Accepted Manuscript

Early detection of fungal infection of stored apple fruit with optical sensors – comparison of biospeckle, hyperspectral imaging and chlorophyll fluorescence



Pieczywek P.M, J. Cybulska, M. Szymańska-Chargot, A. Siedliska, A. Zdunek, A. Nosalewicz, P. Baranowski, A. Kurenda

PII: S0956-7135(17)30493-0

DOI: 10.1016/j.foodcont.2017.10.013

Reference: JFCO 5822

To appear in: Food Control

Received Date: 26 May 2017

Revised Date: 18 September 2017

Accepted Date: 11 October 2017

Please cite this article as: Pieczywek P.M, J. Cybulska, M. Szymańska-Chargot, A. Siedliska, A. Zdunek, A. Nosalewicz, P. Baranowski, A. Kurenda, Early detection of fungal infection of stored apple fruit with optical sensors – comparison of biospeckle, hyperspectral imaging and chlorophyll fluorescence, *Food Control* (2017), doi: 10.1016/j.foodcont.2017.10.013

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

- apples were infected with *P. malicorticis* fungal cultures and tested for 8 days
- visual inspection showed the bull's eye rot 4-5 days after inoculation
- all tested methods showed infected areas before first visual signs of disease
- the biospeckle analysis detected the infection earlier than the reference methods
- the biospeckle activity increased in infected regions



Download English Version:

https://daneshyari.com/en/article/8888231

Download Persian Version:

https://daneshyari.com/article/8888231

<u>Daneshyari.com</u>