

Figure S1. Statistics of each category of metabolites significantly related to germination rate in *ZS97* and *NIP*. (a) and (c) Statistics of metabolites positively correlated with germination rate in *ZS97* and *NIP*, respectively ($PCC > 0.8$, p value < 0.05). (b) and (d) Statistics of metabolites negatively correlated with germination rate in *ZS97* and *NIP* respectively ($PCC < -0.8$, p value < 0.05). The categories of metabolites were shown in Y-axis. The number of metabolites for each category is shown in X-axis. AAs, amino acids; NAs, nucleotides. *ZS97*, *Zhenshan97*. *NIP*, *Nipponbare*.

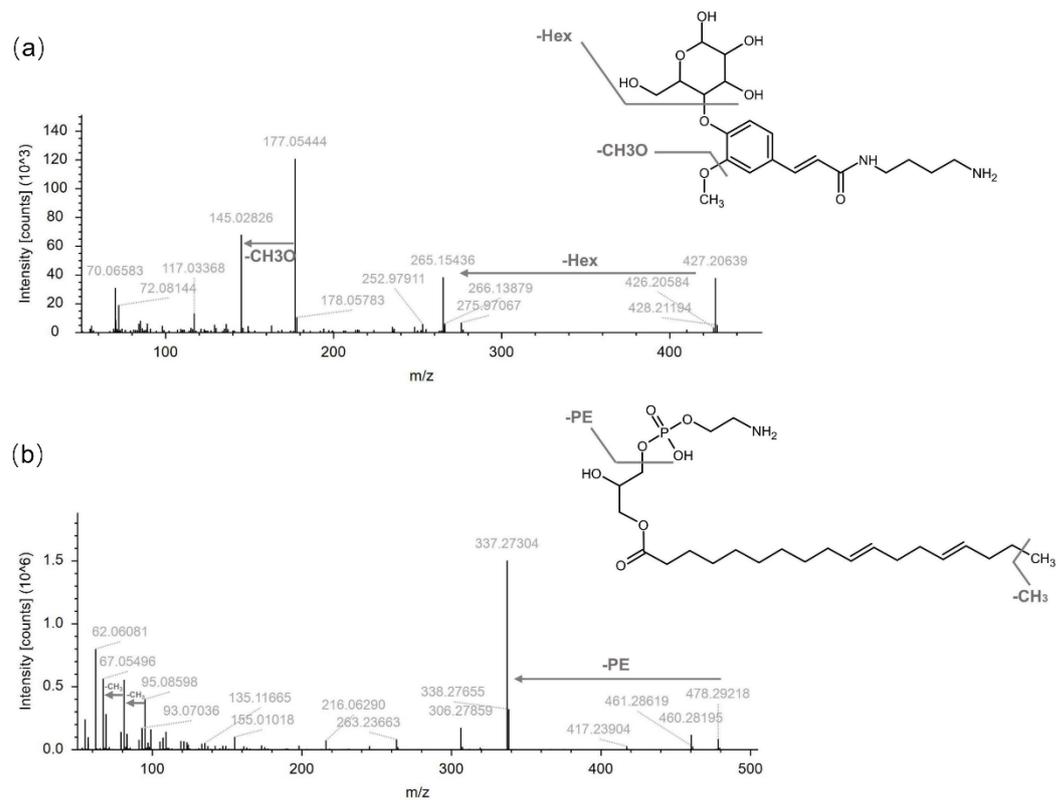


Figure S2. Identification and annotation of metabolites based on high-resolution MS2 data. (a) Feruloylputrescine O-hexoside. (b) LysoPE (18:2). The arrows in the MS2 plots indicate neutral loss of metabolites, and the corresponding positions are marked in the substance structure diagrams.