

Supplementary Data 1

Effect of crop diversification on chemical properties in the peanut rhizosphere

Supplementary Data 2

Metabolites significantly enriched or depleted between treatments

Supplementary Data 3

Enrichment of phenylpropanoid and flavonoid biosynthesis pathways of KEGG (PM-R vs PP)

Supplementary Data 4

Functions of enriched genes in phenylpropanoid and flavonoid biosynthesis pathways of KEGG (PM-R vs PP)

Supplementary Data 5

Functional annotation of enriched genes involved in phenylpropanoid and flavonoid biosynthesis pathways based on Gene Ontology (GO)

Supplementary Data 6

Differences in the relative abundances of dominant phyla in the peanut rhizosphere

Supplementary Data 7

Information of enriched ASVs in the peanut rhizosphere of different cropping systems

Supplementary Data 8

Phylogenetic information of selected isolates for microplate inoculation

Supplementary Data 9

Information on four enriched ASVs in the most diverse cropping system and specific bacterial isolates

Supplementary Data 10

Primers for qRT-PCR for peanut symbiotic nodulation genes and phenylpropanoid biosynthesis genes

Supplementary Data 11

Primers for qRT-PCR for Medicago symbiotic nodulation and cytodefense genes

Supplementary Data 12

P values of figure 5b-d