

# **The Eco-Evo Mandala: Simplifying Bacterioplankton Complexity into Ecohealth Signatures**

- Supplementary Information -

**Elroy Galbraith<sup>a\*</sup>, Matteo Convertino<sup>b</sup>**

<sup>a</sup> Graduate School of Information Science and Technology, Hokkaido  
University, Sapporo 060-0814, Japan

<sup>b</sup> bluEco Lab, Institute of Environment and Ecology, Tsinghua Shenzhen  
International Graduate School, Tsinghua University, Shenzhen 518055 China

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*Corresponding author:* \* elroy-louismatthias.galbraith-.d1@elms.hokudai.ac.jp; Tel.: +81-011-706-6489

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## Supplementary Figure Captions

**Figure S1. Power-law Distribution of Abundance.** (A) The EPDF of abundance for populations (colored lines) and the communities (black lines). (B) The top 10 phyla given the exponent of the distribution of their abundance.

**Figure S2. Taylor's Law of Abundance.** (A) The relation between the variance of OTU abundance and the mean of OTU abundance for populations (colored points) and the communities (black lines). (B) The top 10 phyla given the Taylor's law exponent of their abundance.

**Figure S3. Exponential Distribution of Interaction** (A) The EPDF of interactions (TE) for populations (colored lines) and the communities (black lines). (B) The top 10 Phyla given the exponent of the distribution of their interactions.

**Figure S4. Phylogenetic Dissimilarity** (A) The phylogenetic trees inferred for each site given the taxonomic classification of all OTUs observed. A colored node and edge indicates that the taxon was observed in that site; a grey node or edge was not observed. (B) The top 10 Phyla given their phylogenetic distances.

