## Accepted Manuscript

Bacterial community structure in simultaneous nitrification, denitrification and organic matter removal process treating saline mustard tuber wastewater as revealed by 16S rRNA sequencing

Jiale Wang, Benzhou Gong, Wei Huang, Yingmu Wang, Jian Zhou

PII: S0960-8524(16)31749-7

DOI: http://dx.doi.org/10.1016/j.biortech.2016.12.071

Reference: BITE 17447

To appear in: Bioresource Technology

Received Date: 6 October 2016
Revised Date: 16 December 2016
Accepted Date: 21 December 2016



Please cite this article as: Wang, J., Gong, B., Huang, W., Wang, Y., Zhou, J., Bacterial community structure in simultaneous nitrification, denitrification and organic matter removal process treating saline mustard tuber wastewater as revealed by 16S rRNA sequencing, *Bioresource Technology* (2016), doi: http://dx.doi.org/10.1016/j.biortech.2016.12.071

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

1	Title
2	Bacterial community structure in simultaneous nitrification, denitrification and organic matter
3	removal process treating saline mustard tuber wastewater as revealed by 16S rRNA sequencing
4	
5	Author
6	Jiale Wang <sup>a</sup> , Benzhou Gong <sup>a</sup> , Wei Huang <sup>a</sup> , Yingmu Wang <sup>a</sup> , Jian Zhou <sup>a,b,*</sup>
7	a Faculty of Urban Construction and Environmental Engineering, Chongqing University,
8	Chongqing 400045, PR China
9	b Key Laboratory of the Three Gorges Reservoir's Eco-Environments, Ministry of Education,
10	Chongqing University, Chongqing 400045, PR China
11	
12	* Corresponding author at: Faculty of Urban Construction and Environmental Engineering,
13	Chongqing University, 174 Shazheng Street, 400045 Chongqing, PR China. Tel./fax: +86 23
14	1365120980. E-mail address: zhoujiantg@126.com
15	
16	Abstract
17	A simultaneous nitrification, denitrification and organic matter removal (SNDOR) process in
1/	A simultaneous murineauon, demurineauon and organic matter removar (SNDOR) process in
18	sequencing batch biofilm reactor (SBBR) was established to treat saline mustard tuber wastewater
19	(MTWW) in this study. An average COD removal efficiency of 86.48% and total nitrogen removal
20	efficiency of 86.48% were achieved at 30 gNaCl L <sup>-1</sup> during 100 days' operation. The underlying
21	mechanisms were investigated by PacBio SMRT DNA sequencing (V1-V9) to analyze the
22	microbial community structures and its variation from low salinity at 10 gNaCl $\rm L^{-1}$ to high salinity

## Download English Version:

## https://daneshyari.com/en/article/4997722

Download Persian Version:

https://daneshyari.com/article/4997722

<u>Daneshyari.com</u>