Anatomical adaptation of plants

Definition of adaptation:
The adjustment or changes in behavior, physiology and structure of an organism to become more suited to an environment. It is derived from Latin word *"Adaptare" which means "to fit".*

Types of adaptation:

a. **Structural adaptation**

Body parts of an organism that helps them to survive

b. **Behavioral adaptation:**

Are the way something acts naturally or by instinct? It helps them to survive in environment.

Adaptation for Food:

Structural adaptations:
-Plants lean or grow toward the sun.
-Roots grow down into soil.
-Roots soak up water and nutrients from soil.
-Vines climb up trees to catch sunlight.

Behavioral adaptation:
-Plants like the Venus fly trap, trap insects for food.
-Desert flowers can stay dormant for months, only coming to life when it rains.

Adaptation for Reproduction

Structural adaptation:
-Brightly colored flowers with nectar attract pollinators such as birds, bees and insects.
-sweet fruit attracts animals that spread seeds far away.
-Some seeds are shaped to catch the wind.

Behavioral adaptation:
-Plants drop seeds to grow new offspring.

Adaptation for Defense

Structural adaptation:
-Spines and thorns protect plants from predators.

Plant Adaptation for Different Biomes

Desert Adaptation:
-Small leaves or vines on desert plants conserve water.
-Thick waxy skin holds in water.
-Roots near the soils surface soak up rain water quickly before it evaporates.

Grassland Adaptation:
-Deep roots help plants survive prairie fires.
-Narrow leaves lose less water than broad leaves.
-Flexible structure.

Tundra Adaptations:
-Small Plants grow close to the ground for warmth.
-Dark colored flowers absorb heat from the sun.
-Fuzzy stems provide protection from wind.

Temperate Forest Adaptation:
-Thick bark protect trees and dropping leaves in winter conserves water and nutrient during cold winters.

Water Adaptation:
-Flexible stems move with water currents.
-Floating seeds spread off springs.