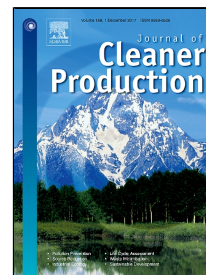


Accepted Manuscript

Effects of different covering systems and carbon nitrogen ratios on nitrogen removal in surface flow constructed wetlands

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PII: S0959-6526(17)32477-0
DOI: 10.1016/j.jclepro.2017.10.170
Reference: JCLP 10962
To appear in: *Journal of Cleaner Production*
Received Date: 21 June 2017
Revised Date: 30 September 2017
Accepted Date: 15 October 2017

Please cite this article as: Xiaowen Ding, Ying Xue, Yong Zhao, Weihua Xiao, Yuan Liu, Jiagang Liu, Effects of different covering systems and carbon nitrogen ratios on nitrogen removal in surface flow constructed wetlands, *Journal of Cleaner Production* (2017), doi: 10.1016/j.jclepro.2017.10.170

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1 **Amount of words: 8398**

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3 **removal in surface flow constructed wetlands**

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11 **Highlights:**

12 Effects of different covering systems and COD/N on nitrogen removal were studied.

13 Nitrogen was divided into ORN, NH₄⁺-N and NO₃⁻-N.

14 Plants favored ORN and NH₄⁺-N removal, and large coverage favored NO₃⁻-N removal.

15 Nitrification was the key step in nitrogen removal.

16 Results provide a theoretical basis for non-point source pollution control using SFW.

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