

Accepted Manuscript

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PII: S0141-8130(17)30745-6
DOI: <http://dx.doi.org/doi:10.1016/j.ijbiomac.2017.06.027>
Reference: BIOMAC 7707

To appear in: *International Journal of Biological Macromolecules*

Received date: 28-2-2017
Revised date: 3-6-2017
Accepted date: 6-6-2017

Please cite this article as: Muhammad Irshad, Aimen Murtza, Muddassar Zafar, Khizar Hayat Bhatti, Abdul Rehman, Zahid Anwar, Chitosan-immobilized pectinolytics with novel catalytic features and fruit juice clarification potentialities, International Journal of Biological Macromolecules <http://dx.doi.org/10.1016/j.ijbiomac.2017.06.027>

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Chitosan-immobilized pectinolytics with novel catalytic features and fruit juice clarification potentialities

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Highlights

- Efficient breakdown of cellulose, pectin and starch is important for juice clarification.
- In-house developed CTS-immobilized pectinolytics were developed for hydrolysis of polysaccharides.
- CTS-immobilized pectinolytics: an efficient green catalyst for apple, mango, peach, and apricot juice clarification.

Abstract

Biological macromolecules are primarily composed of complex polysaccharides that strengthen microbial growth for the production of industrially relevant enzymes. The presence of polysaccharides in the form of the disrupted cell wall and cell materials are among major challenges in the fruit juice industry. The breakdown of such biological macromolecules including cellulose and pectin is vital for the juices

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