Module 3: Project 2 by Team 5

Charting the distributed nitrogen cycle

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Abstract

This is the abstract. It consists of two paragraphs.

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1 Introduction

2 Materials and Experimental Configuration

2.1 Experimental Protocols

To understand the correlation of microbial diversity and oxygen concentration across samples, we report four experimentally designed test protocols:

- P1. Analysis of the DNA abundance of norB with depth.
- **P2.** Analysis of similarities between the RNA abundance and the DNA abundance of norB with depth.
- **P3.** Reconstructing the taxa associated with norB and Analyze variance based on depth, DNA, and RNA.
- P4. Analysis of the abundance of norB in relation to nitrogen species in Saanich.

2.2 Dataset

2.3 Data Preporocessing

Manipulate the data into a single data frame

3 Results

3.1 Analysis of the DNA abundance of norB with depth

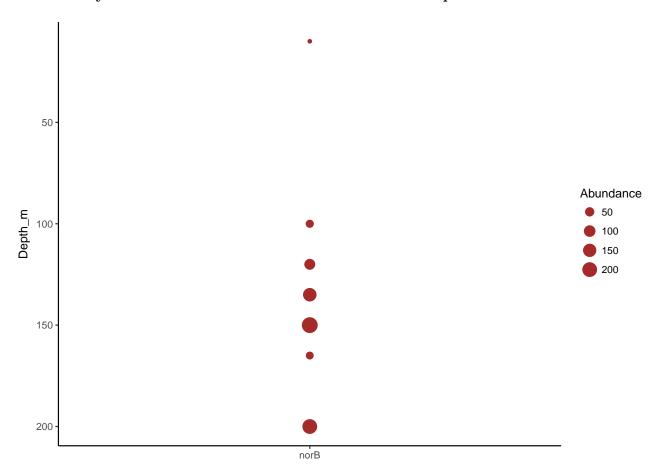


Figure 1: Abundance of the norB gene (DNA) at different depths

3.2 Analysis of similarities between the RNA abundance and the DNA abundance of norB with depth

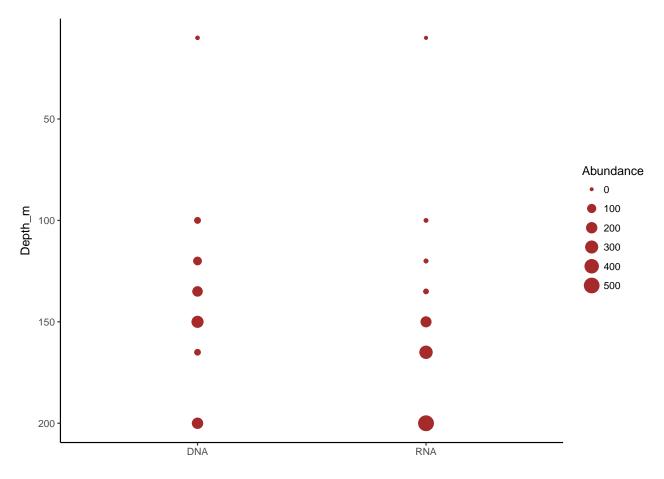


Figure 2: Abundance of the norB gene (DNA vs. RNA) at different depths

3.3 Reconstructing the taxa associated with norB and Analyze variance based on depth, DNA, and RNA

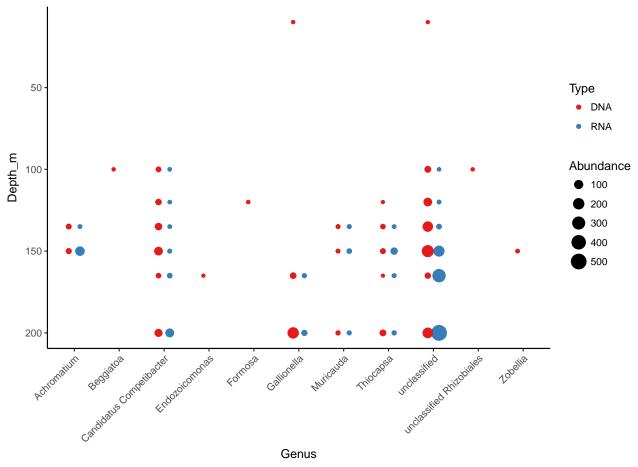


Figure 3: Abundance of genera with norB (DNA vs. RNA) at different depths

Another way to represent the same figure above:

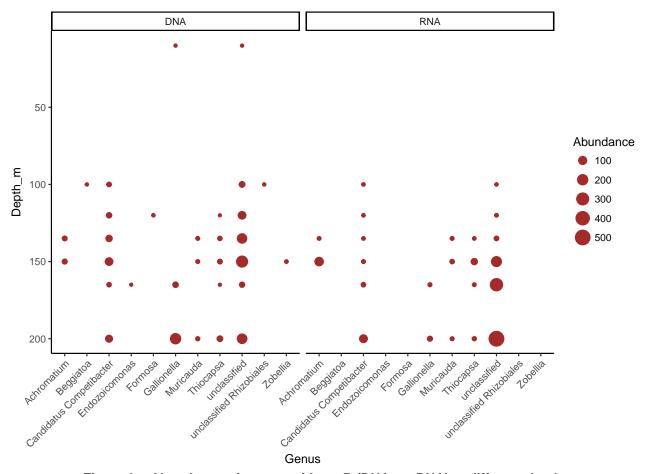


Figure 3a: Abundance of genera with norB (DNA vs. RNA) at different depths

3.4 Analysis of the abundance of norB in relation to nitrogen species in Saanich

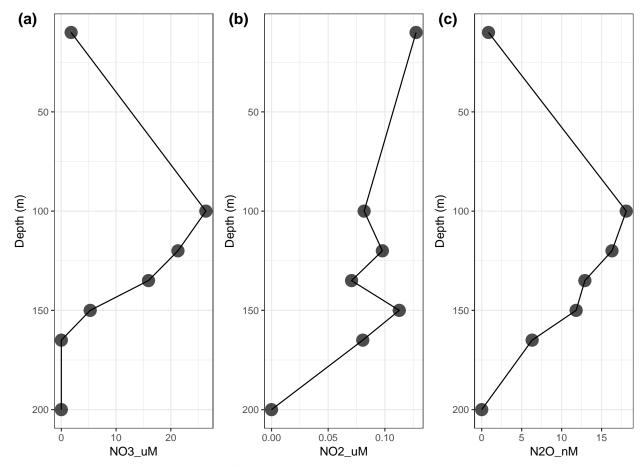


Figure 4: Abundance of norB in relation to nitrogen species across depths

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5 References