

Accepted Manuscript

Title: A Comparison of Canthaxanthine Pickering emulsions, stabilized with cellulose nanocrystals of different origins

Authors: Sheida Hedjazi, Seyed Hadi Razavi

PII: S0141-8130(17)30245-3

DOI: <http://dx.doi.org/doi:10.1016/j.ijbiomac.2017.08.030>

Reference: BIOMAC 8022

To appear in: *International Journal of Biological Macromolecules*

Received date: 18-1-2017

Revised date: 25-5-2017

Please cite this article as: Sheida Hedjazi, Seyed Hadi Razavi, A Comparison of Canthaxanthine Pickering emulsions, stabilized with cellulose nanocrystals of different origins, *International Journal of Biological Macromolecules* <http://dx.doi.org/10.1016/j.ijbiomac.2017.08.030>

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 Comparison of Canthaxanthine Pickering emulsions, stabilized with cellulose nanocrystals of different origins

Short title: Canthaxanthin Pickering Emulsion

Sheida Hedjazi¹, Seyed Hadi Razavi^{1,2*}

¹ Department of Food Science and Engineering, University College of Agriculture and Natural Resources, University of Tehran, Karaj, Iran.

² Center of Excellence for Application of Modern Technologies for Producing Functional Foods and Drinks (FFDCE) and Bioprocess Engineering Laboratory (BPEL), University College of Agriculture and Natural Resources, University of Tehran, Karaj, Iran.

*Corresponding author: Seyed Hadi Razavi, Email: srazavi@ut.ac.ir P. O. Box: 31587-77871, Tel: +98-26-32248804, Fax: +98-26-32249453

Research highlights

- The Structure of CNCs was discussed over AFM imaging and structural changes were reviewed by XRD and FTIR exams
- CTX micro-structure droplets in pickering emulsions with different CNC content from different source was investigated with DLS and optical microscopy
- Emulsion and canthaxanthin stability to different environmental factors such as temperature, pH, ionic concentration and light examined
- Emulsions became more stable as the temperature and pH rose, and ionic concentration fall

Download English Version:

<https://daneshyari.com/en/article/8329145>

Download Persian Version:

<https://daneshyari.com/article/8329145>

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