

Morphology of Flowering Plants

Stem

- Bears branches, leaves, flowers, and fruits
- Conducts water and minerals to all parts of the plant body
- Bears nodes and internodes

Stem modifications

- For storage – Example: Potato, ginger, turmeric.
- For support – Tendrils in cucumber, pumpkins, watermelon.
- For protection – Thorns in *Citrus*, *Bougainvillea*.
- For vegetative propagation – Tubers and rhizomes in potato and ginger respectively.

Leaf

- Performs the function of photosynthesis
- Consists of leaf base, petiole, and lamina
- Veins help in the transport of water to all leaf parts.
- Arrangement of veins is known as venation.
- Parallel venation is found in monocots. Example: Banana
- Reticulate venation is found in dicots. Example: Mango
- Leaves may be simple or compound.
- Pattern of arrangement of leaves on the stem is known as **phyllotaxy**. It may be alternate as in china rose, opposite as in *Calotropis* or whorled as in *Alstonia*.

Leaf modifications

- Tendrils- Example: Peas
- Spines- Example: Cactus
- Fleshy leaves for storage- Example: Onion and garlic

Inflorescence

- Arrangement of flowers on the floral axis is termed as inflorescence.