Short Communication

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Abstract

In this research, the nitrate reduction rate increased 2~3 fold in the presence of five different porphyrin compounds (0.25 mM), among which hemin expressed the best accelerating effectiveness. Therefore, hemin was used to explore the catalytic characteristics and mechanisms during denitrification. The relationship between hemin concentrations (C_{hemin}) and nitrate reduction rates (k) could be best described by the equation k=8.7463+0.44528ln (C_{hemin}-0.00993) (R^2=0.9908). Furthermore, the