Accepted Manuscript

Integrated production of second generation ethanol and lactic acid from steamexploded elephant grass

Sheila Montipó, Ignacio Ballesteros, Roselei Claudete Fontana, Siqing Liu, Ayrton F. Martins, Mercedes Ballesteros, Marli Camassola

PII: DOI: Reference:	S0960-8524(17)31950-8 https://doi.org/10.1016/j.biortech.2017.11.001 BITE 19151
To appear in:	Bioresource Technology
Received Date:	6 October 2017
Revised Date:	31 October 2017
Accepted Date:	1 November 2017



Please cite this article as: Montipó, S., Ballesteros, I., Fontana, R.C., Liu, S., Martins, A.F., Ballesteros, M., Camassola, M., Integrated production of second generation ethanol and lactic acid from steam-exploded elephant grass, *Bioresource Technology* (2017), doi: https://doi.org/10.1016/j.biortech.2017.11.001

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

Integrated production of second generation ethanol and lactic acid

from steam-exploded elephant grass

Sheila Montipó^{a,*}, Ignacio Ballesteros^b, Roselei Claudete Fontana^a, Siqing Liu^c, Ayrton

F. Martins^d, Mercedes Ballesteros^b, Marli Camassola^a

^aBiotechnology Institute, University of Caxias do Sul, Caxias do Sul, RS, 95070-560, Brazil.

^bRenewable Energies Department, CIEMAT – Research Centre for Energy,

Environment and Technology, Madrid, 28040, Spain.

^cRenewable Product Technology, NCAUR-ARS, U.S. Department of Agriculture,

Peoria, IL 61604, USA

^dChemistry Department, Federal University of Santa Maria, Santa Maria, RS, 97105-900, Brazil.

*Corresponding author at: Instituto de Biotecnologia, Laboratório de Enzimas e Biomassas, Universidade de Caxias do Sul, Rua Francisco Getúlio Vargas, 1130, Prédio 57, Sala 212, Caxias do Sul, RS, 95070-560, Brasil.

Phone: +55 54 3218 2149; Fax: +55 54 3218 2149

E-mail address: sheilamontipo@gmail.com (S. Montipó)

Abstract

Elephant grass was subjected to steam explosion to enhance cellulose accessibility and convert it into ethanol. After catalyzed pretreatment at 190 °C for 5 min, enzymatic

Download English Version:

https://daneshyari.com/en/article/7068936

Download Persian Version:

https://daneshyari.com/article/7068936

Daneshyari.com