

## **Supplementary Figures**

**Supplementary Figure S1.** Chao1 rarefaction curves of the 14 samples.

**Supplementary Figure S2.** Observed ASVs rarefaction curves of the 14 samples.

**Supplementary Figure S3.** Shannon rarefaction curves of the 14 samples.

**Supplementary Figure S4.** Simpson rarefaction curves of the 14 samples.

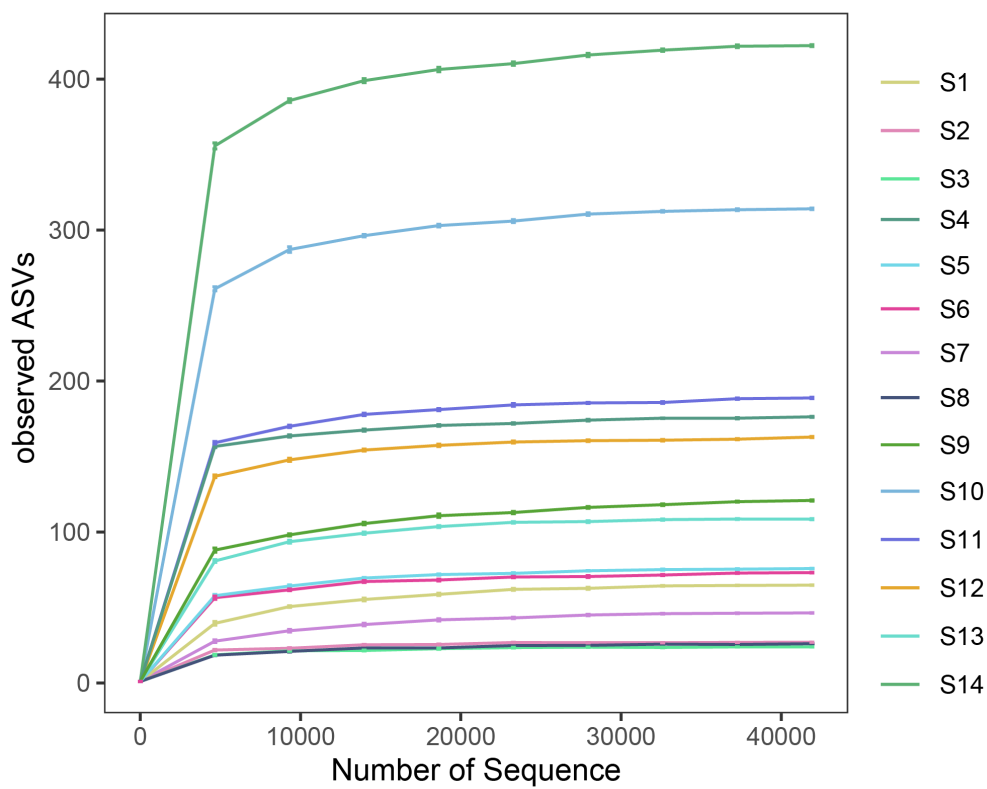
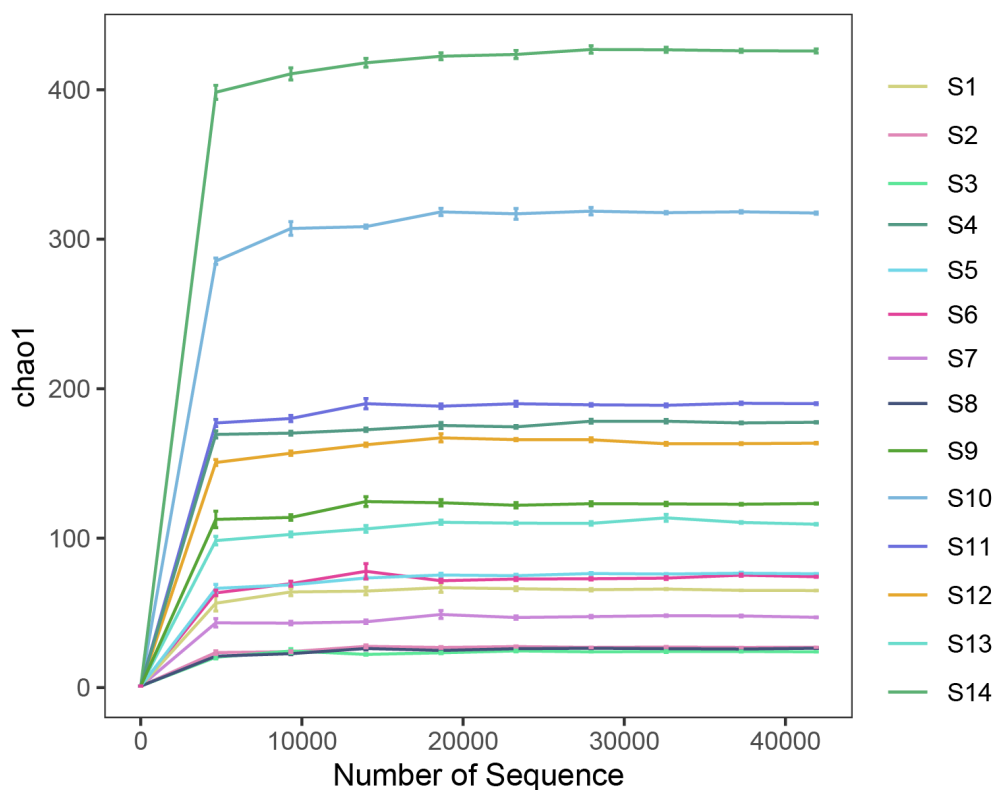
**Supplementary Figure S5.** Goods coverage rarefaction curves of the 14 samples.

