

# **Chapter – 6 Types of Plants**

## **Class – 4**

### **E.V.S**

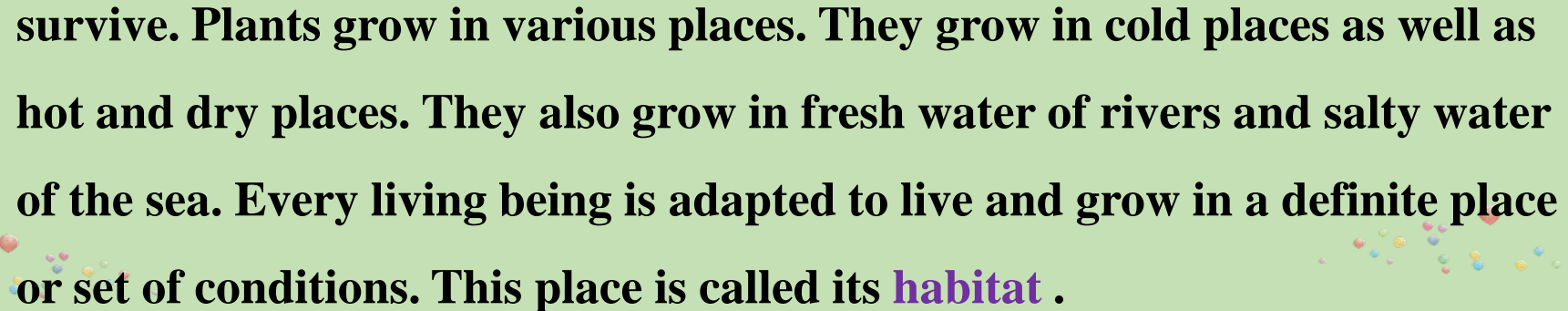




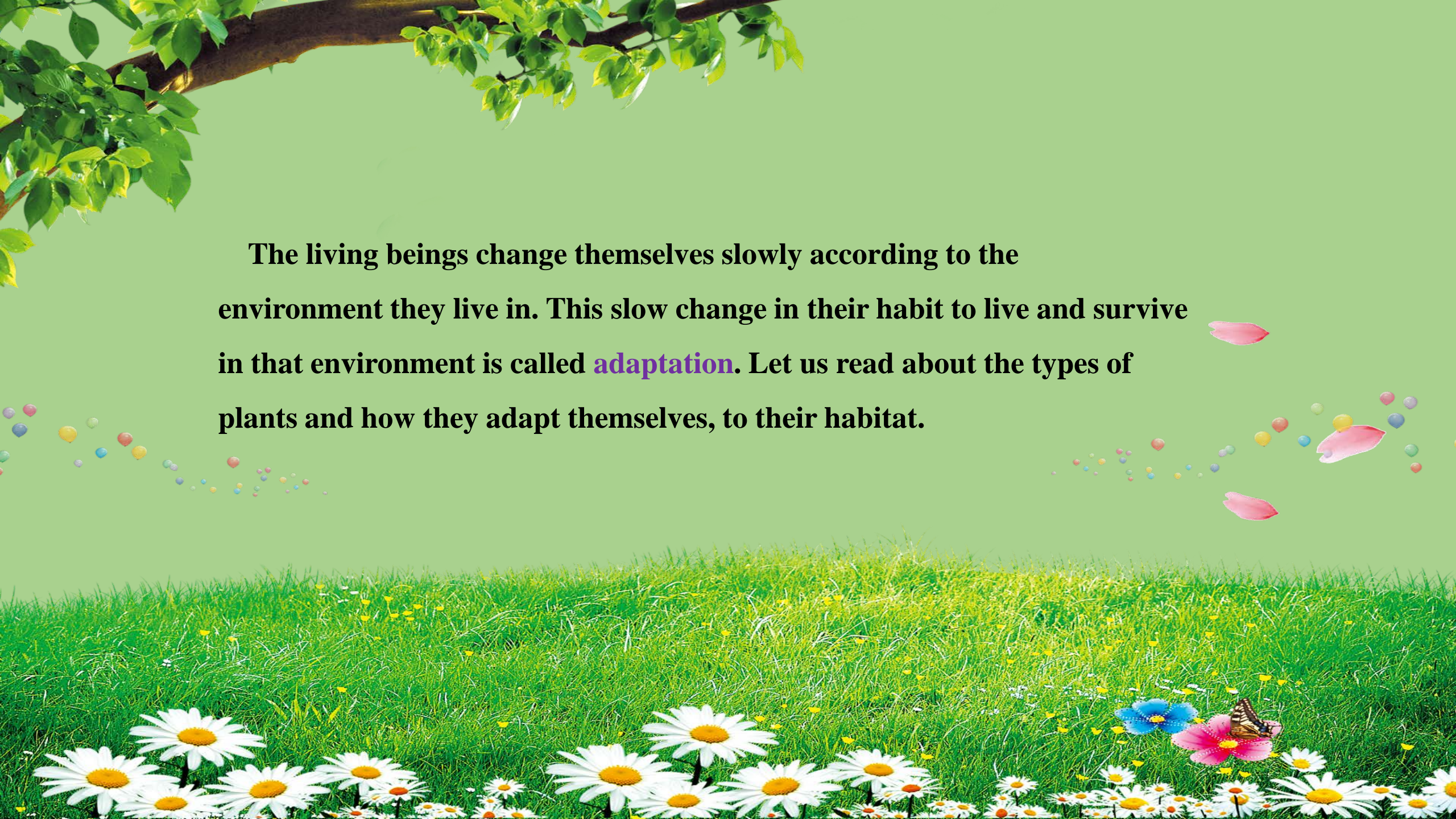


# INTRODUCTION

The plants need soil, water, air, shelter and adequate climate, to survive. Plants grow in various places. They grow in cold places as well as hot and dry places. They also grow in fresh water of rivers and salty water of the sea. Every living being is adapted to live and grow in a definite place or set of conditions. This place is called its **habitat** .