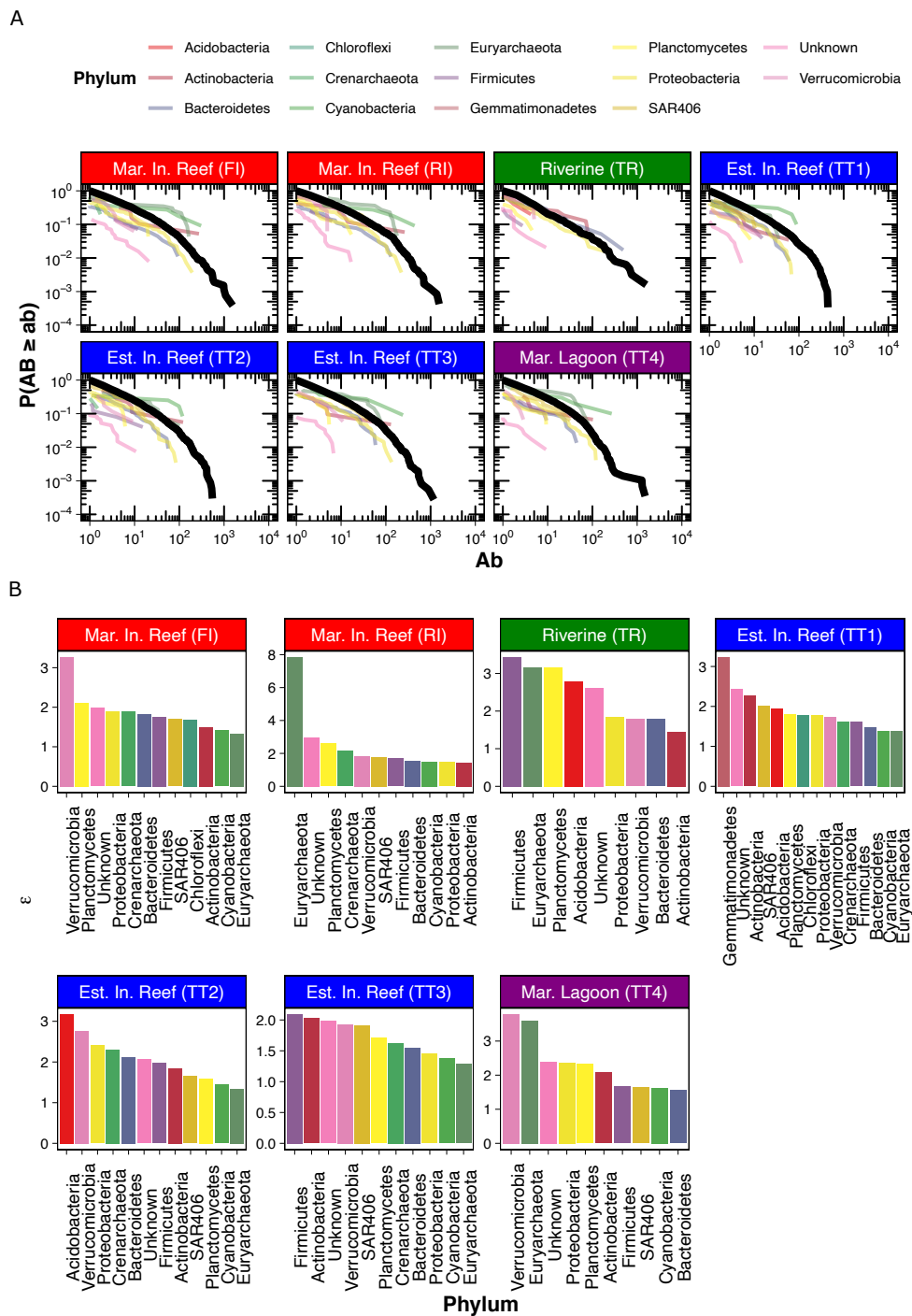


Figure S1:

