

To examine the pattern and distribution of stomata on both the upper and lower surfaces of leaves. Compound microscope Methods: Place distilled water in two watch glasses. The stomata are composed of a pair of specialized cells, known as guard cells, that encircle the opening; these cells play a key role in regulating the size of the stomatal opening. The leaf section taken from the four-o'clock plant indicates that the lower epidermis contains a significantly greater number of stomata compared to the fewer stomata present in the upper epidermis. Observe each slide under the microscope and record the number of stomata found in both the upper and lower epidermis of the four-o'clock leaf. Materials required: 1. Needles 2. Forceps 3. Safranin 5.