

## Accepted Manuscript

Title: A global visual method for measuring the deterioration of strawberries in MAP

Authors: Céline Matar, Sébastien Gaucel, Nathalie Gontard, Stéphane Guilbert, Valérie Guillard



PII: S2215-0161(18)30119-5  
DOI: <https://doi.org/10.1016/j.mex.2018.07.012>  
Reference: MEX 340

To appear in:

Received date: 13-4-2018  
Accepted date: 18-7-2018

Please cite this article as: Matar C, Gaucel S, Gontard N, Guilbert S, Guillard V, A global visual method for measuring the deterioration of strawberries in MAP, *MethodsX* (2018), <https://doi.org/10.1016/j.mex.2018.07.012>

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.

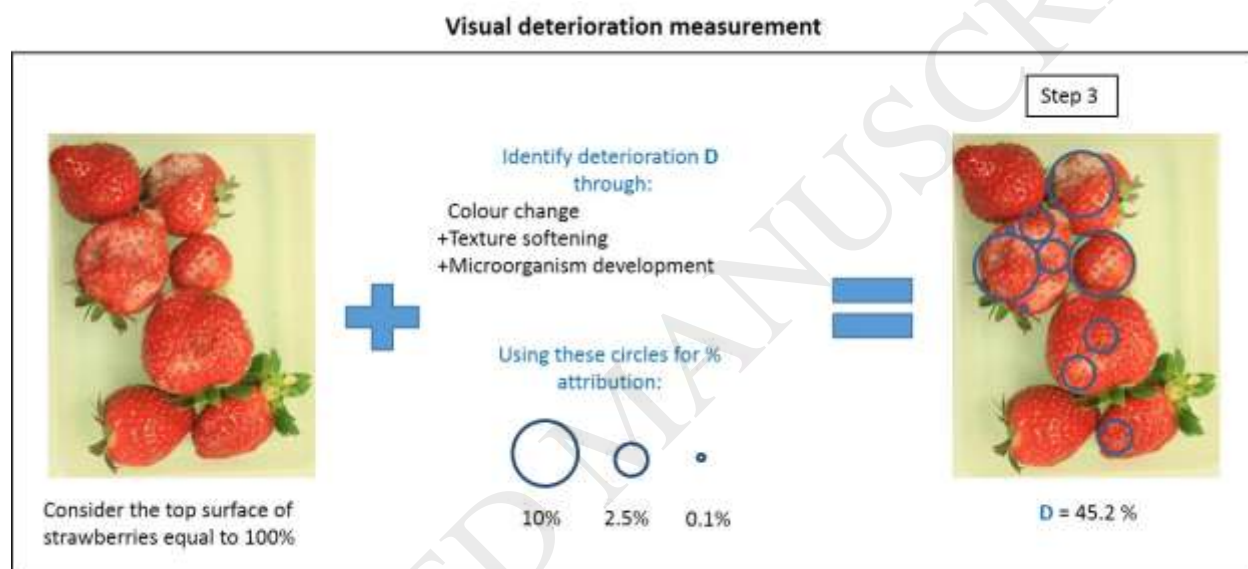
## A global visual method for measuring the deterioration of strawberries in MAP

Matar Céline, Gaucel Sébastien, Gontard Nathalie, Guilbert Stéphane & Guillard Valérie\*

Joint Research Unit, Agropolymers Engineering & Emerging Technology, UM - INRA- Supagro & CIRAD, 2 place Pierre Viala, Bat 31, 34060 Montpellier cedex 01 France

\*[valerie.guillard@umontpellier.fr](mailto:valerie.guillard@umontpellier.fr)

### Graphical abstract



### Abstract:

Evaluating the quality changes of packed strawberries during storage requires multiple, time consuming and costly measurements such as sensorial, chemical and decay identification. In order to efficiently assess the quality of strawberries in Modified Atmosphere Packaging (MAP) while reducing the number of analysis done, we propose to gather the main visual quality changes under one unique, overall measurement. For this end, a protocol associated to a deterioration grid was built to evaluate surface deterioration as a function of time considering colour change, texture softening and microorganism development. The developed method has permitted to build the deterioration kinetic of strawberries packed in different conditions (MAP or no MAP). It allows to mimic the quality analysis made by the consumer, at a glance, during purchase. To the best of our knowledge, the presented method is a breakthrough unlike most common usual methods mainly relying on the number of spoiled strawberries.

- Global measurement of the deterioration encompassing microorganism development, color change and texture softening

Download English Version:

<https://daneshyari.com/en/article/9954325>

Download Persian Version:

<https://daneshyari.com/article/9954325>

[Daneshyari.com](https://daneshyari.com)