



Plant pigment's microscopic examination



Materials and tools:

Green leaves (moss, geranium...), orange, lemon, carrot, tomato, slides, cover slips, distilled water, scalpel, needle, dropper, a light microscope.

Experiment description:

- a) Take a look at the leaf's pigments of the **moss!** Study them under light microscope!
- b) Make thin section from **carrot** and **orange peel**.
- c) Make peel from **tomato** with needle than put it on a covered object-slide and examine under light microscope.
- d) Make cross-sections from the pepper's pericarpo.

Experience:

- a) **The green pigments are lens shaped.** The leaf of the moss is just some cell line thick so it is fluoroscoped so well.
- b) Narancs és citrom terméfalában **sárga festékanyagot** tartalmazó sejteket és **olajjáratokat** láthatunk.
- b) The lemon's and the orange's pericarpo is containe **yellow pigments and oil runnings**.
- c) In the tomato's pulpy there are red **lichopinkcrystals** in scattered or in groups in egg shaped seperated and little cells
- d) We can notice red colored **oil dropps** and red **carotincrystals** in the matrice's of the pericarpo.

Explanation:

The pigments make the colour of the plants.

The green pigments can be found in plants:

Chlorophyll is a-bluish green colored.

Cholorophyll b is yellowish green shaded.

Carotin-orange.

Xanthophyll-yellow.

The yellow pigments occur not only in the green pigments but in the crops, roots and in the flower's petal.

Licopin can give the red colour.

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