

We have been discussing some of the plants that depend on other plants for food and shelter.

What about the pepper vine that grows on other plants? Why does it do so?

### **Lend support, make pandals...**



Different kinds of vegetables

Visit a vegetable garden. What are the different kinds of plants found there?

Which are the plants that are provided with support to climb up?

Which are the plants that spread and grow on the ground?

Write down your observations in the science diary.

Observe the picture. You can see spring-like parts in the ash gourd vine. What are they for?



Tendrils



Pepper vine



Snake gourd



Bitter gourd



Gloriosa

Search for similar plants in your surroundings. Record their peculiarities.

### Climbers

Climbers are weak-stemmed plants. They climb on other plants with the support of spring-like parts called tendrils. Some plants have clinging roots for this purpose. Plants like pepper, bitter gourd and snake gourd are examples.

You might have seen the sweet potato.

It is a weak-stemmed plant.

How does it grow?

Does it have tendrils?



Sweet potato



Hydrocotyle



Strawberry

### Creepers

Weak-stemmed plants that grow creeping on the ground are called creepers. Sweet potato, hydrocotyle, strawberry etc. are examples. These plants do not possess tendrils or clinging roots.

Observe the creepers and climbers seen around us and classify them. Write them down in your science diary.



## Diversity in roots



Banyan Tree



Screw pine

Look at the pictures. Do you notice roots growing downwards from the branches and the stem? How are these roots useful to the plants? Are there such plants in your locality? Observe.

### Prop roots and stilt roots

Roots are used not only to absorb water and minerals but also to provide support to plants. Prop roots and stilt roots are roots seen above the soil to support the plants.

Roots seen in the banyan tree are prop roots. These roots grow downwards from aerial branches. But look at the roots in screw pine. It is from the stem that the roots grow downwards. These roots are called stilt roots.

There are more diversities among roots. Read the following note on mangroves.

### Mangroves

Mangroves are special kinds of plants growing in marshy areas. The tip of their roots grow towards the atmosphere. These roots that help in gaseous exchange are called pneumatophores.

Collect more details and pictures of mangroves and prepare a wall journal.



Pneumatophores in mangroves

## For storing food...

Observe the picture.

Aren't both edible tubers? Which of them sprouts when kept for some time? Why?

Write down your guess in the science diary.



Potato



Tapioca

Tapioca stores food in roots. Roots that store food in this way are called storage roots.

All tubers are not storage roots. Potato is a modified stem. Such stems seen below the soil are underground stems.

Classify the items given below into storage roots and underground stem.

Carrot	Chinese potato
Beetroot	Arrowroot
Elephant foot yam	Tapioca
Colocasia	Sweet potato
Ginger	Turmeric

Storage roots	Underground stem

## Diversity in the world of plants



The world of plants is full of diversities.

Have you ever enquired about the plant diversity in your locality?

Examine the Biodiversity Register in your Panchayat office and

prepare a table of plants. Observe these plants and write down their peculiarities. Find out their significance as well.

Prepare a report of your findings and present it in the science club meeting. Prepare a Biodiversity Register after observing the plants in your school premises.