

SPECTRAL CHARACTERISTICS OF *MIMOSA PUDICA* L. SHOOT TISSUES

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Received 13 October 2018, Accepted 22 October 2018

In vivo by cytophotometric method was studied the spectral characteristics of the stem and *Mimosa pudica* L. leaf tissues. The optical density of the sclerenchyma, the parenchyma and the vascular bundle in the visible region of the spectrum was estimated. Changes in the optical properties of the studied tissues are due to both changes in the pigment systems and restructuring of the cell ultrastructure. The maximum difference in the optical properties of its tissues absorbing in the blue, yellow-green and red parts of the visible spectrum was found in a sheet pillow of *Mimosa pudica* L. The tissue specificity of the spectral characteristics in this structure is established. The average optical density of the sclerenchyma of the leaf pad of *Mimosa pudica* L. is up to 2 times less than this indicator in other parts of the shoot. It is assumed that the increase in the functional activity of the tissues of shoots *Mimosa pudica* L. is associated with a change in their optical properties.

Key words: *Mimosa pudica* L., sclerenchyma, spectral characteristics, anatomical structure.

DOI: 10.18500/1682-1637-2018-3-52-67

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Cite this article as:

Kasatkin M. Yu., Stepanov S. A. Spectral characteristics of *Mimosa pudica* L. shoot tissues. *Bulletin of Botanic Garden of Saratov State University*, 2018, vol. 16, iss. 3, pp. 52 – 67 (in Russian). DOI: 10.18500/1682-1637-2018-3-52-67.