements towards sunlight, warmth and support. e.g. sunflower turns towards the sun. Climbers move towards support etc.

2) Sunlight, water, soil and air (carbon dioxide) are essential for plants.

3) Plants can exist in water as well.

4) Plants are green in color due to the presence of a **green color pigment** called **chlorophyll**. Chlorophyll helps plants in absorbing the energy of sunlight during photosynthesis.

5) As blood flows in the body of humans, similarly sap flows in the plants.

6) The **bark** is the outermost layer of stem and roots of woody plants. It is like the **skin** of plants.

7) Plant roots absorb water and transfer it to other parts of the plant through the stem.

8) When a plant has excess water it **releases some of the water through stomata**. This process is called **transpiration**. Water is released from the underside of leaves and is converted into vapours. Transpiration is also called evaporation of water from plant leaves.

Growing Tip
(Terminal Bud)

Flowers

Axillary Bud

Petiole

Node

Enter Node

Node

Leaf

Fruit(Seeds)

Stem

Primary Root

Lateral Roots

Shoot
System

Root
System