**Suplementary Figures**



**Supplementary FIGURE 1** Distribution of different traitsincluding:NDG, RDW, SDW, GP, SL, RL, RFW, SFW.



**Supplementary FIGURE 2** Q-Q plots of SNPs on rice genome.The observed and expected -log10 (*p*-values) from the GWAS were plotted for the studied traits including: a) NDG, b) RDW, c(SDW, d) GP, e) SL, f) RL, g) RFW, h) SFW.