The living beings change themselves slowly according to the environment they live in. This slow change in their habit to live and survive in that environment is called **adaptation**. Let us read about the types of plants and how they adapt themselves, to their habitat.





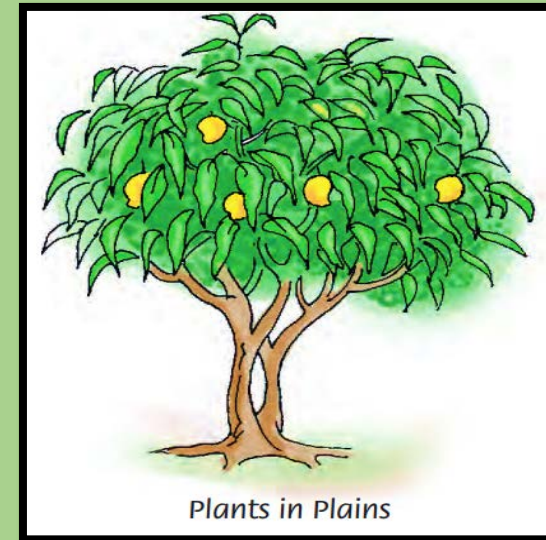
# TERRESTRIAL PLANTS

Plants that grow on land are called the **terrestrial plants**. Depending on the conditions they grow in, there are different types of terrestrial plants.



# Plants in Plains

Trees like banyan, peepal and mango grow in the warmer climate of the plains. They shed their leaves in winter to protect themselves from cold.







## Plants in Cold and Hilly Regions

**The hilly areas have cold climatic conditions. There is snowfall in some areas. The trees that grows here have to survive in cold.**



# Conifer Trees

These trees are cone shaped. This is the reason that the trees are called **conifers**. Conifer trees



