

Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: Raw metagenome and metatranscriptome statistics.

File name: Supplementary Data 2

Description: Assembly statistics of short- and long-read metagenomes as well as metatranscriptomes.

File name: Supplementary Data 3

Description: Each biosynthetic gene cluster identified from the assembled metagenomes in this study.

File name: Supplementary Data 4

Description: Each biosynthetic gene cluster identified in the metatranscriptomic assemblies.

File name: Supplementary Data 5

Description: The genes used to calculate transcription of biosynthetic gene clusters and core bacterial genes.

File name: Supplementary Data 6

Description: DESeq2 analysis of significantly transcribed genes between day and night-time transcription.

File name: Supplementary Data 7

Description: Transcriptional scores for cation-related genes.

File name: Supplementary Data 8

Description: Average abundance pattern for each phylum through time.

File name: Supplementary Data 9

Description: Taxonomic composition of metagenomes and metatranscriptomes using full-length 16S rRNA.

File name: Supplementary Data 10

Description: Normalized sequence data showing scores of transcription at each time point with BGC type and Phylum shown