

The stems & functions :

Stems are the Structural Support of plants, supporting leaves, flowers, and fruits, and are also considered as transport System, transporting water/minerals, and nutrients. The green stems play a role in photosynthesis.

The main types of stems:

1. Aerial Stems (Above Ground): These grow vertically or horizontally above the ground.

A) Woody Stems.

B) Climbing Stems : grape vine plant.

2. Underground Stems: These grow below the soil surface, acting as food storage.

A) Rhizomes: جذامير Horizontal, fleshy stems that grow underground, storing nutrients (e.g., ginger, turmeric) .

B) Tubers : درنات stems that store starch (e.g., potatoes)

C) Bulbs: ابصال (e.g., onions)

3. Modifications stems :

Thorns or spines : like a cactus or roses .

Types of Stems



Underground Stem



Ginger (Rhizome)



Potatoes (Tuber)



Onion (Bulb)