

## THE INFLORESCENCE

The transformation of the shoot into a flower characterizes the flower as a modified shoot. This modification occurs when the apical shoot meristem undergoes a shift to floral meristem, resulting in the production of flowers. The process involves the condensation of the axis, with no elongation of internodes. Flowers emerge at successive nodes, replacing the typical leaf arrangement on the shoot.

Flowers are situated either individually or in clusters on the shoot. When the shoot tip undergoes transformation into a flower, it typically occurs as a solitary entity. The pattern of flower arrangement on the floral axis is referred to as inflorescence.

The arrangement of flowers can vary based on whether the shoot apex continues growing or transforms into a flower. Two primary types of inflorescence are observed:

- **Racemose:** In racemose inflorescence, the shoot axis displays indefinite growth, and flowers are arranged in an acropetal succession. This means that younger flowers are positioned towards the apex, while older flowers are situated at the base. Examples of plants with racemose inflorescence include radish, lupin, and mustard.
- **Cymose:** Cymose inflorescence, on the other hand, involves the termination of the main axis (peduncle) into a flower, restricting its further growth. In cymose inflorescence, flowers are arranged in a basipetal order, where the youngest flowers are located towards the base. Examples of plants with cymose inflorescence include Begonia, Teak, Bougainvillea, Dianthus, and Solanum.

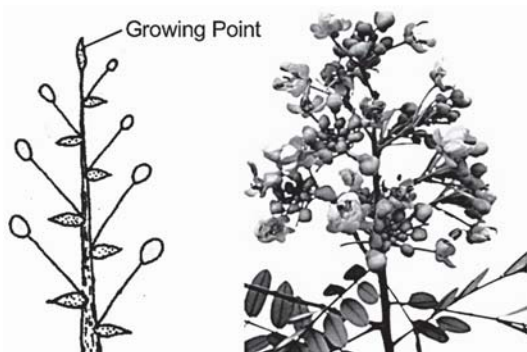


Fig. : Racemose inflorescence

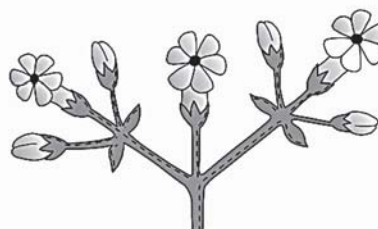


Fig. : Cymose inflorescence