Pine




Spruce



Cedar

Conifer trees

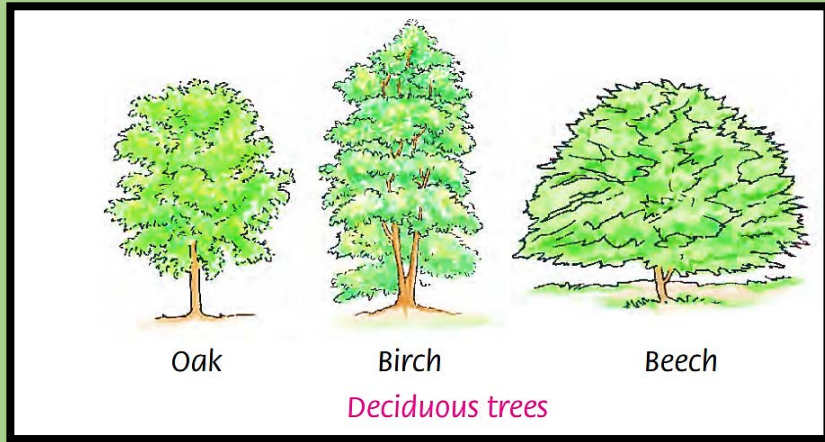




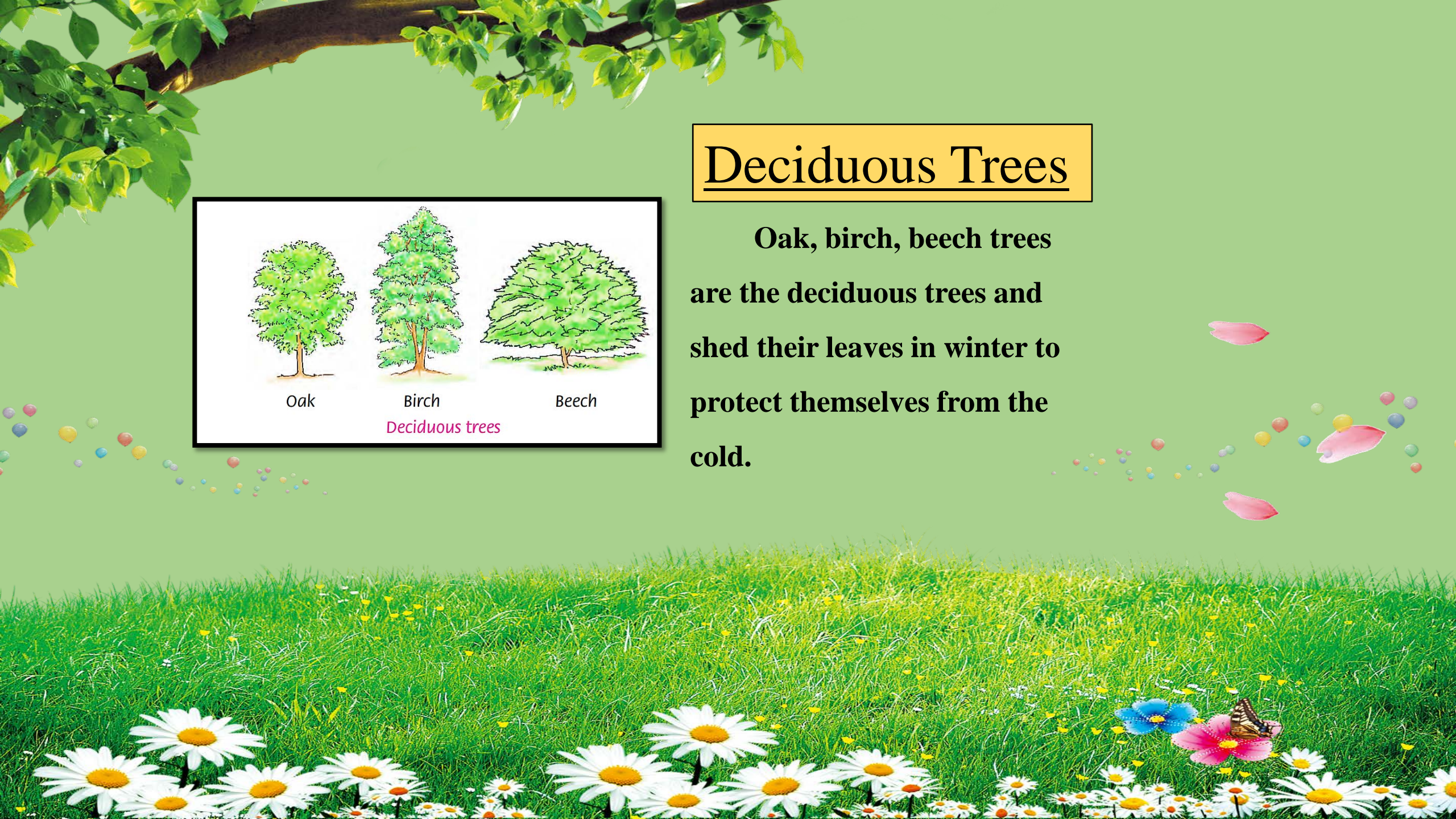
**have needle shaped  
leaves, which are tough  
and can tolerate cold and  
snow. The sloping shape of  
the trees make the snow  
slip down easily. Pine, spruce, cedar and fir are the evergreen trees  
that never shed their leaves.**



# Deciduous Trees



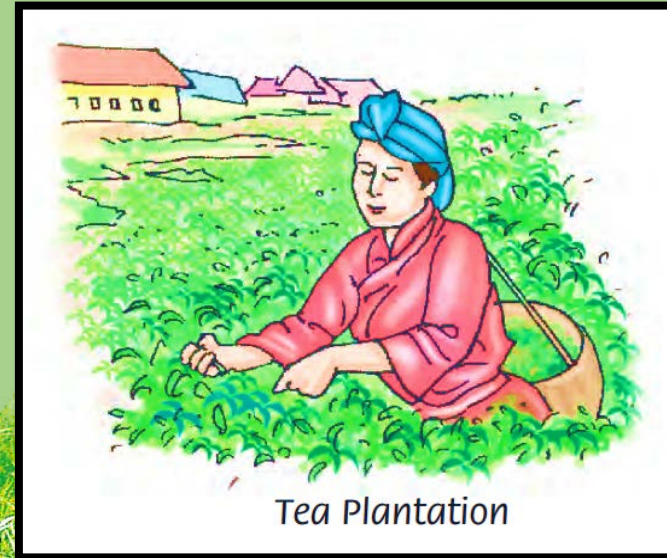
Oak, birch, beech trees  
are the deciduous trees and  
shed their leaves in winter to  
protect themselves from the  
cold.





# Plants In Hilly Areas With Heavy Rainfall

Tea plants grow in hilly areas with heavy  
rain.





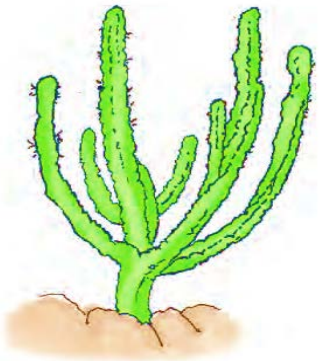


# Plants in Desert

Some plants grow in hot and dry places.

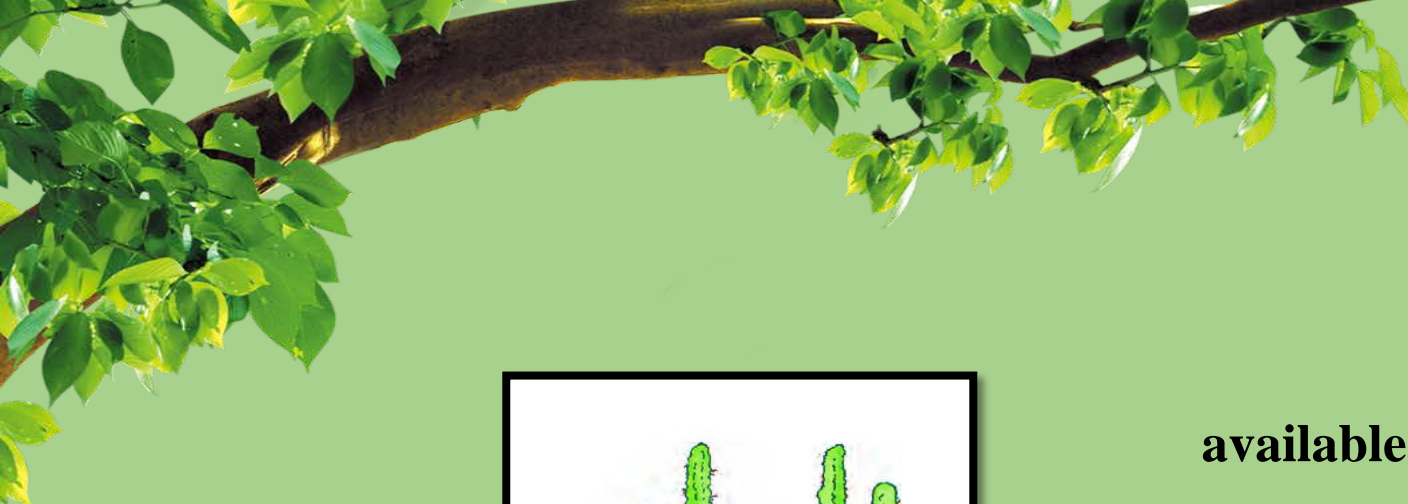
They are called **xerophytes** . Roots of these plants are adapted to get whatever water is





