Accepted Manuscript

Chemico-Physical and antifungal properties of Poly(butylene succinate)/cavoxin blend: study of a novel bioactive polymeric based system

Gabriella Santagata, Francesca Valerio, Alessio Cimmino, Giovanni Dal Poggetto, Marco Masi, Mariaelena Di Biase, Mario Malinconico, Paola Lavermicocca, Antonio Evidente



Received Date:13 April 2017Revised Date:17 May 2017Accepted Date:5 July 2017



Please cite this article as: Santagata, G., Valerio, F., Cimmino, A., Poggetto, G.D., Masi, M., Biase, M.D., Malinconico, M., Lavermicocca, P., Evidente, A., Chemico-Physical and antifungal properties of Poly(butylene succinate)/cavoxin blend: study of a novel bioactive polymeric based system, *European Polymer Journal* (2017), doi: http://dx.doi.org/10.1016/j.eurpolymj.2017.07.004

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

Chemico-Physical and antifungal properties of Poly(butylene succinate)/cavoxin blend: study of a novel bioactive polymeric based system

Gabriella Santagata^{*^a}, Francesca Valerio^b, Alessio Cimmino^c, Giovanni Dal Poggetto^a, Marco Masi^c, Mariaelena Di Biase^b, Mario Malinconico^a, Paola Lavermicocca^{*^b} and Antonio Evidente^c

^aInstitute for Polymers, Composites and Biomaterials, National Research Council, Via Campi Flegrei
34, 80078 Pozzuoli (Napoli), Italy
^bInstitute of Sciences of Food Production, National Research Council, via Amendola 122/0, 70126
Bari, Italy

^cDepartment of Chemical Sciences, University of Naples "Federico II", Complesso Universitario Monte S. Angelo, Via Cintia 4, 80126 Napoli, Italy

Corresponding authors:

*E-mail address: gabriella.santagata@ipcb.cnr.it (G. Santagata)

* E-mail address: <u>paola.lavermicocca@ispa.cnr.it</u> (P. Lavermicocca)

ABSTRACT

This manuscript describes antifungal, structural, thermal and morphological properties of a novel, eco-friendly bioplastic film, based on poly(butylenesuccinate) and cavoxin, a chalcone phytopathogenic metabolite, isolated from cultures by the fungus *Phoma cava* and included inside the biodegradable polymeric matrix. The antagonistic activity of the film explored against two fungal

Download English Version:

https://daneshyari.com/en/article/5159347

Download Persian Version:

https://daneshyari.com/article/5159347

Daneshyari.com