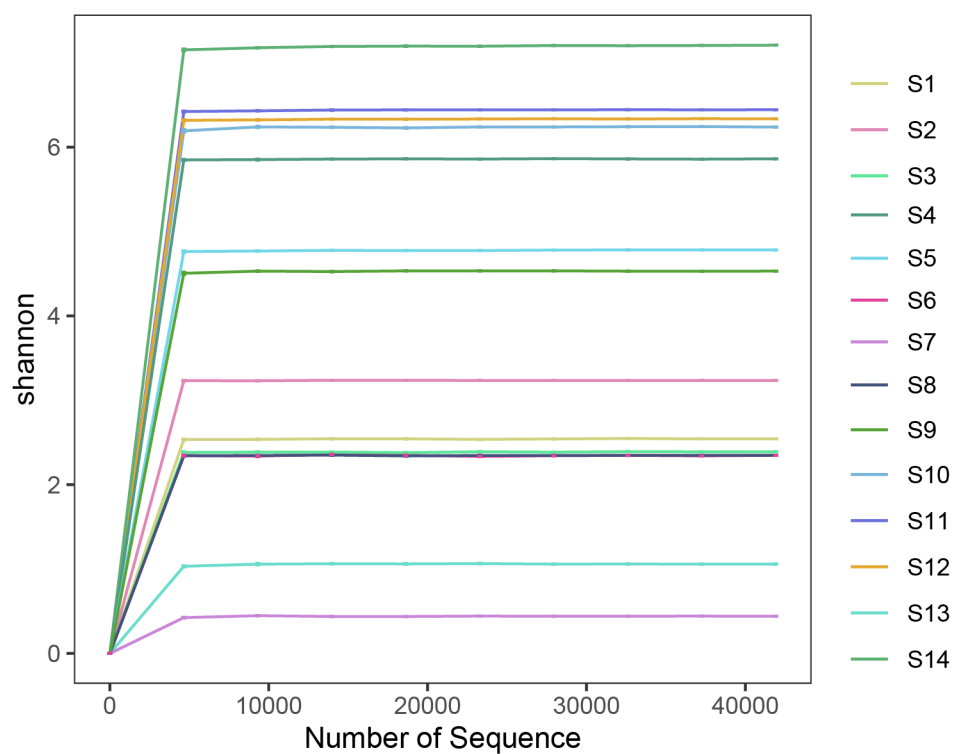
**Supplementary Figure S6.** Species composition and relative abundance of fungal communities in sediments of Zhanjiang Bay, China (Class level).

**Supplementary Figure S7.** Molecular ecological networks of fungal communities in high salinity group sediments of Zhanjiang Bay, China.

