

## Accepted Manuscript

Synthesis and characterization of cellulose nanofibers (CNF)  
ramie reinforced cassava starch hybrid composites

Edi Syafri, Anwar Kasim, Hairul Abral, Sudirman, Grace Tj  
Sulungbudi, M.R. Sanjay, Nasmi Herlina Sari



PII: S0141-8130(18)32420-6

DOI: doi:[10.1016/j.ijbiomac.2018.08.134](https://doi.org/10.1016/j.ijbiomac.2018.08.134)

Reference: BIOMAC 10378

To appear in: *International Journal of Biological Macromolecules*

Received date: 18 May 2018

Revised date: 13 July 2018

Accepted date: 25 August 2018

Please cite this article as: Edi Syafri, Anwar Kasim, Hairul Abral, Sudirman, Grace Tj Sulungbudi, M.R. Sanjay, Nasmi Herlina Sari , Synthesis and characterization of cellulose nanofibers (CNF) ramie reinforced cassava starch hybrid composites. Biomac (2018), doi:[10.1016/j.ijbiomac.2018.08.134](https://doi.org/10.1016/j.ijbiomac.2018.08.134)

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.

## **Synthesis and Characterization of Cellulose Nanofibers (CNF) Ramie Reinforced Cassava Starch Hybrid Composites**

Edi Syafri<sup>a</sup>, Anwar Kasim<sup>b</sup>, Hairul Abral<sup>c</sup>, Sudirman<sup>d</sup>, Grace Tj Sulungbudi<sup>d</sup>, Sanjay M R<sup>e\*</sup>, Nasmi Herlina Sari<sup>f</sup>

<sup>a</sup>Department of Agricultural Technology, Agricultural Polytechnic, Payakumbuh, West Sumatra 26271, Indonesia. E-mail: [edisyafr11@gmail.com](mailto:edisyafr11@gmail.com)

<sup>b</sup>Department of Agriculture Product Technology, Andalas University Kampus Limau Manis, West Sumatra 25163, Indonesia. E-mail: [anwar\\_ks@yahoo.com](mailto:anwar_ks@yahoo.com)

<sup>c</sup>Department of Mechanical Engineering, Andalas University Kampus Limau Manis, West Sumatra 25163, Indonesia. E-mail: [abral@ft.unand.ac.id](mailto:abral@ft.unand.ac.id)

<sup>d</sup>Center for Science and Technology of Advanced Materials - BATAN, Kawasan Puspitek, Serpong 15314, Tangerang Selatan, Indonesia. E-mail: [sudirman@batan.go.id](mailto:sudirman@batan.go.id), [grace@batan.go.id](mailto:grace@batan.go.id)

<sup>e\*</sup>Department of Mechanical Engineering, Ramaiah Institute of Technology, Bengaluru 560054 Karnataka, India. E-mail: [mcemrs@gmail.com](mailto:mcemrs@gmail.com)

<sup>f</sup>Department of Mechanical Engineering, Mataram University, Jl. Majapahit No. 62 Mataram, NTB 83126, Indonesia. Email: [n.herlinasari@unram.ac.id](mailto:n.herlinasari@unram.ac.id)

**Corresponding Author: Sanajy M R**, Department of Mechanical Engineering, Ramaiah Institute of Technology, Bengaluru 560054 Karnataka, India. E-mail: [mcemrs@gmail.com](mailto:mcemrs@gmail.com)

Download English Version:

<https://daneshyari.com/en/article/10129165>

Download Persian Version:

<https://daneshyari.com/article/10129165>

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