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Heavy metals in slag affect inorganic N dynamics and soil bacterial community structure and function

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## Decrease in N metabolism function I I Control (C) < Low (L) < Middle (M) < High (H) Day 28 Treatment Day 0 Soil contaminated with different amount of slag containing Pb and Zn O 0 79.0 99'0 49.0 99.0 99.0 19.0 99.0 89.0 79.0 Proportion of sequences (%) Proportion of sequences (%) Contamination level; 1.0 community structure Change in bacterial 0.5 RDA1 0.0 0H2 0H3 4 weeks of incubation Urea application 0.1-5.0 0.0 9.0-RDA2 H-H \* 4 D H A-N 30 30 Delay in nitrification 25 25 20 20 15 Days 15 Days 10 10 5 NH<sub>4</sub><sup>+</sup>- N (mg/kg) 009 NO<sub>3</sub><sup>-</sup>-N (mg/kg) 20 50 100 50 500 250

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