

## Supplementary Information

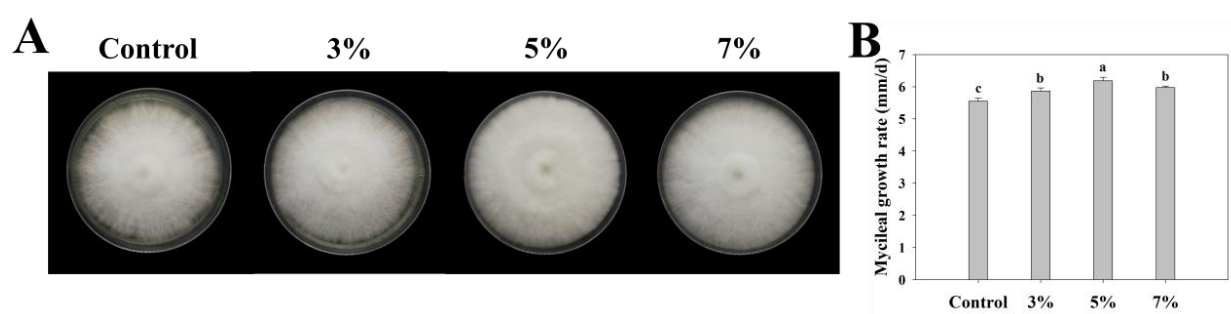
### The promoting mechanism of the sterile fermentation filtrate of *Serratia odorifera* on *Hypsizygus marmoreus* by means of metabolomics analysis

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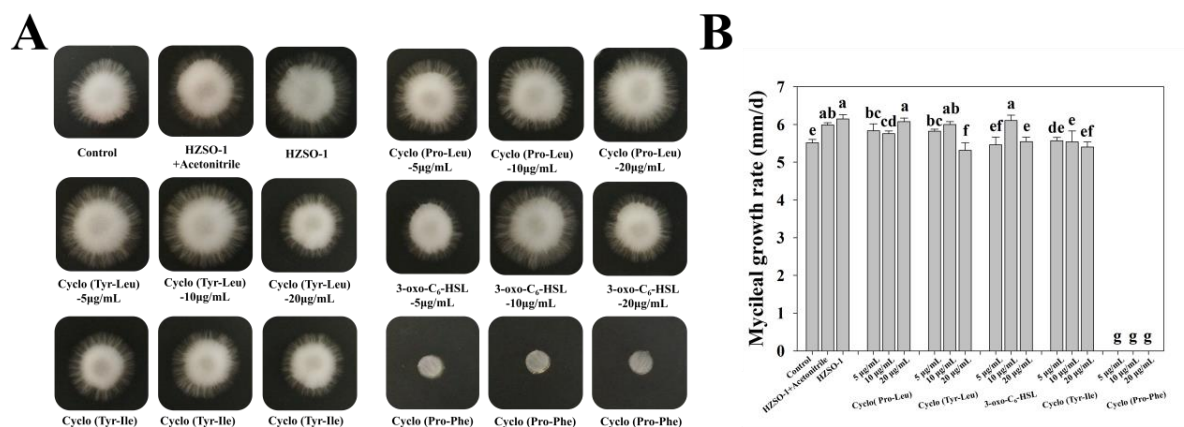
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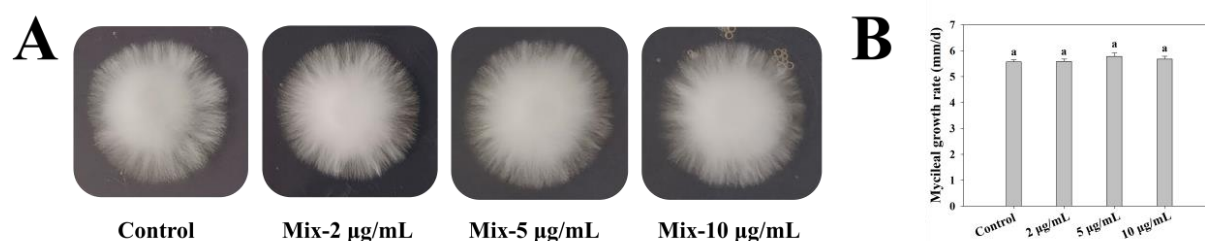
\* Correspondence: shjsun2004@126.com



