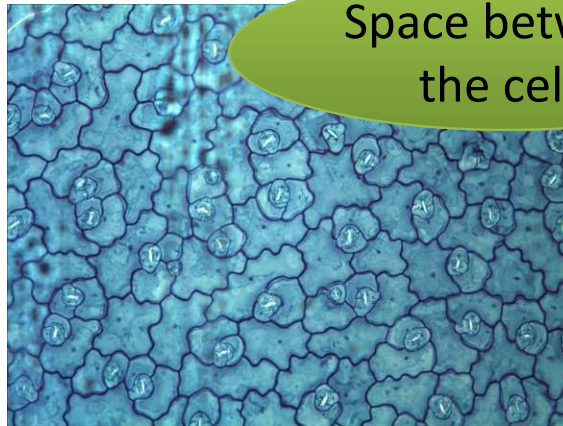


## Simple permanent tissue

### vi. Surface tissue :

- ◆ The entire surface of the plant consists of a single layer of cells called surface tissue or epidermis.
- ◆ Most of the epidermal cells are relatively flat.
- ◆ The outer and lateral walls of the cell are often thicker than the inner wall.
- ◆ The cells form a continuous sheet without intercellular spaces.
- ◆ It protects all parts of the plants.

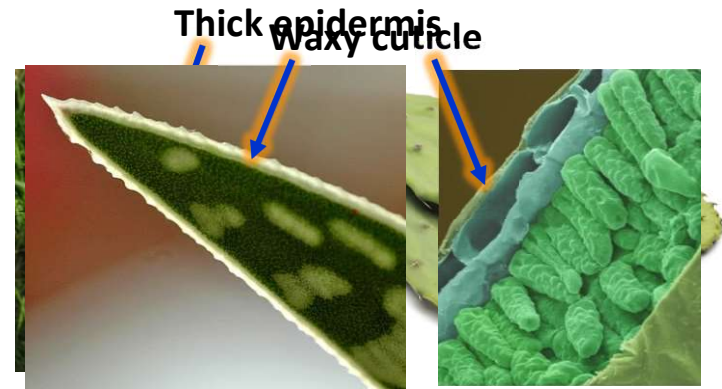


Space between  
the cells

## Simple permanent tissue

### vi. Surface tissue :

- ◆ In some plants growing in very dry habitats, like cactus, the epidermis may be thicker to prevent water loss.
- ◆ Epidermal cells on the aerial parts of the plant often secrete a waxy, water resistant layer on their outer surface.
- ◆ This layer helps in protection against loss of water, mechanical injury and invasion of parasitic fungi.



## Simple permanent tissue

### vi. Surface tissue :

- ◆ In order to exchange gases with the atmosphere, epidermis has minute openings called stomata.
- ◆ The stomata are enclosed by two epidermal kidney shaped cells called guard cells.
- ◆ They control the opening and closing of the stomata.
- ◆ Transpiration is the loss of water from the stomata.

