

Bhavan Vidyalaya, Chandigarh

Science

Terrestrial Plants

By :-

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Habitat and Adaptation

Habitat

A place where an organism naturally lives is called its habitat.

Adaptations

Special features required by an organism to adjust itself in a habitat are called adaptations.

What will we learn ?

Terrestrial Plants

Deserts

Mount-
ains and
Hills

Plains

Marshes

Forests

Coastal
Areas

Unique Plants

Insecti-
vorous
Plants

Non-
Green
Plants

Parasitic
Plants

Terrestrial Plants

Desert Plants

- ✦ Desert Plants are called Xerophytes.
- ✦ They are adapted to grow in very hot and dry conditions.
- ✦ Examples : Date Palm, Cactus, Prickly Pear.



Date Palm



Cactus



Prickly pear

Terrestrial Plants

Desert Plants

Adaptations by Desert Plants:-

1. Stem is thick and fleshy - It helps it to store water.
2. Leaves are modified to Spines.
 - ◆ It provides protection.
 - ◆ Reduces water loss.
3. Roots grow deep into the ground to absorb water.



Cactus

Interesting Fact !!

★ Saguaro cactus found in deserts
can store upto 800 litres of water
and can live upto 200 years.



Terrestrial Plants

Plants in Mountains and Hills

- ✦ Adapted to grow in very cold temperatures.
- ✦ Examples: Pine, Fir, Cedar, Spruce.

Adaptations by plants in Mountains and Hills:-

- ✦ Trees are straight, tall and cone-shaped so that snow can easily slide off their branches.
- ✦ Leaves are needle shaped and have waxy coating so that snow does not accumulate on them.
- ✦ These plants bear cones with seeds instead of flowers.



Pine



Fir



Cedar



Pine Cone



Fir Leaves



Cedar Cone

Terrestrial Plants

Plants in Plains

- ♦ Adapted to survive in both hot and cold weather.
- ♦ Examples: Banyan Tree, Mango Tree, Teak.

Adaptations by plants in Plains:-

- ♦ Have many branches with plenty of leaves and flowers.
- ♦ Some trees shed their leaves in autumn and grow new leaves in Spring - **Deciduous Trees**.
- ♦ Some trees shed their leaves and grow new ones throughout the year - **Evergreen Trees**.



Banyan Tree



Mango Tree



Teak Trees

Terrestrial Plants

Deciduous Trees



Trees in Summer season



Trees in Winter season

Terrestrial Plants

Evergreen Trees



Date Tree



Palm Tree



Bottle Palm

Terrestrial Plants

Evergreen Trees



Coconut Tree



Eucalyptus Tree



Rubber Tree

Terrestrial Plants

Plants in Marshy Areas

- ✦ Marshy areas are places that have wet, clayey and sticky soil with water standing on its surface.
- ✦ Most of the plants that grow in marshy areas are called **mangroves**.
- ✦ Examples: *Avicennia*, *Rhizophora*.

Adaptations by plants in Marshy Areas:-

- ✦ Roots emerge out from the surface of marsh because of which the roots can breathe.



Avicennia



Rhizophora

Interesting Fact !!

★ Mangrove forests
in West Bengal and Bangladesh
are natural habitat of **Royal Bengal Tiger**.



Terrestrial Plants

Plants in Forests

- ♦ Forests have warm climates with lot of rain throughout the year.
- ♦ Examples: Mahogany, Oak, Maple, Redwood.



Mahogany



Oak



Maple



Redwood

Adaptations by plants in Forests:-

- ♦ Plants grow tall with broad and abundant leaves to capture sunlight.

Terrestrial Plants

Plants in Coastal Areas

- ✦ Coastal Areas are places close to sea.
- ✦ These places have salty water and heavy rainfall.
- ✦ Examples: Coconut Tree.

Adaptations by plants in Coastal Areas:-

- ✦ These plants usually grow tall and straight.
- ✦ They are adapted to survive salty water and heavy rainfall.



Coconut Tree

Unique Plants

Insectivorous Plants

- ✦ These Plants feed on small insects.
- ✦ Live in a habitat :-
 - ◆ Where soil is poor in nutrients.
 - ◆ Or in thick forests where enough sunlight doesn't reach the forest floor
- ✦ Examples: Venus flytrap, Pitcher plant.



Venus Flytrap



Pitcher Plant

Unique Plants

Insectivorous Plants

Adaptations by Insectivorous plants:-

- ♦ Venus flytrap : It has two lobes with hair like spikes on its edges. The lobes snap shut when an insect sits on it.



Venus Flytrap

- ♦ Pitcher plant : It is shaped like a pitcher. Its edges secrete a slippery substance due to which the insects sitting on it slips inside the pitcher.



Pitcher Plant

Unique Plants

Non-green Plants

- ✦ These plants do not contain green pigment 'Chlorophyll' and hence cannot carry out photosynthesis.
- ✦ Examples: Coralroot, Indian pipe.

Adaptations by Non-green Plants:-

- ✦ These plants absorb their food from dead plants and animals.



Coralroot



Indian pipe

Unique Plants

Parasitic Plants

- ✦ These plants depend on other plants partially or completely for their nutrition.
- ✦ Examples: *Cuscuta*, Mistletoe.

Adaptations by Parasitic Plants:-

- ✦ They grow on other plants and absorb nutrition from them.
- ✦ They often harm the plant on which they grow.



Cuscuta



Mistletoe

Terrestrial Plants

