Accepted Manuscript

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PII: DOI: Reference:	S1385-8947(16)30449-1 http://dx.doi.org/10.1016/j.cej.2016.04.020 CEJ 15026
To appear in:	Chemical Engineering Journal
Received Date:	9 January 2016
Revised Date:	27 March 2016
Accepted Date:	4 April 2016



Please cite this article as: S-H. Zhang, Z-Q. Chen, Q-X. Wen, J. Zheng, Assessing the stability in composting of penicillin mycelial dreg via parallel factor (PARAFAC) analysis of fluorescence excitation-emission matrix (EEM), *Chemical Engineering Journal* (2016), doi: http://dx.doi.org/10.1016/j.cej.2016.04.020

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Assessing the stability in composting of penicillin mycelial dreg via parallel factor (PARAFAC) analysis of fluorescence excitation-emission matrix (EEM)

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Abbreviations: PMD, penicillin mycelial dreg; OM, organic matter; DOM, dissolved organic matter; EEM, excitation-emission matrix; PARAFAC, parallel factor analysis; EEMs-PARAFAC, Parallel Factor analysis of EEMs; F_{max} , maximum fluorescence intensity; WEOM, water extractable organic matter; DOC, dissolved organic carbon; DTN, dissolved total nitrogen; DON, dissolved organic nitrogen; SOUR, specific oxygen uptake rate; UV₂₅₄, UV absorption at 254 nm; SUVA₂₅₄, specific UV absorption; SS, sewage sludge; RS, rice straw; SD, sawdust; C1, component 1; C2, component 2; C3, component 3; C4, component 4; C5, component 5.

Abstract

Four composting treatments with different ratios of penicillin mycelial dreg (PMD) to sewage sludge (T-1, 1:0.4; T-2, 1:0.8; T-3, 1:1.2; T-4, 0:1) were investigated to characterize the property and composition of water-extractable organic matter (WEOM)

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