Cultivation of microalgal biomass using swine manure for biohydrogen production: impact of dilution ratio and pretreatment

Gopalakrishnan Kumar, Dinh Duc Nguyen, Periyasamy Sivagurunathan, Takuro Kobayashi, Kaiqin Xu, Soon Woong Chang

PII: S0960-8524(18)30367-5
DOI: https://doi.org/10.1016/j.biortech.2018.03.029
Reference: BITE 19668

To appear in: *Bioresource Technology*

Received Date: 30 December 2017
Revised Date: 3 March 2018
Accepted Date: 5 March 2018

Please cite this article as: Kumar, G., Nguyen, D.D., Sivagurunathan, P., Kobayashi, T., Xu, K., Chang, S.W., Cultivation of microalgal biomass using swine manure for biohydrogen production: impact of dilution ratio and pretreatment, *Bioresource Technology* (2018), doi: https://doi.org/10.1016/j.biortech.2018.03.029

Cultivation of microalgal biomass using swine manure for biohydrogen production: impact of dilution ratio and pretreatment

Gopalakrishnan Kumar[a], Dinh Duc Nguyen[b], Periyasamy Sivagurunathan[c,d*], Takuro Kobayashi[d], Kaiqin Xu[d], and Soon Woong Chang[b]

[a]School of Civil and Environmental Engineering, Yonsei University, Seoul 38722, Republic of Korea

[b] Department of Environmental Energy Engineering, Kyonggi University, 94 San, Iui-dong, Youngtong-gu, Suwon-si, Gyeonggi-do, 16227, Republic of Korea

[c] Faculty of Environment and Labour Safety, Ton Duc Thang University, Ho Chi Minh City, Vietnam

[d] Green Energy Technology Research Group, Ton Duc Thang University, Ho Chi Minh City, Vietnam

[e] National Institute for Environmental Studies, Tsukuba, Ibaraki, Japan

Corresponding author

Periyasamy Sivagurunathan,

Green Energy Technology Research Group,

Ton Duc Thang University, Ho Chi Minh City,

Viet Nam.

(E-mail: *contact2sivas12@gmail.com; periyasamy.sivagurunathan@tdt.edu.vn*)