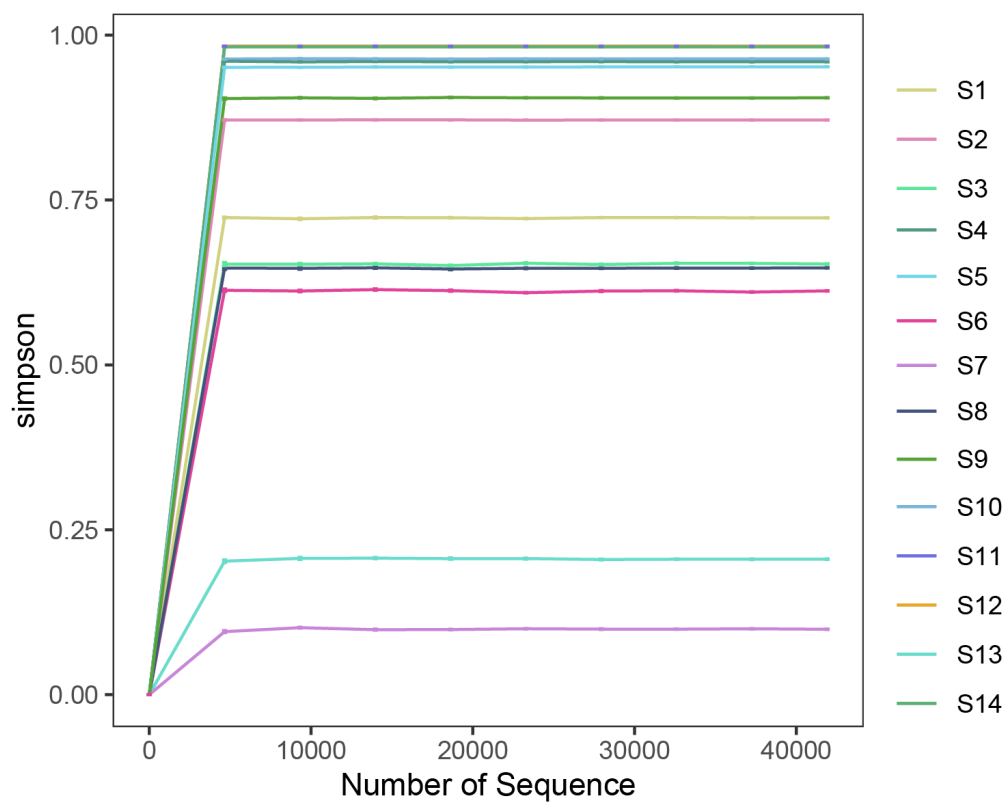
**Supplementary Figure S8.** Molecular ecological networks of fungal communities in low salinity group sediments of Zhanjiang Bay, China

**Supplementary Figure S9.** Molecular ecological networks of fungal communities in medium salinity group sediments of Zhanjiang Bay, China

