

Sun vs. Shade

Some plants produce "sun leaves" in direct sun and "shade leaves" where the leaves are shaded by others.

Sun leaves become thicker than shade leaves because they develop longer palisade cells or an additional layer of palisade cells (which contain the chloroplasts that absorb most of the light energy used by the leaf).

Shade leaves are typically bigger and thinner than sun leaves. In shade leaves, the chloroplasts move within the cells to take up a position where they will absorb the maximum light without shading other chloroplasts below them.

