

## Accepted Manuscript

Title: Functionalization of pectin with laccase-mediated oxidation products of ferulic acid

Authors: N. Karaki, A. Aljawish, L. Muniglia, S. Bouguet-Bonnet, S. Leclerc, C. Paris, J. Jasniewski, C. Humeau-Virot



PII: S0141-0229(17)30084-4  
DOI: <http://dx.doi.org/doi:10.1016/j.enzmictec.2017.05.001>  
Reference: EMT 9075

To appear in: *Enzyme and Microbial Technology*

Received date: 22-3-2017  
Accepted date: 4-5-2017

Please cite this article as: Karaki N, Aljawish A, Muniglia L, Bouguet-Bonnet S, Leclerc S, Paris C, Jasniewski J, Humeau-Virot C. Functionalization of pectin with laccase-mediated oxidation products of ferulic acid. *Enzyme and Microbial Technology* <http://dx.doi.org/10.1016/j.enzmictec.2017.05.001>

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.

## Functionalization of pectin with laccase-mediated oxidation products of ferulic acid

N. Karaki<sup>1</sup>, A. Aljawish<sup>1</sup>, L. Muniglia<sup>1</sup>, S. Bouguet-Bonnet<sup>2</sup>, S. Leclerc<sup>3</sup>, C. Paris<sup>1</sup>, J. Jasniewski<sup>1\*</sup>, C. Humeau-Virot<sup>4</sup>

<sup>1</sup> Laboratoire d'Ingénierie des Biomolécules (LIBio), Université de Lorraine, 2 avenue de la Forêt de Haye, TSA40602, F-54518 Vandœuvre-lès-Nancy, France

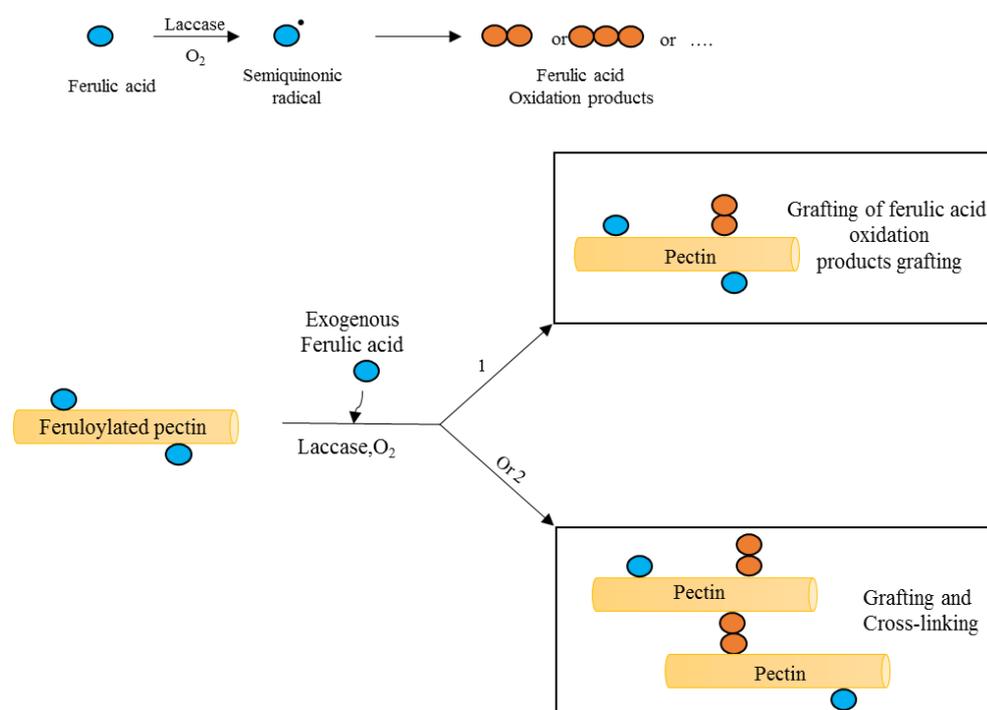
<sup>2</sup> Laboratoire de Cristallographie, Résonance Magnétique et Modélisations (CRM2), UMR 7036, Université de Lorraine, Vandœuvre-lès-Nancy F-54506, France.

<sup>3</sup> Laboratoire d'Energétique et de Mécanique Théorique et Appliquée (LEMTA), 2 avenue de la Forêt de Haye, TSA60604, F-54518 Vandœuvre-lès-Nancy, France

<sup>4</sup> Laboratoire Réactions et Génie des Procédés (LRGP), Université de Lorraine, 2 avenue de la Forêt de Haye, TSA40602, F-54518 Vandœuvre-lès-Nancy, France

\*Corresponding author: [jordane.jasniewski@univ-lorraine.fr](mailto:jordane.jasniewski@univ-lorraine.fr)

### Graphical abstract



### Highlights

- The functionalization of pectin with phenols was performed in the presence of laccase
- Modified pectin contained five times more phenols than the native pectin
- The ferulic acid oxidation products were grafted onto pectin carboxyl groups

Download English Version:

<https://daneshyari.com/en/article/4752699>

Download Persian Version:

<https://daneshyari.com/article/4752699>

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