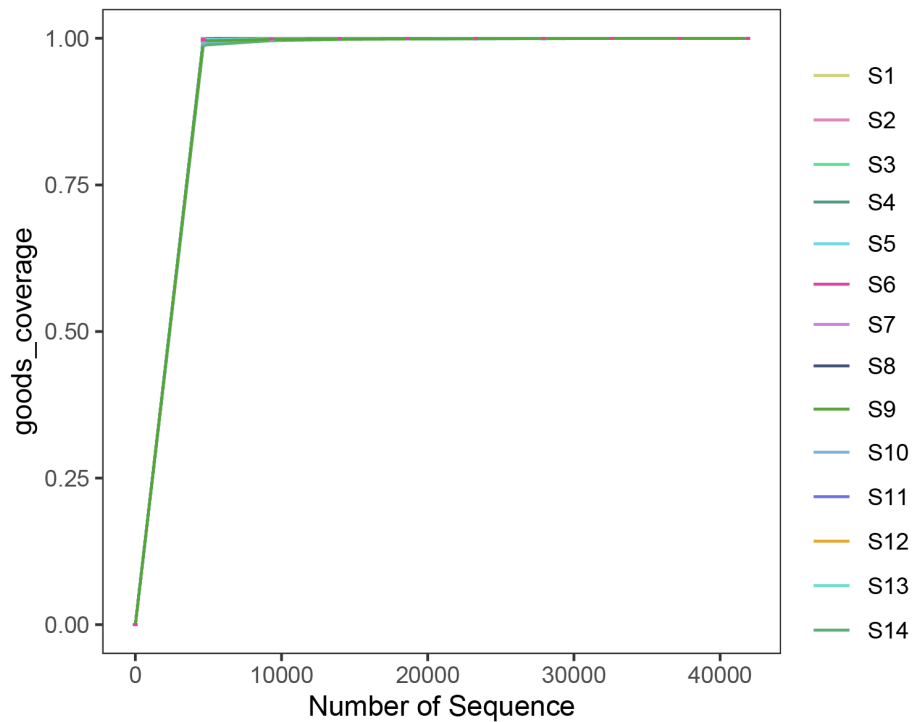




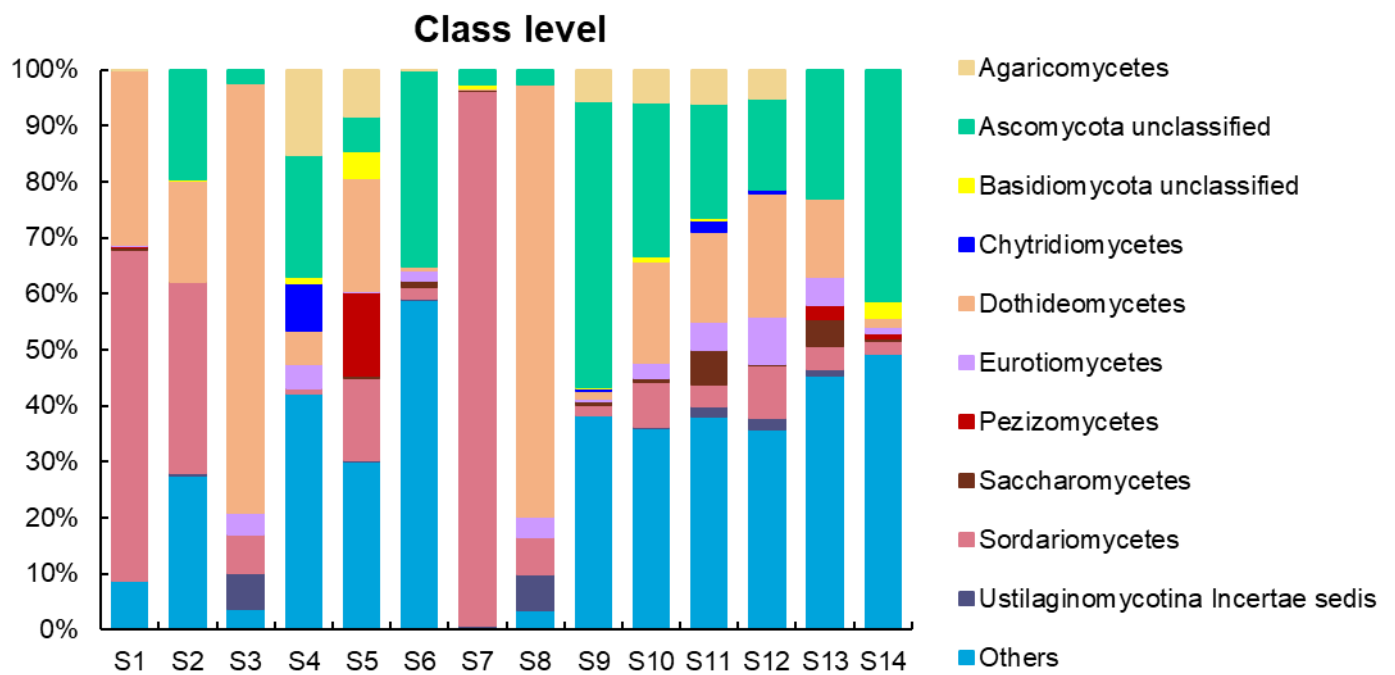
**Supplementary Figure S3. Shannon rarefaction curves of the 14 samples.**