Xerophytes (plants in desert)

available. Desert plants have small reduced leaves. Plants like cactus spread their roots under the earth's surface. They can quickly catch the underground water.








**The leaves of cactus are like sharp spines. This prevents loss of water from the leaves.**





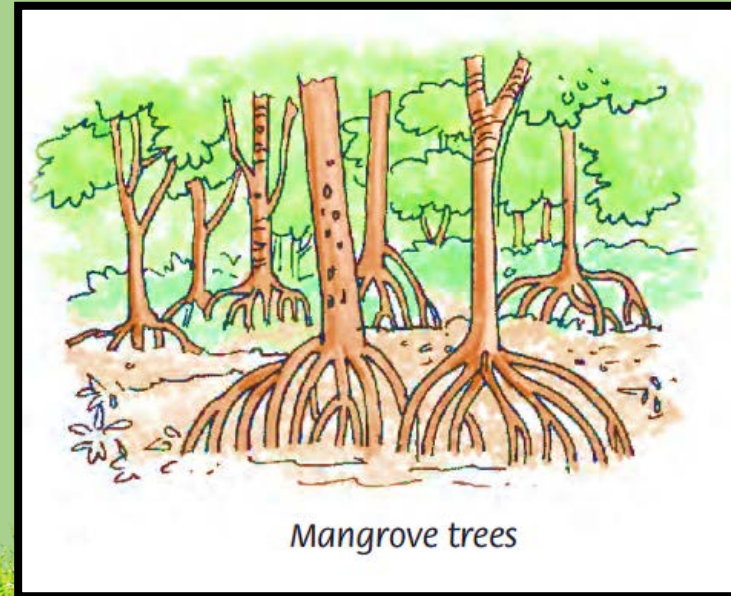


**Cactus plants store water in their thick stem  
and use this water when there is no rain. The  
green stem contains chlorophyll and instead of  
leaves, the stem itself makes food for the plant.**



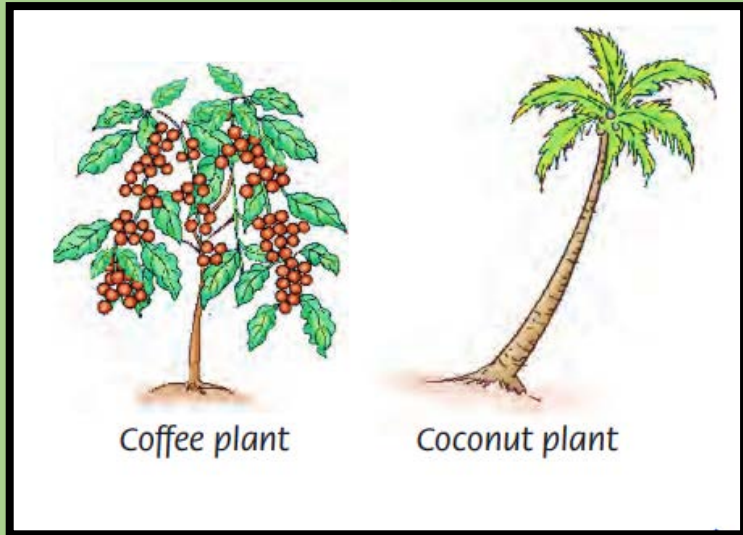
# Plants in Marshy Places

Marshy places have clayey soil and plenty of water. In these areas water collects in the soil and cannot drain away. Mangrove trees grow in the marshy places. Roots of these trees do not get air from the soil. They have breathing roots that grow above the soil.

