Supplementary material

Car\_vs\_Con\_pca\_pair.png: The PCA pairwise score plot on the Carbaryl and Control samples

Car\_vs\_Con\_pca\_score.csv: The PCA scores table on the Carbaryl and Control samples

Pb\_vs\_Con\_ pca\_pair.png: The PCA pairwise score plot on the Lead and Control samples

Pb\_vs\_Con\_pca\_score.csv: The PCA scores table on the Lead and Control samples

Car\_vs\_Con\_manova\_pvalue.txt: The MANOVA output for Carbaryl VS Control samples

Pb\_vs\_Con\_manova\_pvalue.txt: The MANOVA output for Lead VS Control samples

sPLS-DA folder contains sPLS-DA results:

spls\_cv.png: The error rate for the sPLS-DA model.

spls\_loading.png: The significant metabolites selected by sPLS-DA.

spls\_pair.png: The pairwise score plot.

splsda\_loadings.csv: The loading table.

splsda\_score.csv: The scores table.

WGCNA folder contains WGCNA results and KEGG enrichment analysis results:

The 2 genotype WGCNA analysis was stored in I\_geno and X\_geno folder.

soft-thresholding powers.png: Check the scale-free topology of the network constructed by the WGCNA

geneInfo.csv: The WGCNA results containing the metabolite annotations and metabolite module assignments.

IMPaLA\_results: The KEGG enrichment analysis results.