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## ETHIDIUM BROMIDE INFLUENCE ON PHOTOSYNTHETIC PIGMENTS CONTENT IN *Calendula officinalis* L. LEAF

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### Abstract

Photosynthesis is a physiological process characteristic of green plants that synthesize, with participation of light and assimilatory pigments, the organic substances, using the water and carbon dioxide as raw material. In higher plants, photosynthesis is conducted in all the organs, but predominantly in the green leaves, which can develop adjustments that favour the development of this activity. If the plants are maintained in the dark, it can be observed the pigment chlorophyll disappearance in the cells. Usually, the assimilatory pigments are found in optimal quantities in the cell. This amount is limited only in the case of leaves etiolation, a phenomenon caused by the absence of light, translated in some plants with a substantial reduction of pigment in the cells. The intensity of photosynthesis during plant vegetation is influenced by natural factors that characterize the different seasons and also by the changes of some internal factors that may interfere during the growing season. The quantity of assimilatory pigments present in the chloroplasts is influenced by many environmental factors. Also, the ratio (R) between the components of photosynthetic system is designed so that the absorption efficiency to be on maximum level and the pigments to have maximum resistance to various harmful factors.

*Key words:* *Calendula officinalis* L., Ethidium bromide, mutagenic, photosynthesis

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