



Supplement of

Oxygen isotope fractionation during N₂O production by soil denitrification

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Appendix 1

Table.A1 Detailed scheme of the applied treatments and the incubations carried out. Each treatment included 3 replications. Last column shows where the results of particular treatments are presented in the manuscript and which symbols are used for different treatments.

| | WFPS | nitrate | water | inhibition | soil | temp. | results showed in: | Table1 | Fig2 | Fig3 | Fig4 | Fig5 |
|--|------|--------------------------|-------|-------------------------------|------------|-------|--------------------|--------|------|------|------|------|
| Exp 1.1b incubation 1 (25.- 26.02.2013) | 80 | Chile Saltpeter | light | C ₂ H ₂ | loamy sand | 22 | x | △ | ▲ | ▲ | ▲ | ▲ |
| | 80 | synthetic | light | C ₂ H ₂ | loamy sand | 22 | | △ | △ | △ | △ | △ |
| | 80 | Chile Saltpeter | heavy | C ₂ H ₂ | loamy sand | 22 | x | △ | ▲ | ▲ | ▲ | ▲ |
| | 80 | synthetic | heavy | C ₂ H ₂ | loamy sand | 22 | | △ | △ | △ | △ | △ |
| | 80 | Chile Saltpeter | heavy | - | loamy sand | 22 | x | × | × | × | × | × |
| | 80 | synthetic | heavy | - | loamy sand | 22 | | × | × | × | × | × |
| | 80 | ¹⁵ N labelled | heavy | C ₂ H ₂ | loamy sand | 22 | | | | | | |
| | 80 | ¹⁵ N labelled | heavy | - | loamy sand | 22 | | | | | | |
| Exp 1.1a incubation 2 (11- 12.03.2013) | 80 | Chile Saltpeter | light | C ₂ H ₂ | loamy sand | 8 | x | △ | ▲ | ▲ | ▲ | ▲ |
| | 80 | synthetic | light | C ₂ H ₂ | loamy sand | 8 | | △ | △ | △ | △ | △ |
| | 80 | Chile Saltpeter | heavy | C ₂ H ₂ | loamy sand | 8 | x | △ | ▲ | ▲ | ▲ | ▲ |
| | 80 | synthetic | heavy | C ₂ H ₂ | loamy sand | 8 | | △ | △ | △ | △ | △ |
| | 80 | Chile Saltpeter | heavy | - | loamy sand | 8 | x | × | × | × | × | × |
| | 80 | synthetic | heavy | - | loamy sand | 8 | | × | × | × | × | × |
| | 80 | ¹⁵ N labelled | heavy | C ₂ H ₂ | loamy sand | 8 | | | | | | |
| | 80 | ¹⁵ N labelled | heavy | - | loamy sand | 8 | | | | | | |
| Exp 1.1c incubation 2 (11- 12.03.2013) | 80 | Chile Saltpeter | light | C ₂ H ₂ | silt loam | 22 | x | ◊ | ◊ | ◊ | ◊ | ◊ |
| | 80 | synthetic | light | C ₂ H ₂ | silt loam | 22 | | ◊ | ◊ | ◊ | ◊ | ◊ |
| | 80 | Chile Saltpeter | heavy | C ₂ H ₂ | silt loam | 22 | x | ◊ | ◊ | ◊ | ◊ | ◊ |
| | 80 | synthetic | heavy | C ₂ H ₂ | silt loam | 22 | | ◊ | ◊ | ◊ | ◊ | ◊ |
| | 80 | Chile Saltpeter | heavy | - | silt loam | 22 | x | × | × | × | × | × |
| | 80 | synthetic | heavy | - | silt loam | 22 | | × | × | × | × | × |
| | 80 | ¹⁵ N labelled | heavy | C ₂ H ₂ | silt loam | 22 | | | | | | |
| | 80 | ¹⁵ N labelled | heavy | - | silt loam | 22 | | | | | | |
| Exp 1.2a incubation 3 (22- 23.08.2013) | 80 | Chile Saltpeter | light | C ₂ H ₂ | loamy sand | 22 | x | ▲ | ▲ | ▲ | ▲ | ▲ |
| | 80 | Chile Saltpeter | light | C ₂ H ₂ | loamy sand | 22 | x | ▲ | ▲ | ▲ | ▲ | ▲ |
| | 80 | synthetic | heavy | C ₂ H ₂ | loamy sand | 22 | | ▲ | ▲ | △ | △ | △ |
| | 65 | Chile Saltpeter | light | C ₂ H ₂ | loamy sand | 22 | x | ▲ | ▲ | ▲ | ▲ | ▲ |
| | 65 | Chile Saltpeter | light | C ₂ H ₂ | loamy sand | 22 | x | ▲ | ▲ | ▲ | ▲ | ▲ |
| | 65 | synthetic | heavy | C ₂ H ₂ | loamy sand | 22 | | ▲ | ▲ | △ | △ | △ |
| | 65 | synthetic | heavy | C ₂ H ₂ | loamy sand | 22 | | | | | | |
| | 65 | synthetic | heavy | C ₂ H ₂ | loamy sand | 22 | | | | | | |

