# Adaptation in Terrestrial Plants

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**Terrestrial Plants**

Plants that grow on land are called terrestrial plants.

Depending on the different terrestrial habitats, terrestrial plants can be classified into five main groups:

1. Plants in plains with less rainfall
2. Plants in plains with heavy rainfall
3. Plants in mountains
4. Plants in deserts
5. Plants in coastal areas

### 1. Plants in Plains

Plains are large, flat land areas and have different climatic conditions.

### A. Plants in Plains with Less Rainfall

Some plains have very hot weather and receive limited rainfall.

**Adaptations:**

- Trees have many branches.
- Most trees shed their leaves during autumn and are called deciduous trees.

**Examples:** Mango, Banyan, Neem, Peepal, Gulmohar.

### B. Plants in Plains with Heavy Rainfall

These regions receive a lot of rainfall and have hot and damp weather.

**Adaptations:**

- Trees have drip tips and waxy surfaces on leaves to shed excess water.
- There is abundant plant growth, and some plants grow on top of others to reach sunlight.
- Most trees remain green throughout the year and are called evergreen trees.

**Examples:** Rubber, Coconut, Teak.

## 2. Plants in Mountains

Mountain regions are generally colder than plains.

**Adaptations:**

- Trees grow tall and straight and are usually cone-shaped, allowing snow to slide off their branches.
- Leaves are small and needle-like to minimize water loss.
- Trees bear cones with seeds instead of flowers, preventing damage from snow.

**Examples:** Fir, Pine, Cedar, Mosses, Ferns.

## 3. Plants in Deserts

Deserts receive very little rainfall, and plants must survive with minimal water.

**Adaptations:**

- Small leaves and spines help conserve water.
- Leaves have a thick waxy coating to retain moisture.
- Some plants are leafless and store water in their green stems, which help in photosynthesis.
- Roots are close to the soil surface to quickly absorb water before it evaporates.

**Examples:** Cactus, Joshua Tree, Date Palm, Keekar.

## 4. Plants in Saline Coastal Areas

Coastal areas have salty soil and rocky or sandy terrain, making it difficult for roots to grow.

**Adaptations:**

- Trees have deep roots and strong, flexible stems to withstand strong winds.
- Leaves are thick and long, forming many stripes to tolerate wind.
- Fruits and seeds dispersed by seawater to far-off places.

**Example:** Coconut tree are

## 5. Plants in Marshes

Marshy regions have sticky, clayey soil that holds a lot of water and has very little air.

Trees growing in these areas are called mangroves.

**Adaptations:**

- Mangrove trees have breathing roots that grow above the soil.
- Breathing roots help absorb water and minerals for photosynthesis.

**Examples:** Rhizophora, Avicennia.