



**Supplementary Figure S4.** Principal component analysis (PCA) of rhizosphere microbiome communities in healthy and anthracnose-infected. *Epimedium sagittatum* based on metagenomic sequencing. Axes represent principal component 1 (PC1, 62.3% variance) and principal component 2 (PC2, 24.8% variance). DMP, diseased and mature plants; HMP, healthy and mature plants; DS, diseased seedlings; HS, healthy seedlings. Samples are color-coded by health status (blue: healthy; red: diseased), with 95% confidence ellipses highlighting group-specific clustering. Dotted lines delineate intra-group variability, demonstrating significant separation between diseased and healthy microbiomes.