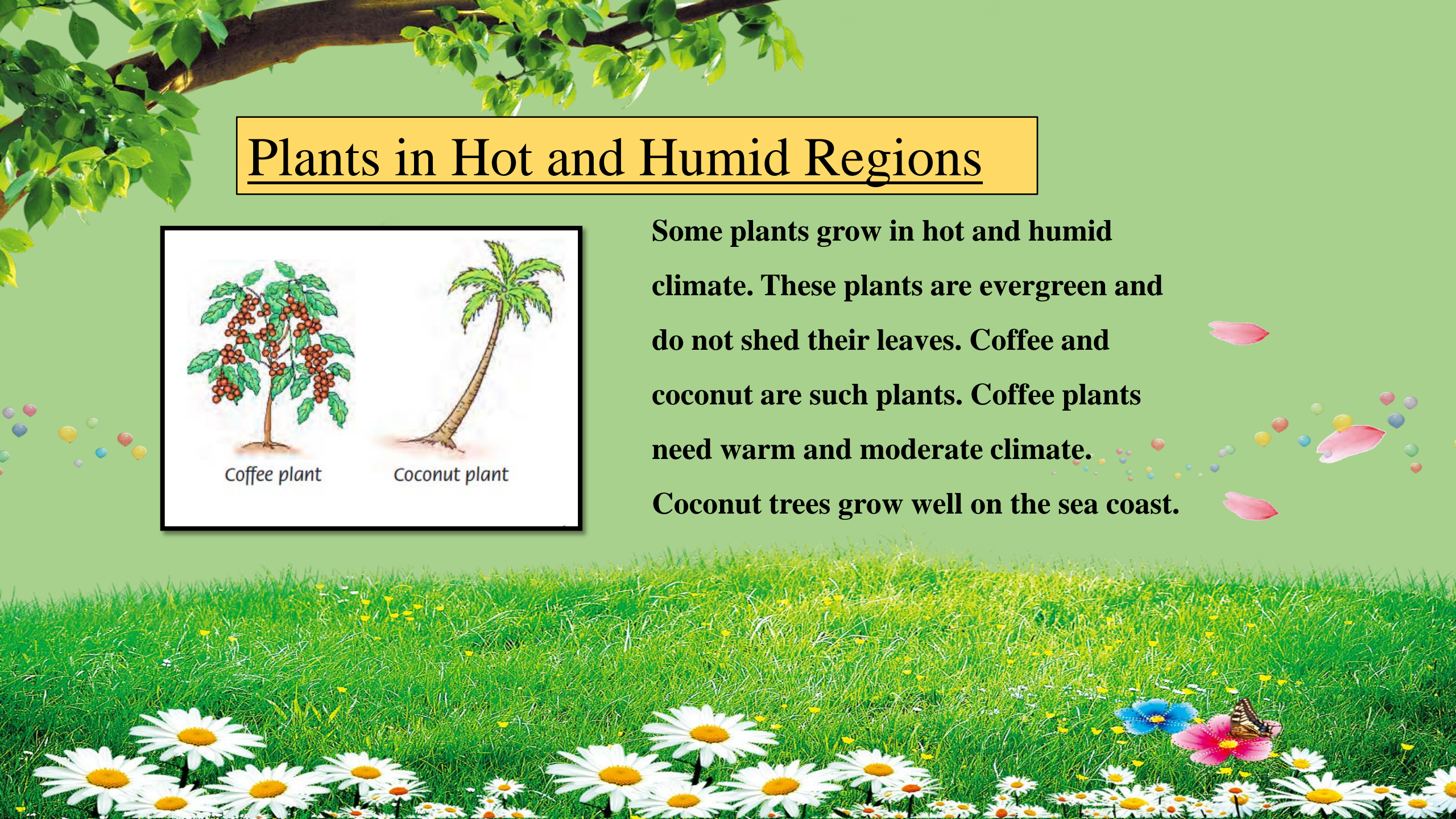




# Plants in Hot and Humid Regions



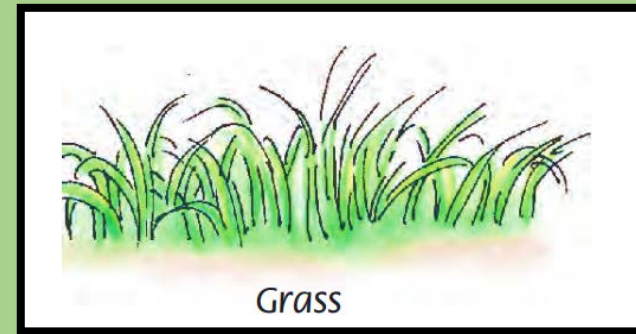
Some plants grow in hot and humid climate. These plants are evergreen and do not shed their leaves. Coffee and coconut are such plants. Coffee plants need warm and moderate climate. Coconut trees grow well on the sea coast.



