Laser fluorescence method of plant stress state remote sensing

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In this paper laser fluorescence method of detection of plant stress state is considered. It is shown that for wavelength of fluorescence excitation 532 nm plant stress state by reason of presence of land pollutant or plant damage result in an increase in deformation of fluorescence spectrum. For presence of land pollutant identifiable characteristic is fluorescence intensity ratio at wavelengths 685 and 740 nm. For plant damage identifiable characteristic is normalized fluorescence intensity at wavelengths 685 nm.

Keywords: laser method, fluorescence, vegetation, detection of plant stress.

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