



© PHI THICKENING

Function

Mechanical strength, resistance, rigidity

Biological mechanism

This is a thickening that occurs in the young roots of certain plants and trees, characterized by the massive deposition of cellulose and lignin material in places where neighboring cells of one layer meet. The massive, thick border around the cell is complemented by a finer mesh inside the cell. It has the shape of the letter phi in cross-section. This thickening protects the root against pressure from both inside and outside, fortifying it as it grows and providing structural support essential for the root's stability and development.