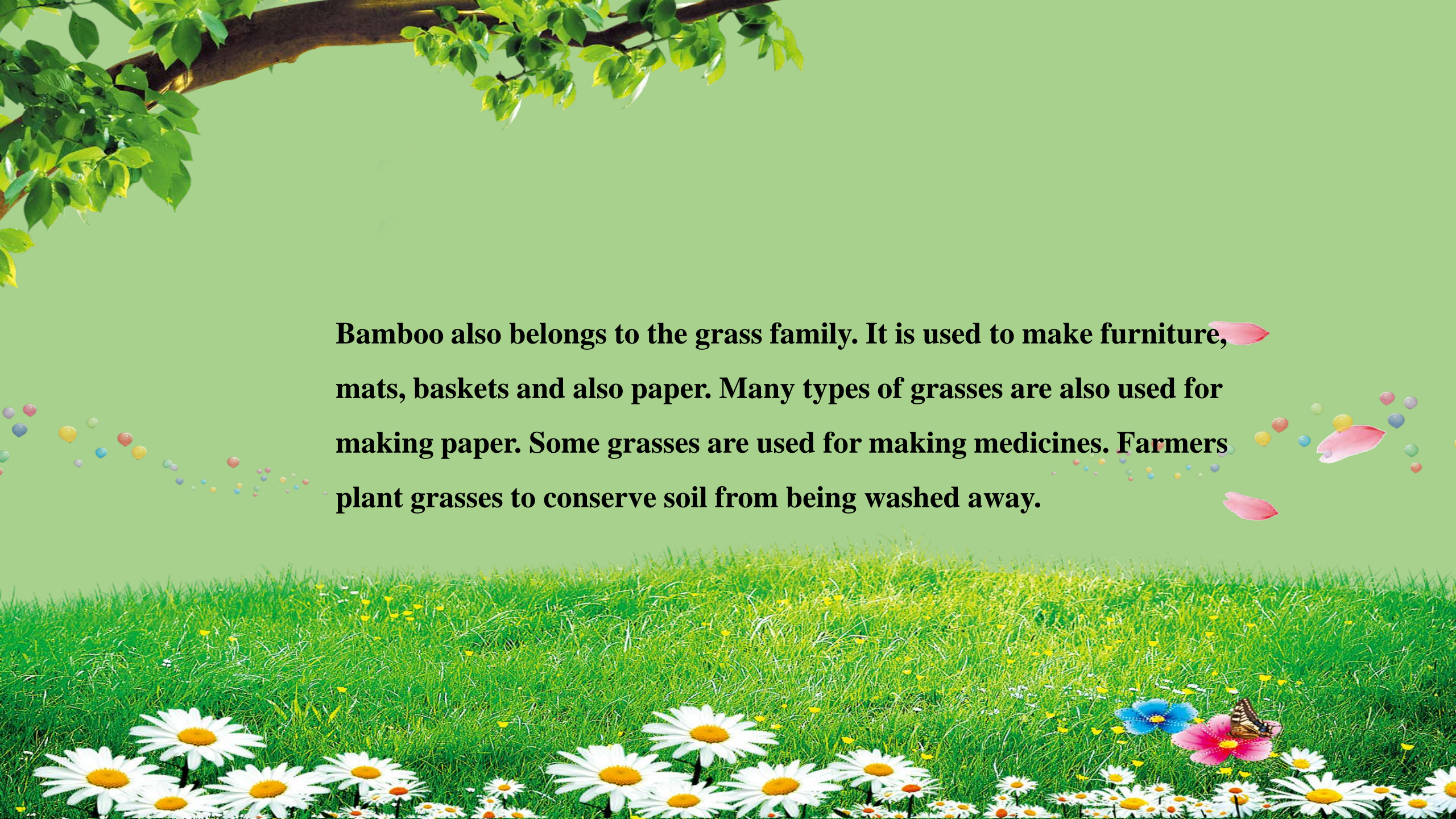


# Plants Related to Grass Family

**All the plants that produce cereals, belong to the grass family. These plants provide food for human beings and fodder for animals.**





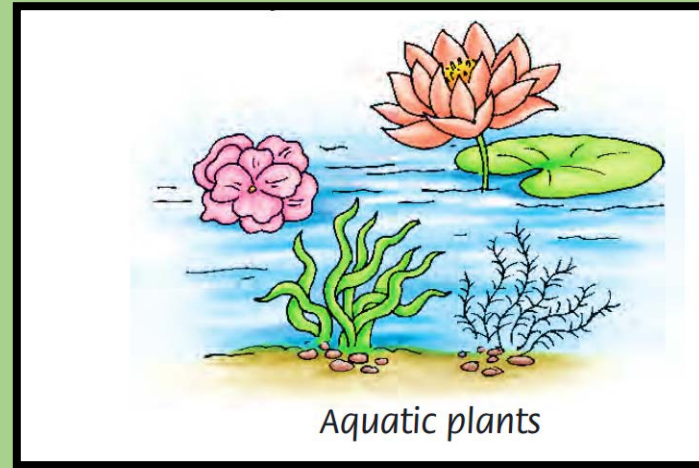


**Bamboo also belongs to the grass family. It is used to make furniture, mats, baskets and also paper. Many types of grasses are also used for making paper. Some grasses are used for making medicines. Farmers plant grasses to conserve soil from being washed away.**



# AQUATIC PLANTS

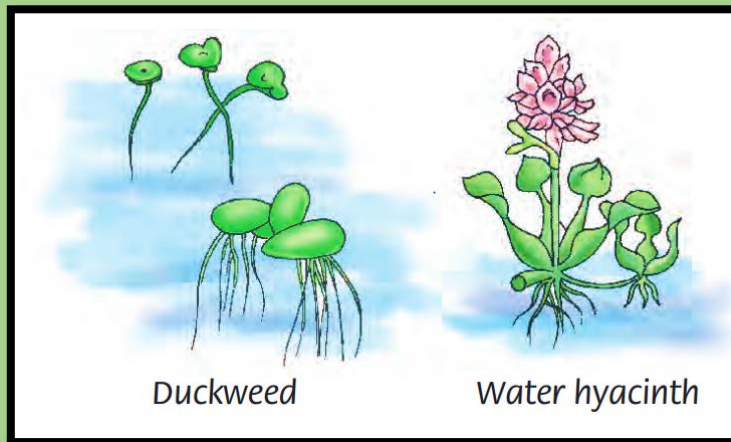
Plants growing in water are called **aquatic plants**. There are three kinds of aquatic plants — floating, fixed and submerged plants.





# Floating Plants

Some plants are seen floating on the surface of water in ponds and lakes. Plants like duckweed and water hyacinth float freely on top of



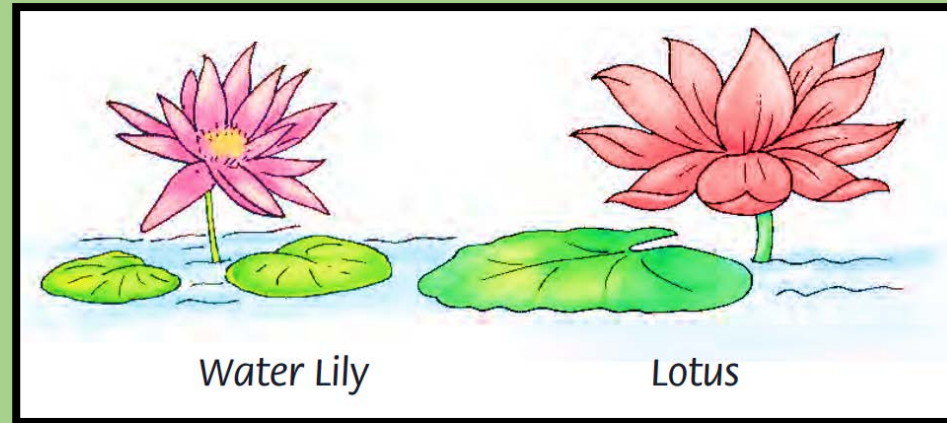
the water. They have spongy bodies with lots of empty space filled with air.

