

## Biology Class 11 NCERT Solutions: Chapter 6 Anatomy of Flowering Plants Part 4

Q: 12. Describe the internal structure of a Dorsiventral leaf with the help of labelled diagrams.

Answer

Dorsiventral leaves are found in dicots. The vertical section of a dorsiventral leaf contains three distinct parts.

[1] Epidermis:

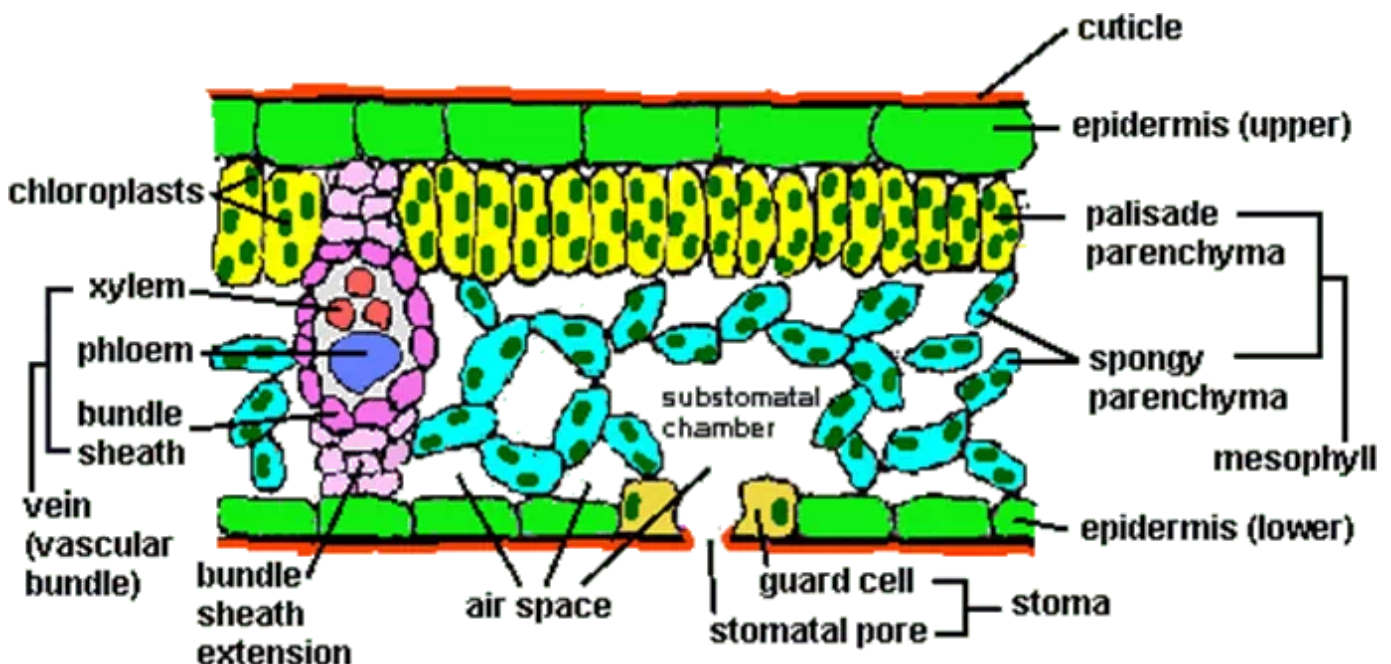
Epidermis is present on both the upper surface (adaxial epidermis) and the lower surface (abaxial epidermis). The epidermis on the outside is covered with a thick cuticle. Abaxial epidermis bears more stomata than the adaxial epidermis.

[2] Mesophyll:

Mesophyll is a tissue of the leaf present between the adaxial and abaxial epidermises. It is differentiated into the palisade parenchyma (composed of tall, compactly placed cells) and the spongy parenchyma (comprising oval or round, loosely arranged cells with inter cellular spaces). Mesophyll contains the chloroplasts, which perform the function of photosynthesis.

[3] Vascular system:

The vascular bundles present in leaves are conjoint and closed. They are surrounded by thick layers of bundle-sheath cells.



*The Internal Structure of a Dorsiventral Leaf*

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