Sulfur-Driven Iron Reduction Coupled to Anaerobic Ammonium Oxidation

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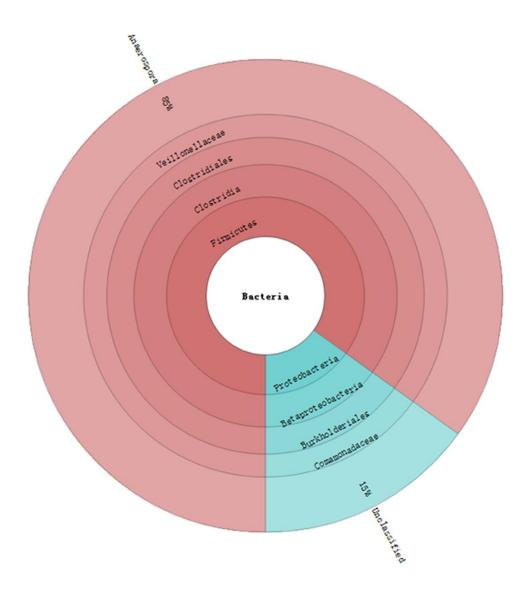


Figure S1. Species annotation of HJ-4 consortium under anaerobic conditions. The mean relative abundances of 16S rRNA gene sequences, classified at the division level.

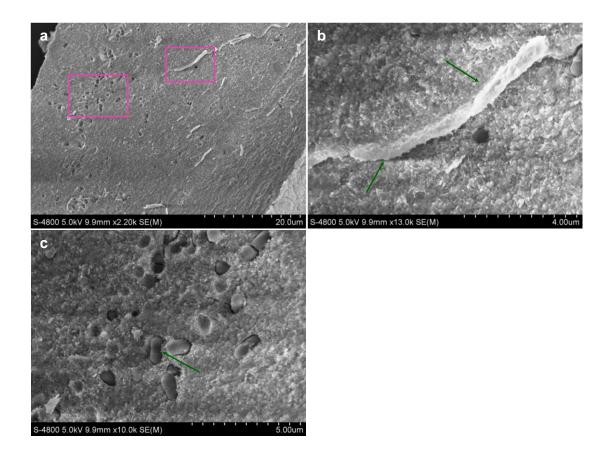


Figure S2. Electron microscope image illustrating cell morphology and size of *Anaerospora hongkongensis* (b) and *Comamonadaceae* (c). Morphology of iron mineralogy on *Anaerospora hongkongensis* surface (b).

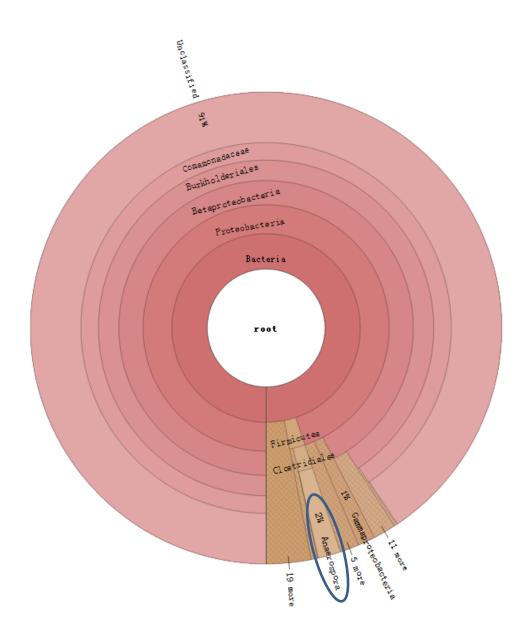


Figure S3. Species annotation of HJ-4 consortium under aerobic conditions. The mean relative abundances of 16S rRNA gene sequences, classified at the division level.

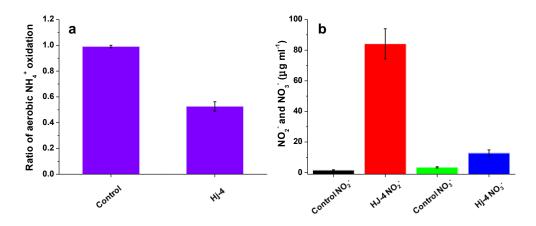


Figure S4. Nitrification of HJ-4 consortium under aerobic condition. Oxidation of ammonium (a), generation of nitrite and nitrate (b).

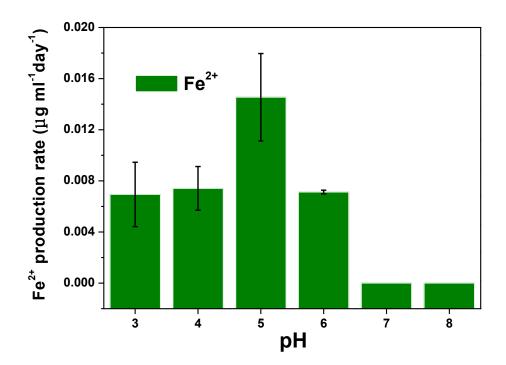


Figure S5. Ferrous production rate at pH 3, 4, 5, 6, 7, and 8 by the HJ-4 consortium.

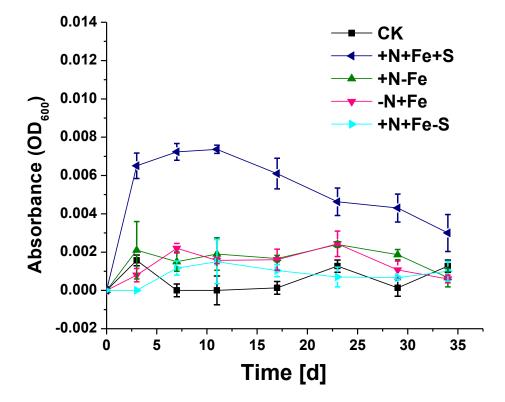


Figure S6. Growth of HJ-4 consortium under the condition of that with/without ammonium, ferrihydrite, and sulfide, respectively.

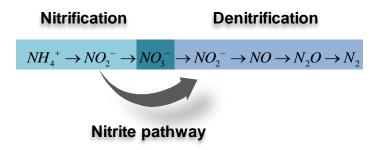


Figure S7. Biological nitrification–denitrification *via* nitrite pathway in the HJ-4 consortium.