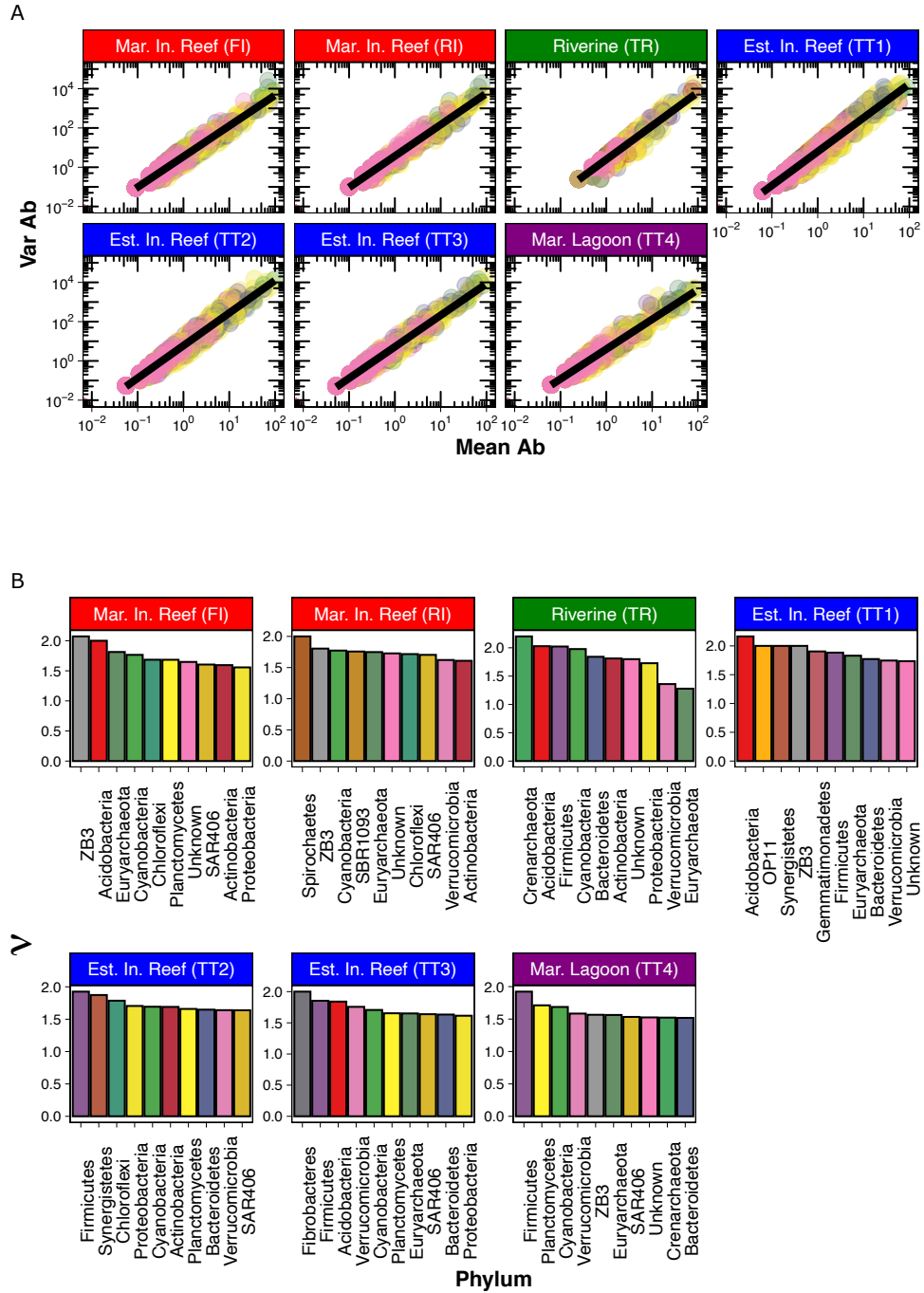
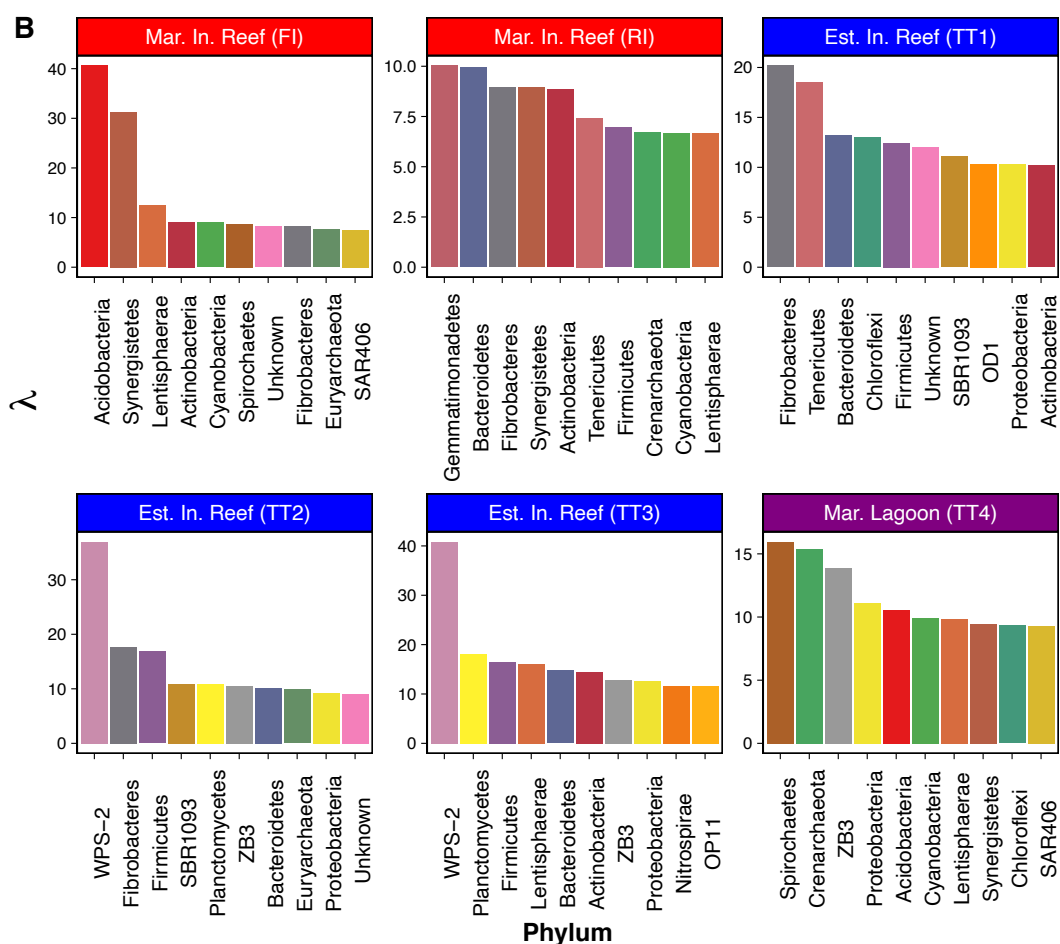
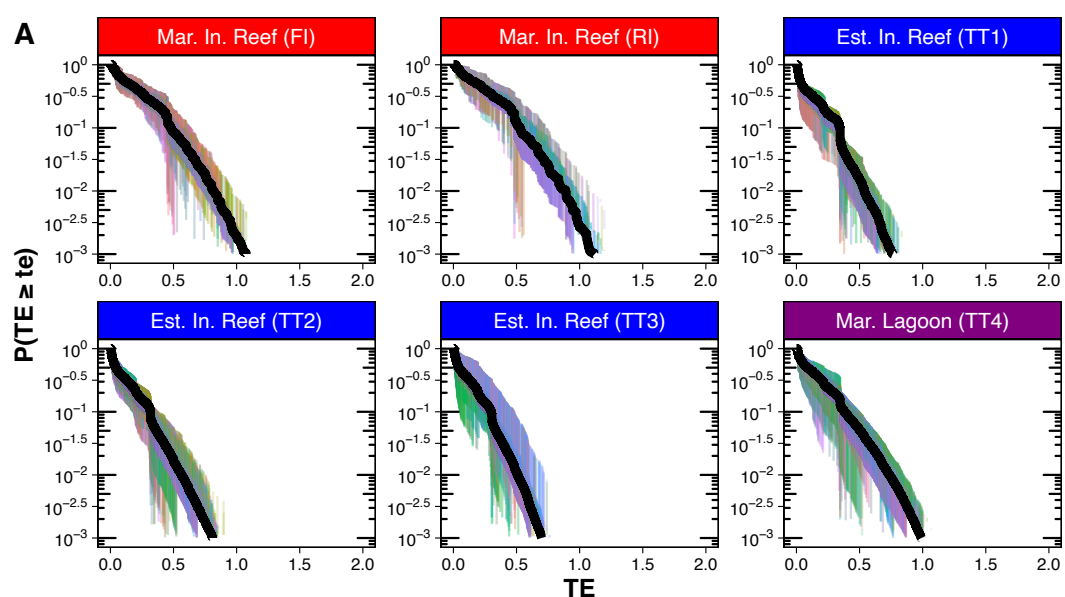