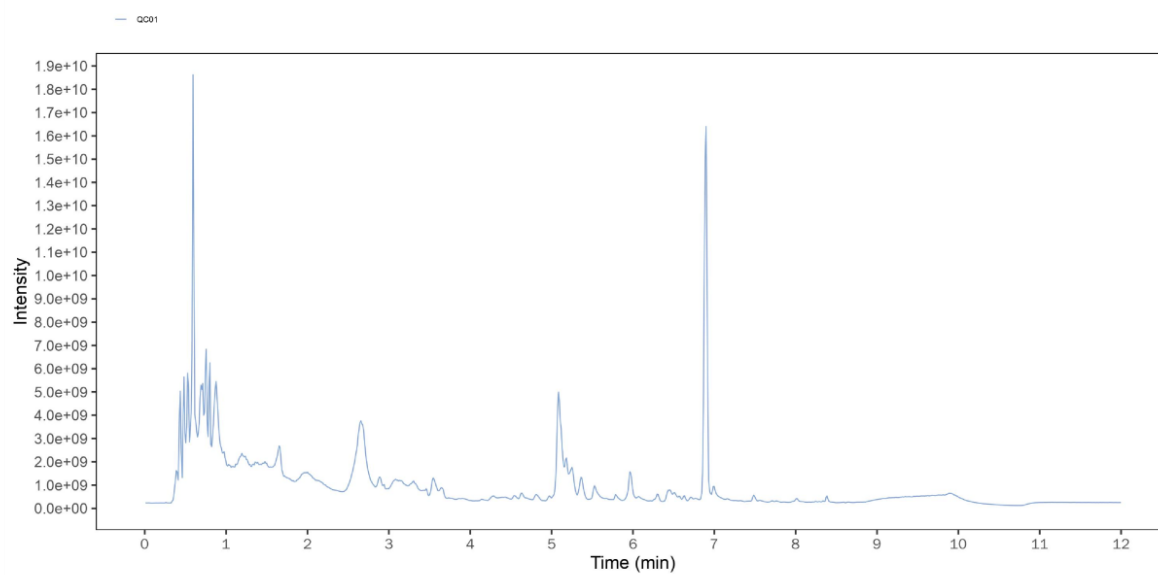
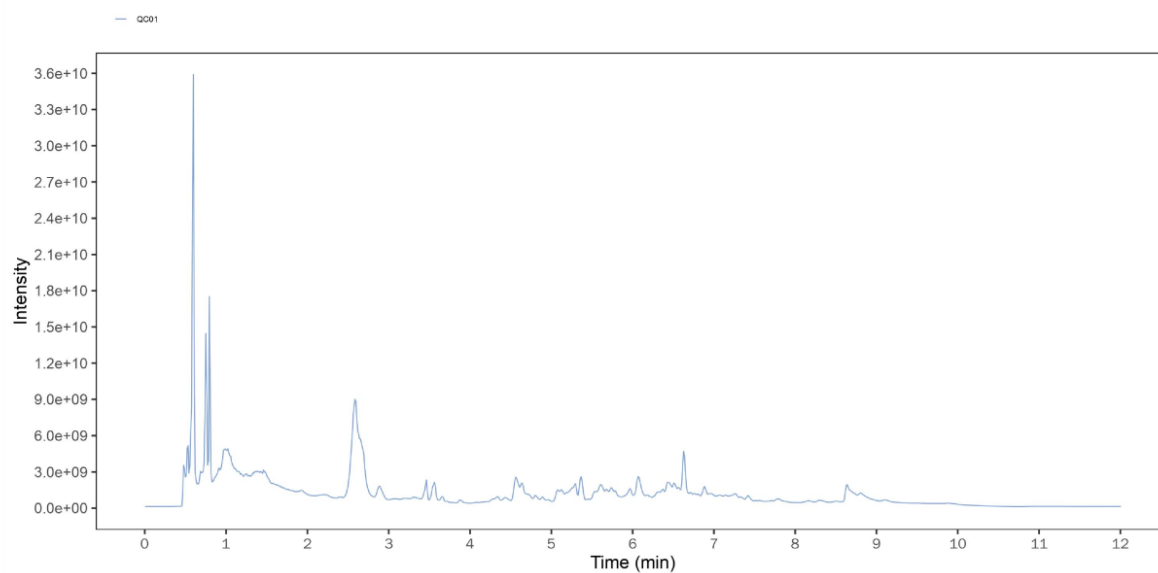
**Figure S1** Effects of sterile fermentation broth of *S. odorifera* on the growth of *H. marmoreus* hyphae on the plate. (A) Diagram and (B) rate of growth of *H. marmoreus* hyphae (mm/d) after treatment with the sterile fermentation broth at different concentrations.



