

# Supplementary information

## **Prophage induction mediated by quorum sensing signals alters soil bacterial community structure**

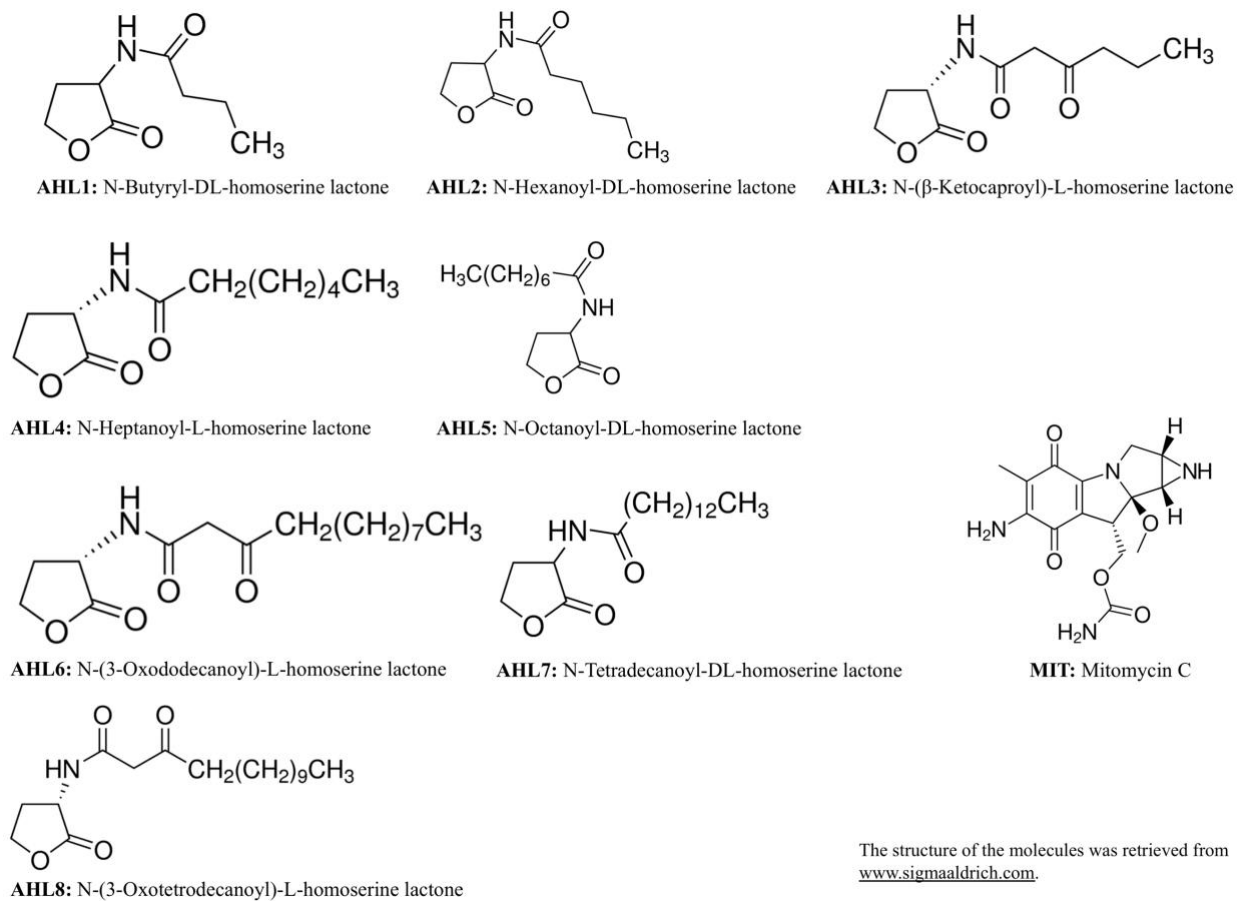
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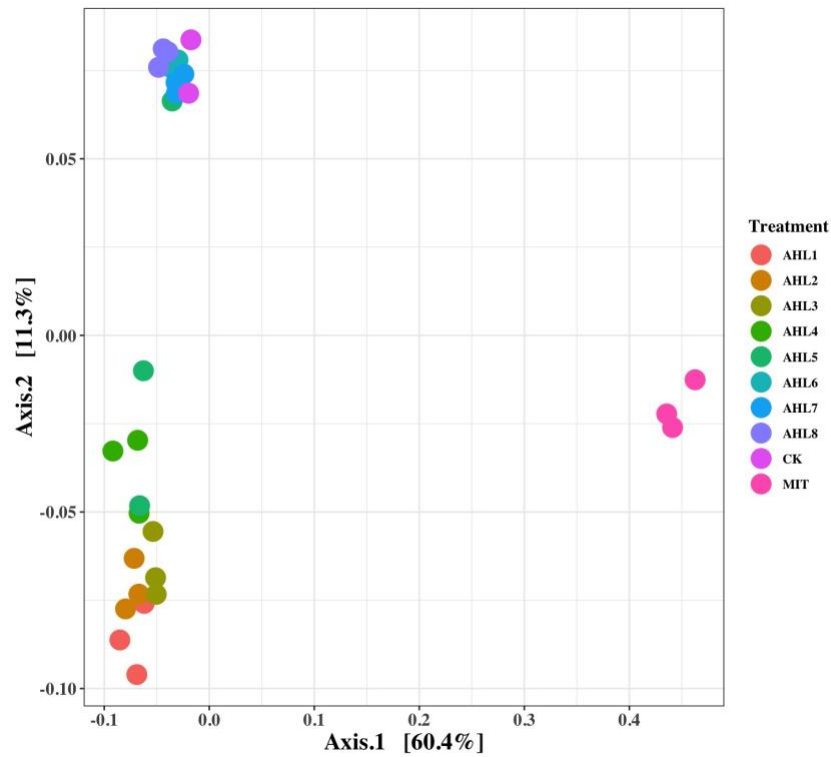
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**Figure S1.** The molecular structure of quorum-sensing N-Acyl homoserine lactones (AHL1–8) and mitomycin C (MIT).



**Fig. S2** Principal coordinate analysis (PCoA) of bacterial community composition. Treatments, including induction assays of mitomycin C (MIT), N-(Butyryl, Hexanoyl,  $\beta$ -Ketocaproyl, Heptanoyl, Octanoyl, 3-Oxododecanoyl, Tetradecanoyl, and 3-Oxotetradecanoyl) homoserine lactones (represented by AHL1–8, respectively), and the control (CK) are color-coded.



**Fig. S3** Bacterial community composition at Class level. Treatments include induction assays of mitomycin C (MIT), N-(Butyryl, Hexanoyl,  $\beta$ -Ketocaproyl, Heptanoyl, Octanoyl, 3-Oxododecanoyl, Tetradecanoyl, and 3-Oxotetradecanoyl) homoserine lactones (represented with AHL1–8, respectively), and the control (CK).