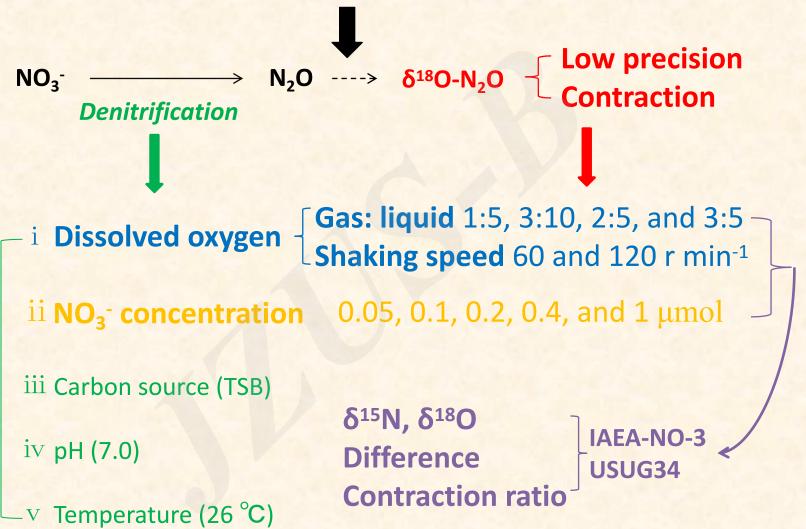
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Factors influencing the accuracy of the denitrifier method for determining the oxygen isotopic composition of nitrate

Key words: Dinitrifier method, Nitrate, δ¹⁵N, δ¹⁸O, Dissolved oxygen (DO), δ¹⁸O contraction

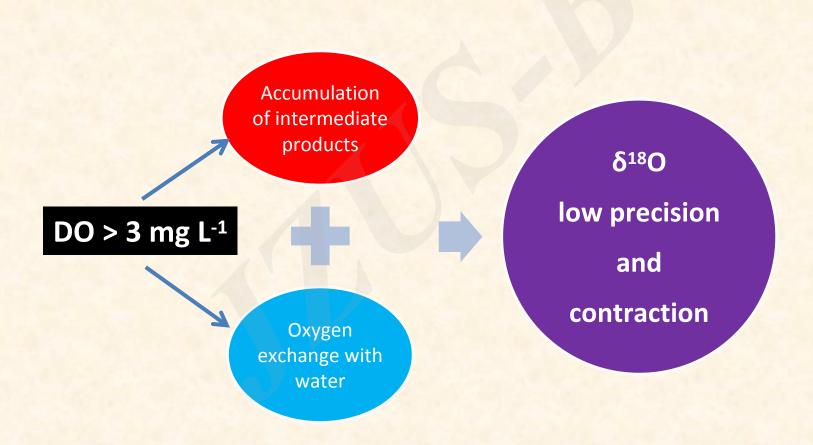
Introduction

The Denitrifier Method (Pseudomonas aureofaciens)



Main Conclusion

1 A strong relationship between δ^{18} O measurements and DO concentrations is found.



Main Conclusion

2 The measurement accuracy of δ^{18} O can be improved and the δ^{18} Ocontraction ratio reduced by selecting an appropriate range of DO concentrations (1.9 to 2.6 mg L⁻¹) and nitrate sample size (0.2 to 0.4 µmol).

