## Accepted Manuscript

Title: Physicochemical characterization of several types of naturally colored cotton fibers from Peru

Authors: R.H. Blas-Sevillano, T. Veramendi, B. La Torre, C.E. Velezmoro-Sánchez, A.I. Oliva, M.E. Mena-Martínez, W.A. Herrera-Kao, J. Uribe-Calderon, J.M. Cervantes-Uc

PII: S0144-8617(18)30652-0

DOI: https://doi.org/10.1016/j.carbpol.2018.06.006

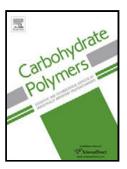
Reference: CARP 13680

To appear in:

Received date: 30-1-2018 Revised date: 28-5-2018 Accepted date: 2-6-2018

Please cite this article as: Blas-Sevillano, RH., Veramendi, T., La Torre, B., Velezmoro-Sánchez, CE., Oliva, AI., Mena-Martínez, ME., Herrera-Kao, WA., Uribe-Calderon, J., & Cervantes-Uc, J.M., Physicochemical characterization of several types of naturally colored cotton fibers from Peru. *Carbohydrate Polymers* (2018), https://doi.org/10.1016/j.carbpol.2018.06.006

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

# PHYSICOCHEMICAL CHARACTERIZATION OF SEVERAL TYPES OF NATURALLY COLORED COTTON FIBERS FROM PERU

R.H. Blas-Sevillano<sup>1</sup>, T. Veramendi<sup>1</sup>, B. La Torre<sup>1</sup>, C.E. Velezmoro-Sánchez<sup>1</sup>, A.I. Oliva<sup>2</sup>, M.E. Mena-Martínez<sup>3</sup>, W.A. Herrera-Kao<sup>3</sup>, J. Uribe-Calderon<sup>3</sup>, J.M. Cervantes-Uc<sup>3\*</sup>

<sup>1</sup>Universidad Nacional Agraria La Molina

Av. La Molina s/n- Lima 12 Perú

<sup>2</sup>Departamento de Física Aplicada, CINVESTAV-IPN, Unidad Mérida,

Carretera Antigua a Progreso Km 6, Cordemex, C.P. 97310

Mérida, Yucatán, México.

<sup>3</sup> Unidad de Materiales, Centro de Investigación Científica de Yucatán, A.C.

Calle 43 No. 130 x 30 y 32, Col. Chuburná de Hidalgo. C.P. 97205,

Mérida, Yucatán, México

\*Corresponding Author.

José M. Cervantes-Uc

e-mail: manceruc@cicy.mx

Tel. +52-999-9428330

#### **HIGHLIGHTS**

- Elemental composition, physical dimensions and crystallinity of different types of naturally colored cotton (NCCs) fibers from Peru were investigated.
- Cotton samples contain mainly carbon, oxygen and hydrogen, but darker color samples also presented nitrogen.
- It was also found that the white cotton sample exhibited the longest fibers whereas the darker color samples showed the shortest values in length
- The crystallinity seems also decrease with color intensity of NCCs.
- The thermal stability of white cotton fibers was similar to those obtained for the NCCs.

#### Download English Version:

# https://daneshyari.com/en/article/7781691

Download Persian Version:

https://daneshyari.com/article/7781691

Daneshyari.com