

Accepted Manuscript

Title: Exploring *Trichoderma* and *Aspergillus* secretomes: proteomics approaches for the identification of enzymes of biotechnological interest

Authors: Nicholas de Mojana di Cologna, Diana Paola Gómez-Mendoza, Fabiana Fonseca Zanoelo, Giovana Cristina Giannesi, Nelciele Guimarães Cavalieri, Leonora Rios de Souza Moreira, Edivaldo Ximenes Ferreira-Filho, Carlos André Ornelas Ricart



PII: S0141-0229(17)30163-1
DOI: <http://dx.doi.org/10.1016/j.enzmictec.2017.08.007>
Reference: EMT 9122

To appear in: *Enzyme and Microbial Technology*

Received date: 9-5-2017
Revised date: 17-8-2017
Accepted date: 18-8-2017

Please cite this article as: Cologna Nicholas de Mojana di, Gómez-Mendoza Diana Paola, Zanoelo Fabiana Fonseca, Giannesi Giovana Cristina, Cavalieri Nelciele Guimarães, Moreira Leonora Rios de Souza, Ferreira-Filho Edivaldo Ximenes, Ricart Carlos André Ornelas. Exploring *Trichoderma* and *Aspergillus* secretomes: proteomics approaches for the identification of enzymes of biotechnological interest. *Enzyme and Microbial Technology* <http://dx.doi.org/10.1016/j.enzmictec.2017.08.007>

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.

Review

Exploring *Trichoderma* and *Aspergillus* secretomes: proteomics approaches for the identification of enzymes of biotechnological interest

Nicholas de Mojana di Cologna¹, Diana Paola Gómez-Mendoza¹, Fabiana Fonseca Zanoelo², Giovana Cristina Giannesi², Nelciele Guimarães Cavalieri², Leonora Rios de Souza Moreira³, Edivaldo Ximenes Ferreira-Filho³, Carlos André Ornelas Ricart^{1*}

1 - Laboratory of Biochemistry and Protein Chemistry, Department of Cell Biology, University of Brasilia, 70910-900, DF, Brazil

2 - Laboratory of Biochemistry and Microorganisms, Biological Sciences and Health Center, Federal University of Mato Grosso do Sul, Campo Grande, 79070-900, MS, Brazil

3 - Laboratory of Enzymology, Department of Cell Biology, University of Brasilia, Brasília, 70910-900, DF, Brazil.

*Corresponding author: Prof. Dr. Carlos André Ornelas Ricart (ricart@unb.br), Laboratory of Biochemistry and Protein Chemistry, Department of Cell Biology, University of Brasilia, Brasília, 70910-900, DF, Brazil.

Highlights

- The review presents the main proteomic approaches used to study filamentous fungi secretomes
- Data on the secretomes from *Trichoderma* and *Aspergillus* species is presented
- Perspectives on fungi secretome analysis are discussed

Abstract

Filamentous fungal secretomes comprise highly dynamic sets of proteins, including multiple carbohydrate active enzymes (CAZymes) which are able to hydrolyze plant biomass polysaccharides into products of biotechnological interest such as fermentable sugars. In recent years, proteomics has been used to identify and quantify enzymatic and non-enzymatic

Download English Version:

<https://daneshyari.com/en/article/6488193>

Download Persian Version:

<https://daneshyari.com/article/6488193>

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