Accepted Manuscript

Title: C-coordinated O-carboxymethyl chitosan metal complexes: Synthesis, characterization and antifungal efficacy

Authors: Weixiang Liu, Yukun Qin, Song Liu, Ronge Xing, Huahua Yu, Xiaolin Chen, Kecheng Li, Pengcheng Li



 PII:
 S0141-8130(17)30871-1

 DOI:
 http://dx.doi.org/doi:10.1016/j.ijbiomac.2017.07.176

 Reference:
 BIOMAC 7984

To appear in: International Journal of Biological Macromolecules

 Received date:
 8-3-2017

 Revised date:
 13-7-2017

 Accepted date:
 30-7-2017

Please cite this article Weixiang Liu, Yukun Oin. Song Liu, as: Ronge Xing, Huahua Yu, Xiaolin Chen, Kecheng Li, Pengcheng Li, C-coordinated O-carboxymethyl chitosan metal complexes: Synthesis, characterization and antifungal efficacy, International Journal of Biological Macromoleculeshttp://dx.doi.org/10.1016/j.ijbiomac.2017.07.176

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

C-coordinated O-carboxymethyl chitosan metal complexes: Synthesis, characterization and antifungal efficacy

Weixiang Liu^{1, 2}, Yukun Qin^{1,*}, Song Liu¹, Ronge Xing¹, Huahua Yu¹, Xiaolin Chen¹, Kecheng Li¹, Pengcheng Li^{1,*}

1 Key Laboratory of Experimental Marine Biology, Institute of Oceanology, Chinese Academy of Sciences, Qingdao 266071, China

2 University of Chinese Academy of Sciences, Beijing 100049, China

* Author to whom correspondence should be addressed; E-Mail: pcli@qdio.ac.cn (P.-C.L.); ykqin@qdio.ac.cn (Y. -K.Q).

Highlights

- A novel kind of C-coordination O-carboxymethyl chitosan metal complexes was prepared.
- The structure were analyzed not only with the traditional analysis methods, but also with density functional theory (DFT).
- The copper complexes could significantly inhibit *P. capsici* and the nickel complexes could significantly inhibit *B. cinerea*.

Abstract:

A novel type of O-carboxymethyl chitosan Schiff bases (O-CSPX) was synthesized via a

Download English Version:

https://daneshyari.com/en/article/8328897

Download Persian Version:

https://daneshyari.com/article/8328897

Daneshyari.com