



### FRactal MORPHOLOGY OF *BETA VULGARIS* L. CELL SUSPENSION CULTURE PERMEABILIZED WITH TRITON X-100.

#### ABSTRACT

In this work, morphology of *Beta vulgaris* L. cells permeabilized with 0.7 mM of Triton X-100® was evaluated using digital image processing and concepts of fractal dimension (perimeter- area relations). Important morphometric changes were found when the contact-time with chemical agent was increased. The size of cells decreased, the cells lost the roundness and their shape was more sinuous; this behaviour was a result of a probable shrinkage caused by the excess of exposure with the permeabilization agent. Morphology of *B. vulgaris* cells after permeabilization, exhibited a fractal nature since the slope of the ratio of the logarithm of the perimeter vs logarithm of the area was higher than unit. Fractal geometry of the cell morphology was affected as a result of the exposure to Triton X-100®. Those changes can be attributed to the loss of turgor and structure of the cell wall.

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