Water hyacinth has swollen leaf stalks that are filled with air.

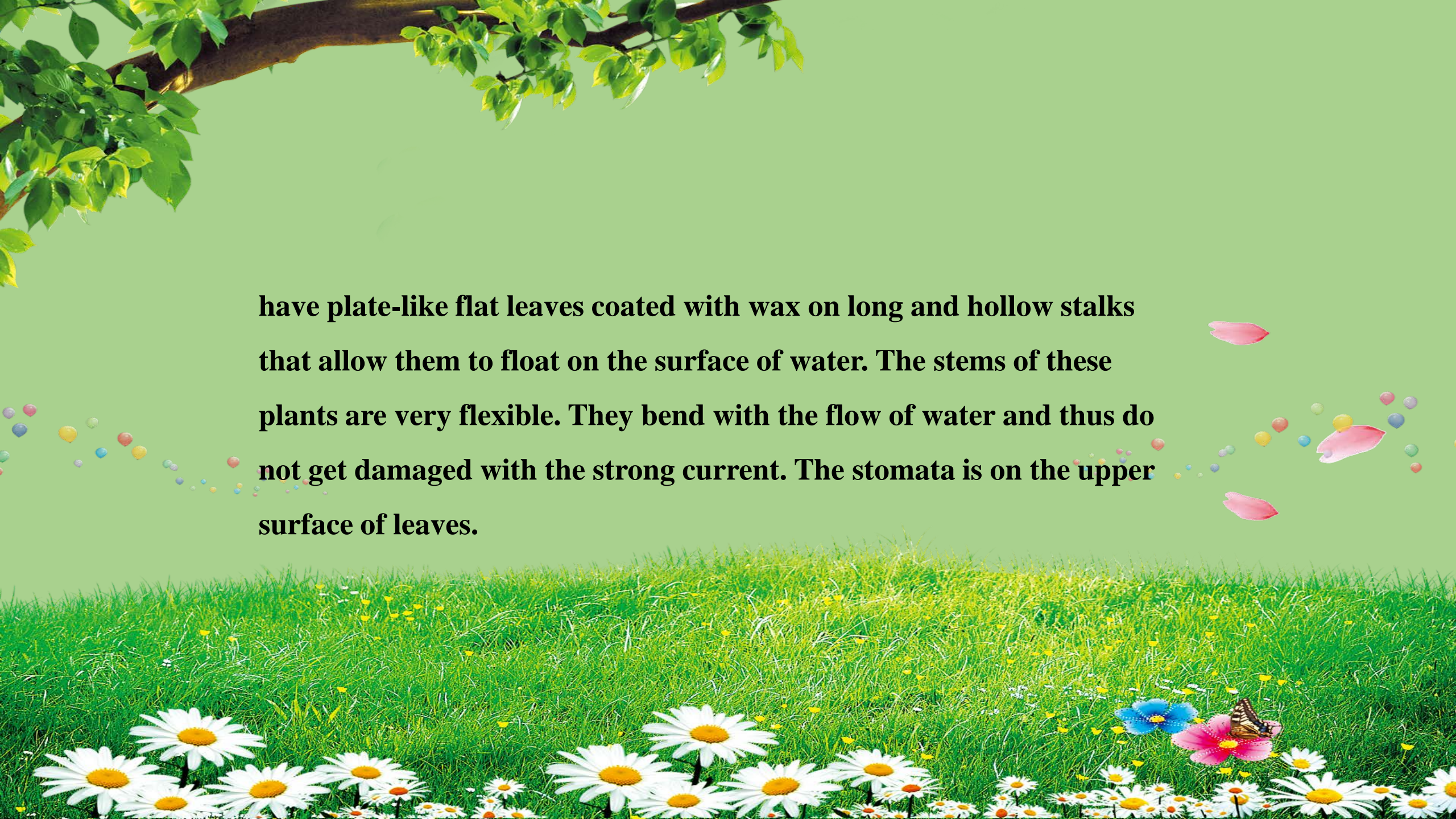


# Fixed Plants

Some plants like water lily and lotus have roots that fix the plants in the mud at the bottom of the pond. Such plants are called fixed plants. These plants