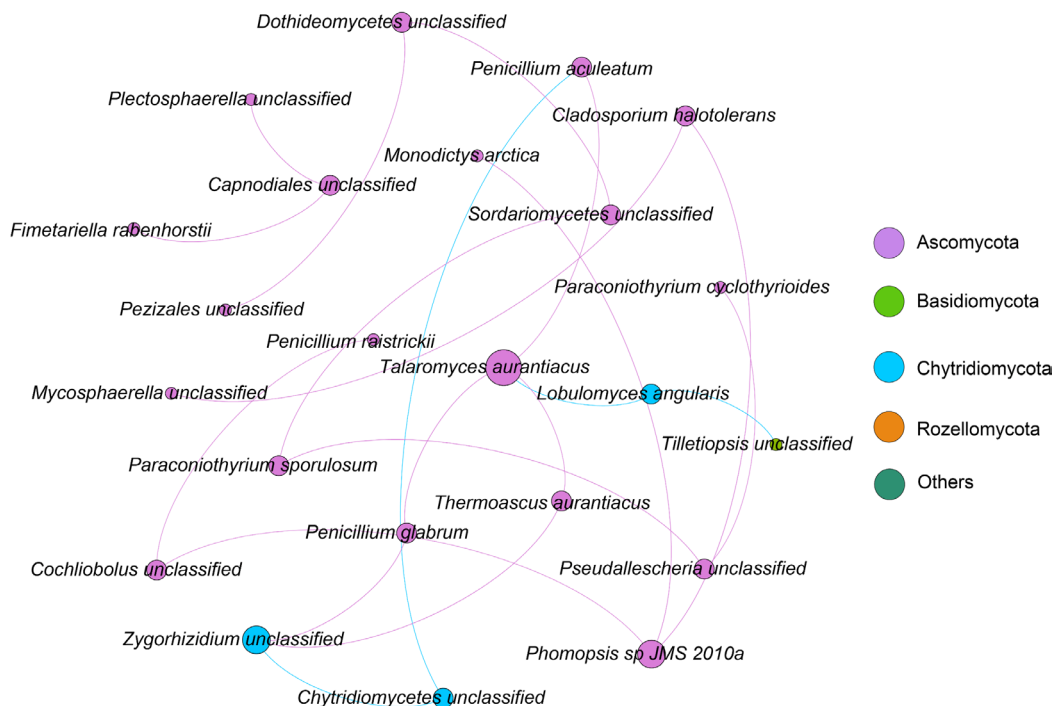
**Supplementary Figure S4. Simpson rarefaction curves of the 14 samples.**



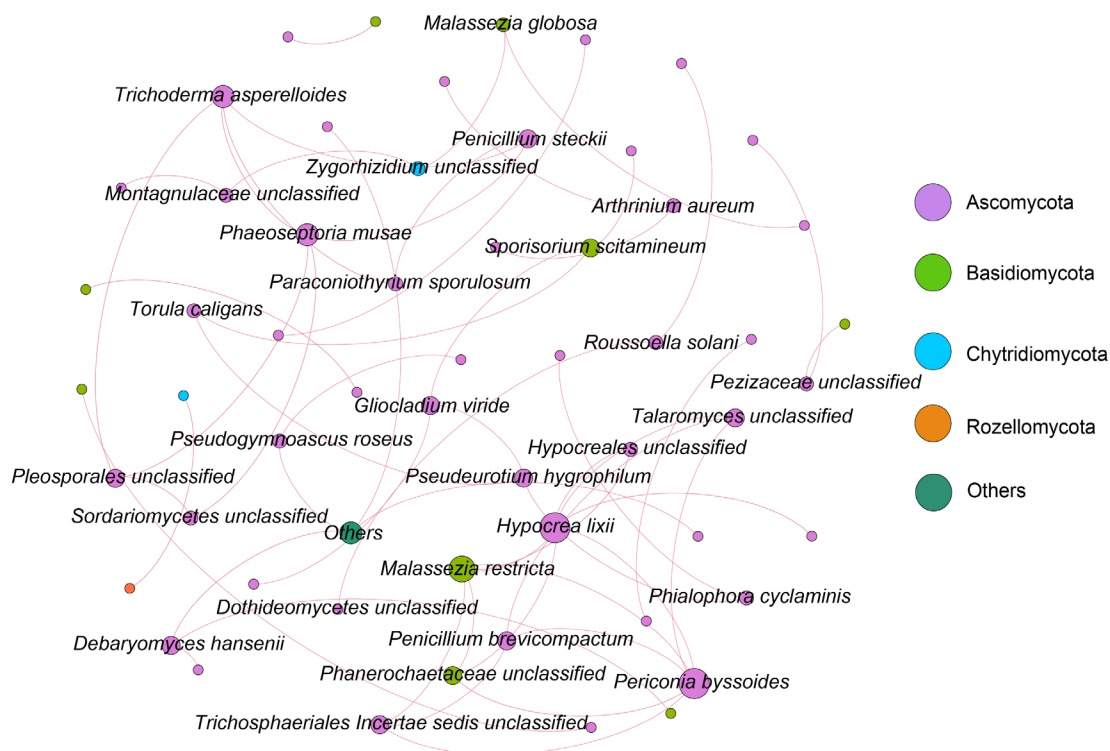
**Supplementary Figure S5. Goods coverage rarefaction curves of the 14 samples.**



