

International Agrophysics

Polish Journal of Soil Science

Acta Agrophysica

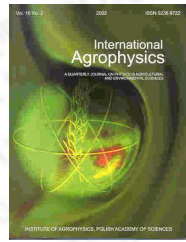
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International Agrophysics

publisher: Institute of Agrophysics
Polish Academy of Sciences
Lublin, Poland

ISSN: 0236-8722

vol. 22, nr. 3 (2008)

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Confocal microscopy for investigations of agricultural materials*

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vol. 9 (1995), nr. 4, pp. 287-292

abstract The paper presents the examples of various applications of the microscopic system made in the Institute of Agrophysics (IA) in Lublin, Poland and consisting of a Tandem Scanning Reflected Light Microscope TSRLM connected to a computer data collecting and image analysis system, containing a high-resolution and sensitivity CCD-HDD camera and a hardware system for data collection and image transmission. The computer image analysis system with its original software worked out together with TSRLM makes a new unit - TSRLM-IA. The optical noise was eliminated as a result of a modification of the camera and especially written software, thus omitting the main disadvantage of the Minsky's Microscope, i.e., low intensity of the light reaching the ocular. The results presented were obtained during examination our samples of agricultural origin (potato tuber tissue, soil) with very different coefficient of the epiluminescence.

keywords confocal microscopy, agricultural materials, microstructure