

Distinguish, differentiate, compare and explain what is the difference between Monocots and Dicots. Comparison and Differences.

Difference between Monocots and Dicots

1. Monocots seeds contain one cotyledon. Dicots seeds contain two cotyledons.
2. Flowers are generally trimerous from Monocots. Flowers are generally pentamerous or tetra-merous from Dicots.
3. Pollen grains generally possess a single germ pore in monocots. Pollen grains commonly have three germ pores in dicots.
4. Leaves generally possess parallel venation in monocots. Leaves possess reticulate venation in dicots.
5. Primary root is short lived, tap root is absent and adventitious roots present in monocots. Primary root is long lived and it forms tap root. Adventitious roots are found in some cases in dicots.
6. In stems, ground tissue is not differentiated into cortex and pith in monocots. In stems, ground tissue is differentiated into cortex, pith, endodermis etc in dicots.
7. In Monocots, Vascular bundles are scattered and closed and cambium is absent. In dicots, Vascular bundles are arranged in a ring and open and cambium present.
8. In root, a pith is always present and Vascular bundles are many (more than 8) in monocots. In root, pith is absent and Vascular bundles are few in dicots.
9. Vessels are rounded in outline in monocots. Vessels are polygonal in outline in dicots.