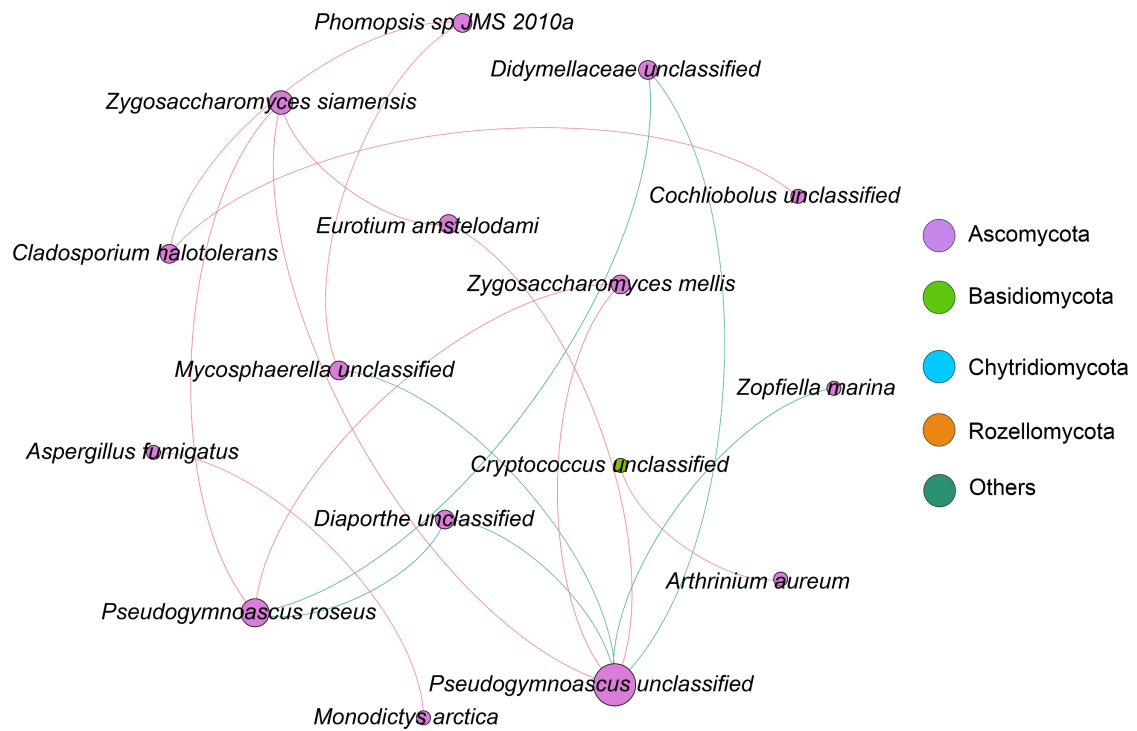
**Supplementary Figure S6. Species composition and relative abundance of fungal communities in sediments of Zhanjiang Bay, China (Class level).**



**Supplementary Figure S7. Molecular ecological networks of fungal communities in high salinity group sediments of Zhanjiang Bay, China.**



**Supplementary Figure S8. Molecular ecological networks of fungal communities in low salinity group sediments of Zhanjiang Bay, China**



**Supplementary Figure S9. Molecular ecological networks of fungal communities in medium salinity group sediments of Zhanjiang Bay, China**