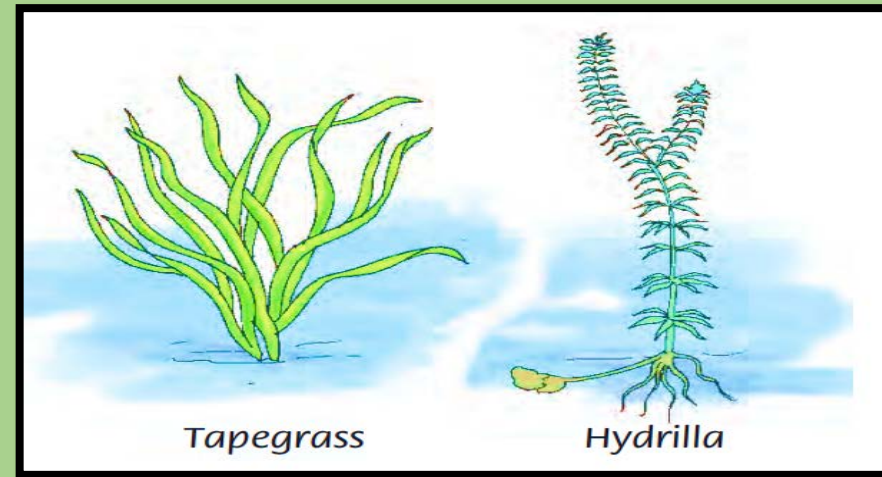


**have plate-like flat leaves coated with wax on long and hollow stalks that allow them to float on the surface of water. The stems of these plants are very flexible. They bend with the flow of water and thus do not get damaged with the strong current. The stomata is on the upper surface of leaves.**




# Submerged Plants

These plants are also called underwater plants. Plants like hydrilla and tapegrass grow completely under water. Their roots fix them in the muddy soil. They have narrow thin leaves without stomata. These plants breathe with their body surface. The







**stems are flexible and have air spaces. They use carbon dioxide from water for photosynthesis and give out oxygen that is used by the aquatic animals.**





## Check Your Knowledge

Fill in the blanks.

1. Cactus plant stores water in its \_\_\_\_\_ .
2. \_\_\_\_\_ is a submerged plant.
3. The \_\_\_\_\_ of aquatic plants are coated with wax.
4. Many types of \_\_\_\_\_ are used to make paper.

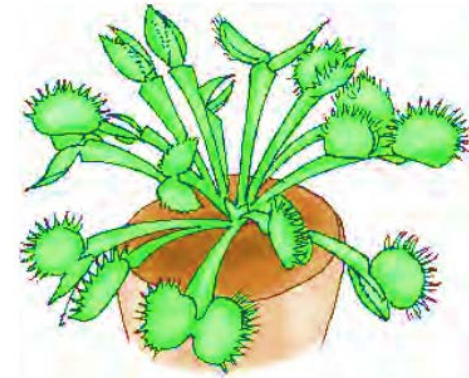


# Insectivorous Plants

Some plants eat insects. They are called **insectivorous plants**. Pitcher plant, Venus flytrap and Sundew are some examples of such plants. Such plants grow in soil that is poor in



Pitcher plant



Venus flytrap

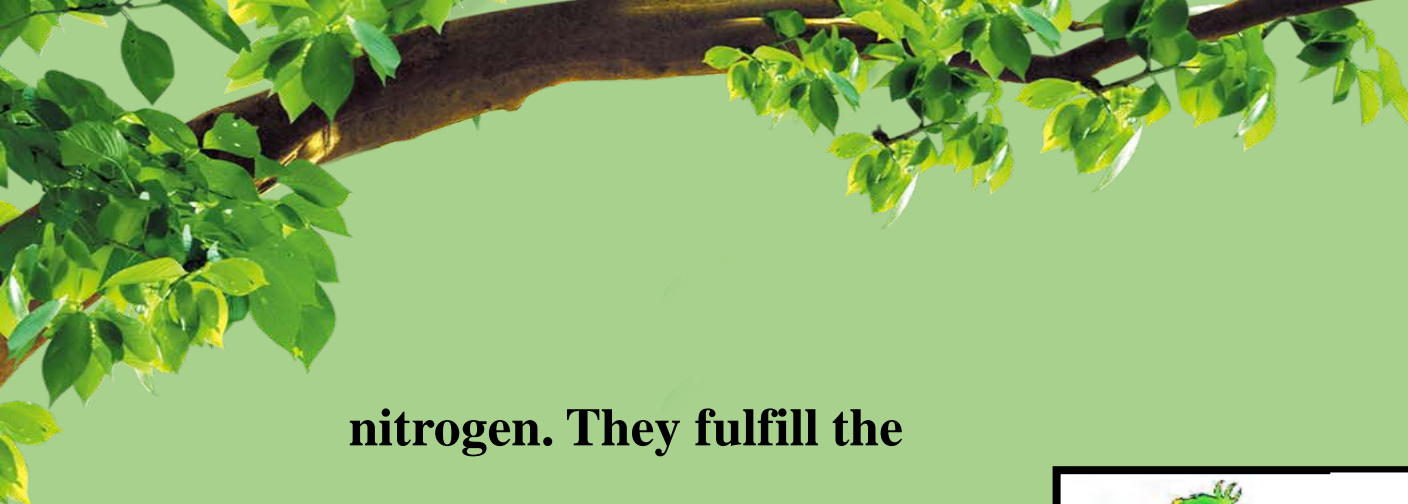


**nitrogen. They fulfill the shortage of nitrogen by trapping insects. Such plants bear beautiful flowers with attractive colours.**



## **INTERESTING FACTS**

- ❖ Sundari is the most significant tree of the Sundarban forest in West Bengal.







### **Fact File**

- **Some cactus plants stop growing when there is no rain. The moment it starts raining, they grow fast and produce seeds and flowers.**
- **The biosphere is that part of the earth where life exists naturally.**





## **Things to Remember**

- **Plants and animals, living in certain places, are adapted to their environment.**
- **Plants that grow on land are called the terrestrial plants.**
- **Some grasses are used for making medicines.**
- **Leaves of the evergreen trees can survive in winter.**
- **The aquatic plants have spongy bodies that help them to float in water.**



THANK  
YOU