

Parameters	Description
Citation	Publication where data were collected from
No.	Observation number
Number of observation	Number of observations for each publication
Reference no.	Reference number as shown in the References S1 section
Land type	Land type of the study using the following categories: Agriculture, Forest, Grassland, Wetland, Desert
Study area Country	Country name where the study was conducted
Soil description	Soil description includes soil classification and soil texture
Soil pH	Soil pH is the pH of the studied soil
Soil C	Soil C is the available C of the studied soils
Soil N	Soil N is the available N of the studied soils
Unit	Unit is the measuring unit
Biocide type	Biocide type means fungicide and bactericide
Biocide name	Biocide name includes different types of biocides
Biocide amount	Biocide amount is the amount of biocides
Unit	Unit is a measurement variable
Total Incub. period (d)	Total incub. Period (d) means the total incubation time expressed in day
Incub. Tem°C	Incubation temperature is the temperature during the incubation periods
Incub. time	Incubation time is the available time for incubation
Unit	Unit is a measurement variable
Replicate	Replicate is the number of replication
Mean MBC control	Mean value of MBC (microbial biomass carbon) in the control
Mean MBC treatment	Mean value of MBC in the treatment
Mean MBC unit	Measurement variable for mean MBC
Mean MBC lnRR	Natural log of response ratio for mean MBC
SD MBC control	Standard deviation of MBC in the control
SD MBC treatment	Standard deviation of MBC in the treatment
Mean MBN control	Mean value of MBN (microbial biomass nitrogen) in the control
Mean MBN treatment	Mean value of MBN in the treatment
Mean MBN unit	Measurement variable for mean MBN
Mean MBN lnRR	Natural log of response ratio for MBN
SD MBN control	Standard deviation of MBN in the control
SD MBN treatment	Standard deviation of MBN in the treatment
Mean Res. control	Mean value of Res. (respiration) in the control

Mean Res. treatment	Mean value of respiration in the treatment
Mean Res. unit	Measurement variable for mean respiration
Mean Res. lnRR	Natural log of response ratio for respiration
SD Res. control	Standard deviation of respiration in the control
SD Res. treatment	Standard deviation of respiration in the treatment
Mean N ₂ O_control	Mean value of N ₂ O in the control
Mean N ₂ O_treatment	Mean value of N ₂ O in the treatment
Mean N ₂ O_unit	Measurement variable for mean N ₂ O
Mean N ₂ O_lnRR	Natural log of response ratio for N ₂ O
SD N ₂ O_control	Standard deviation of N ₂ O in the control
SD N ₂ O_treatment	Standard deviation of N ₂ O in the treatment
Mean NH ₄ ⁺ _control	Mean value of NH ₄ ⁺ in the control
Mean NH ₄ ⁺ _treatment	Mean value of NH ₄ ⁺ in the treatment
Mean NH ₄ ⁺ _unit	Measurement value for mean NH ₄ ⁺
Mean NH ₄ ⁺ _lnRR	Natural log of response ratio for NH ₄ ⁺
SD NH ₄ ⁺ _control	Standard deviation of NH ₄ ⁺ in the control
SD NH ₄ ⁺ _treatment	Standard deviation of NH ₄ ⁺ in the treatment
Mean NO ₃ ⁻ _control	Mean value of NO ₃ ⁻ in the control
Mean NO ₃ ⁻ _treatment	Mean value of NO ₃ ⁻ in the treatment
Mean NO ₃ ⁻ _unit	Measurement value for mean NO ₃ ⁻
Mean NO ₃ ⁻ _lnRR	Effect size of mean NO ₃ ⁻
SD NO ₃ ⁻ _control	Standard deviation of NO ₃ ⁻ in the control
SD NO ₃ ⁻ _treatment	Standard deviation of NO ₃ ⁻ in the treatment
Mean Ammon. control	Mean value of ammonification in the control
Mean Ammon. treatment	Mean value of ammonification in the treatment
Mean Ammon. unit	Measuring unit of mean ammonification
Mean Ammon. lnRR	Natural log of response ratio for ammonification
SD Ammon. control	Standard deviation of ammonification in the control
SD Ammon. treatment	Standard deviation of ammonification in the control
Mean Nitri. control	Mean value of nitrification in the control
Mean Nitri. treatment	Mean value of nitrification in the treatment

Mean Nitri. unit	Measurement variable for mean nitrification
Mean Nitri. lnRR	Natural log of response ratio for nitrification
SD Nitri. control	Standard deviation of nitrification in the control
SD Nitri. treatment	Standard deviation of nitrification in the treatment