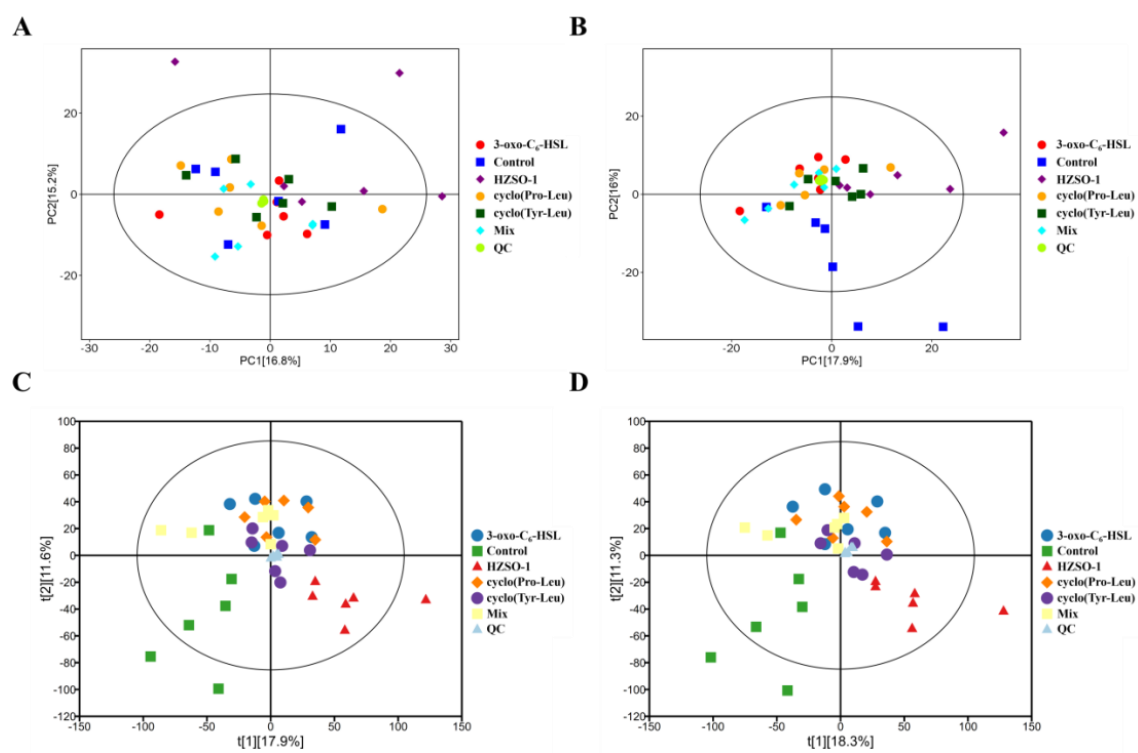
**Figure S2** Effects of different signaling molecules on plate growth of *H. marmoreus* hyphae. (A) Diagram and (B) mycelial growth rate (mm/d) of different signaling molecule treatments on *H. marmoreus* growth.



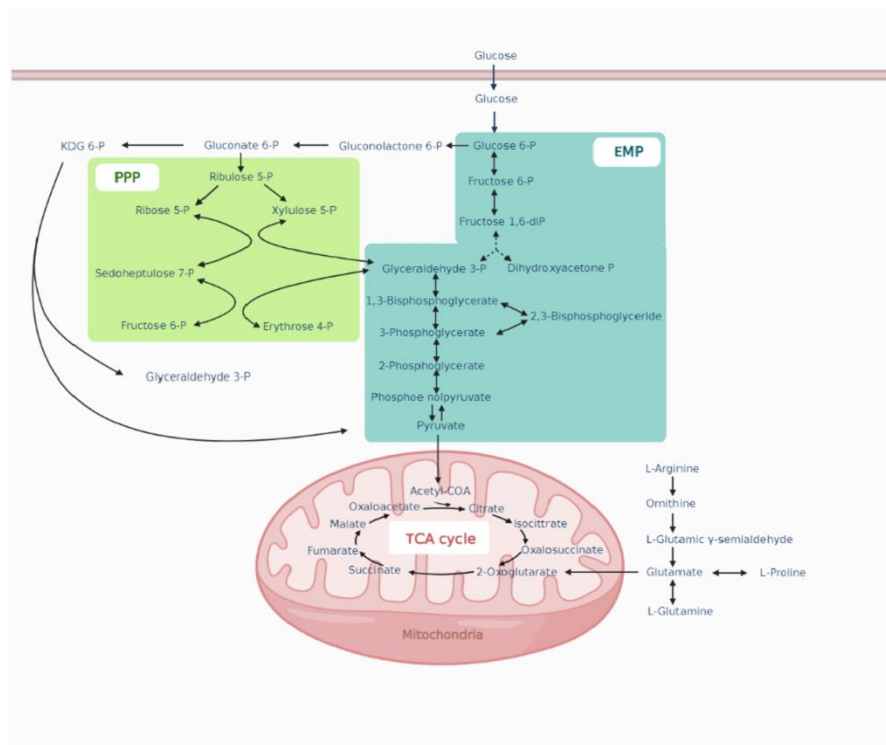
**Figure S3** Effect of mixture (3-oxo-C<sub>6</sub>-HSL: cyclo(Pro-Leu): cyclo(Tyr-Leu) in 1:1:1 ratio) on plate growth of *H. marmoreus* hyphae. (A) Graph and (B) mycelial growth rate (mm/d) at different concentrations.

**A****B**

**Figure S4** Total ion chromatograph of the QC sample. (A) Positive ion mode and (B) negative ion mode.



**Figure S5** Multivariate statistical analysis of *H. marmoreus* mycelia. (A) PCA in positive ion mode; (B) PCA in negative ion mode; (C) PLS-DA in positive ion mode; (D) PLS-DA in negative ion mode.



**Figure S6** Schematic diagram of the metabolic pathways of carbohydrate and amino acid metabolism in *H. marmoreus* as influenced by the sterile fermentation filtrate of *S. odorifera*.