

**Figure S1. Correlations between soil physicochemical factors and** [**genus**](file:///C:\Administrator\AppData\Local\youdao\dict\Application\8.1.2.0\resultui\html\index.html#/javascript:;) **of microbial community.** Main bacterial genera(A); Main fungal genera (B); The letter of \* indicates significant differences at *P* < 0.05 level, the letters of \*\* indicates extremely significant differences at *P* < 0.01 level.

**Table S1. Primers used for quantitative real-time PCR**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Group** | **Prime Sequence (5′→3′)** | **Amplicon size** | **Annealing temp** | **Reference** |
| Total bateria | GTGCCAGCMGCCGCGGTAA (515F)  GGACTACHVGGGTWTCTAAT (806R) | 299 bp | 56 °C | (Carini et al., 2016) |
| Total fungi | GCATCGATGAAGAACGCAGC (ITS3F)  TCCTCCGCTTATTGATATGC (ITS4R) | 400 bp | 54 °C | (Kurzemann et al., 2020) |
| *Plasmodiophora brassicae* | AAACAACGAGTCAGCTTGAATGC (PbF)  TTCGCGCACAAGCACTTG (PbR) | 104 bp | 59 °C | (Wallenhammar et al., 2012) |
| *Streptomyces* | GAGTACATCGAGATGCGCCGCAA (AMgeoF)  GAGAAGAGGTCGTT-GCGCAGGTG (AMgeoR) | 104 bp | 66 °C | (Auffret et al., 2011) |

**References**

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