

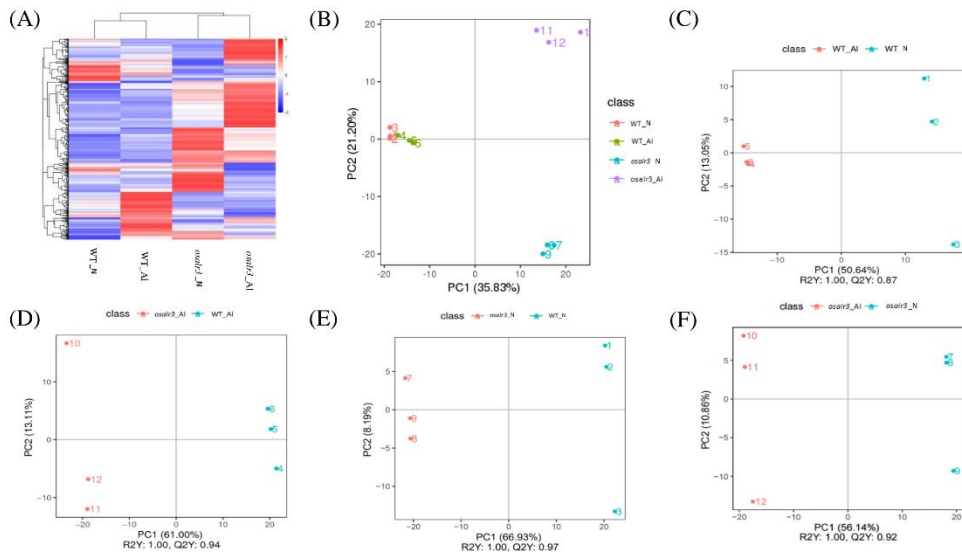


Fig. S3. Overview of the metabolite accumulation under normal conditions and Al stress. (A) HCA of total metabolites in all samples. (B) PCA plots of WT-Al, WT, *osalr3*-Al, *osalr3*-N and QC. (C-F) Score scatter plots of PLS-DA model for WT-Al vs. WT-N, *osalr3*-Al vs. WT-Al, *osalr3*-Al vs. *osalr3*-N, and *osalr3*-N vs. WT-N.