

1 Personal opinion and difficulties

2 Article:

Metabolic coupling between soil aerobic methanotrophs and denitrifiers in rice paddy fields

3 Abstract

In rice paddy fields there is a lot of microbial denitrification, typically linked to oxidation of electron donors such as methane (CH_4) in *anoxic* and *hypoxic* conditions.

Whether and how *aerobic* methane oxidation couples with denitrification in *anoxic* paddy fields is unknown.

4 Intro

5 Methods

$^{13}CH_4$ -DNA-stable isotope probing (SIP)

Microcosm experiments

^{13}C -metabolome-assembled genomes and ^{13}C -metabolomics

6 Results

7 Replication