Figure S2:



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Figure S3:

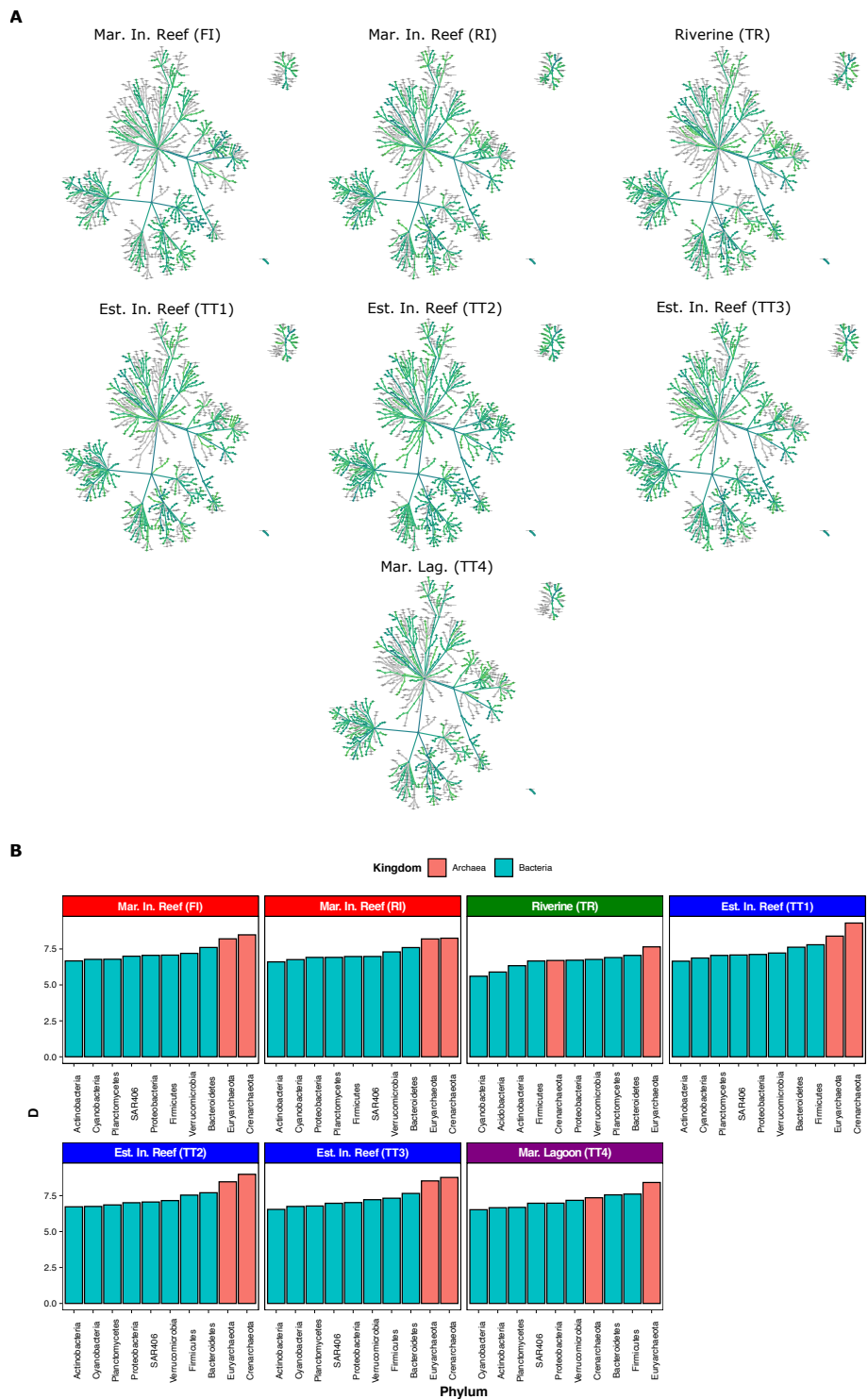


Figure S4: