

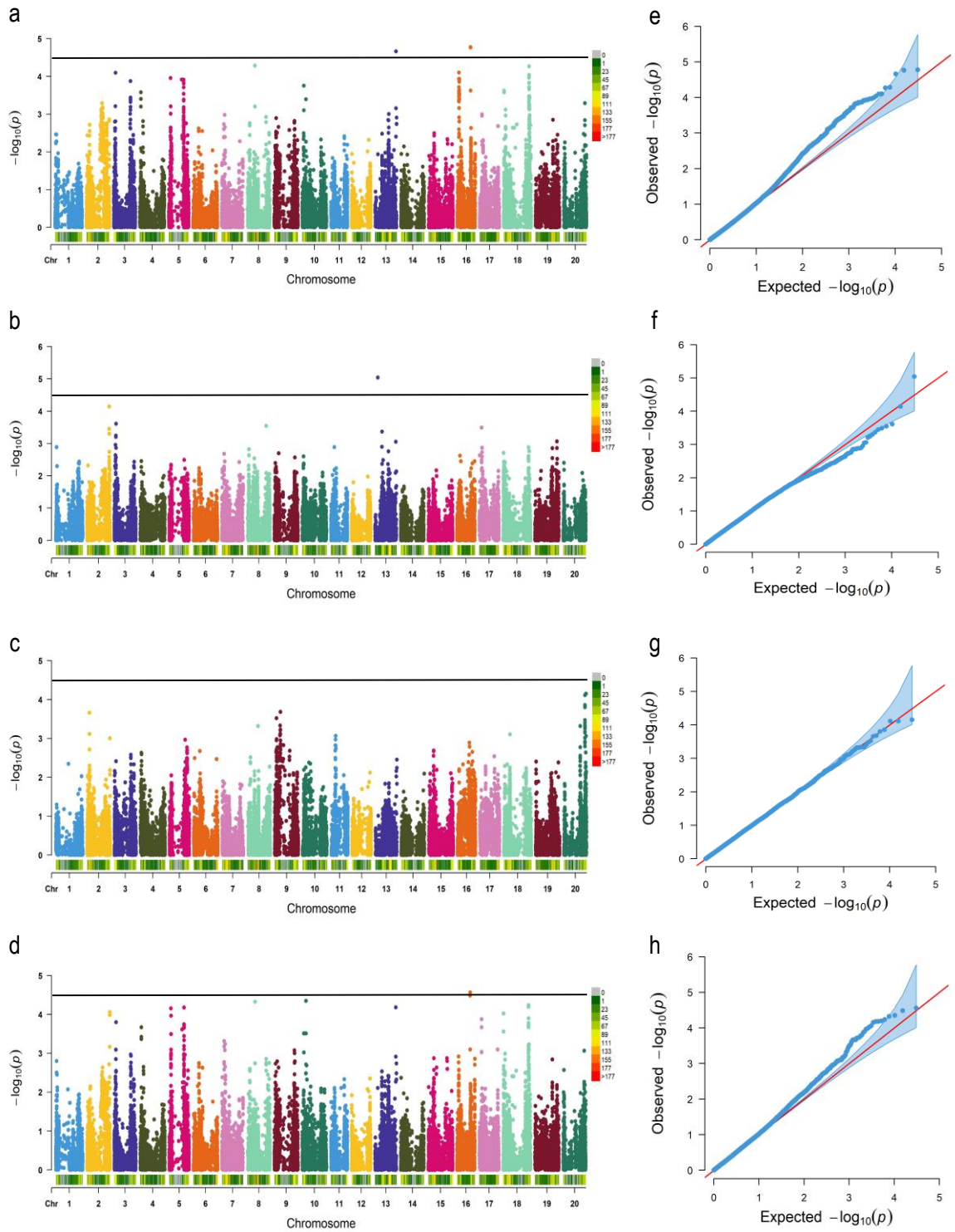


Fig S1 Manhattan plots and Quantile - quantile (QQ) plots for GWAS for GP, GR, MGT and GI at 3°C. (a) Manhattan plot for GP. (b) Manhattan plot for GR. (c) Manhattan plot for MGT. (d) Manhattan plot for GI. (e) QQ plot for GP. (f) QQ plot for GR. (g) QQ plot for MGT. (h) QQ plot for GI. The threshold of 4.49 was adopted with a black line in the Manhattan plots. The X-axis represented chromosome number and Y-axis represented  $-\log_{10}(P)$ .

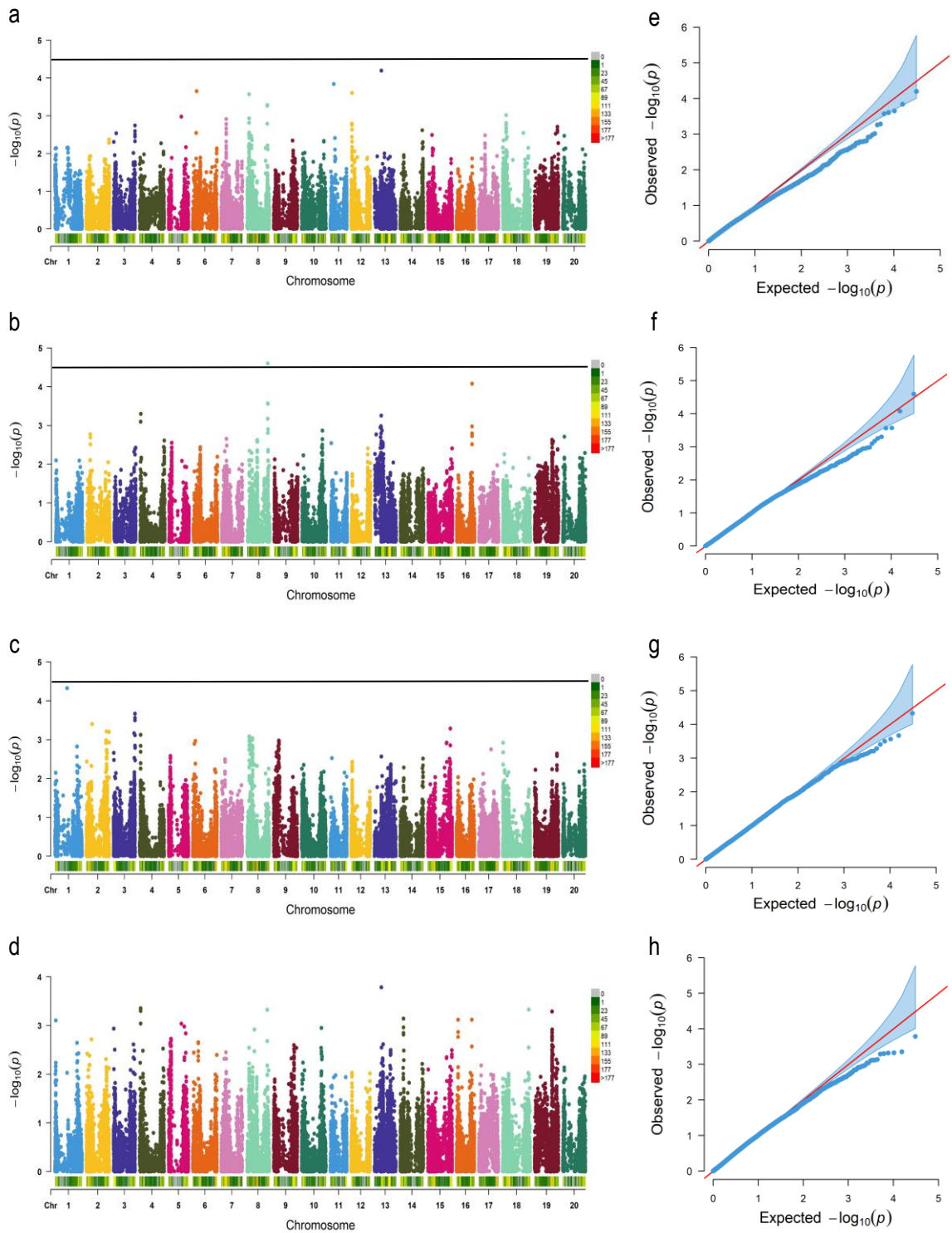


Fig S2 Manhattan plots and Quantile - quantile (QQ) plots for GWAS for GP, GR, MGT and GI at 20°C. (a) Manhattan plot for GP. (b) Manhattan plot for GR. (c) Manhattan plot for MGT. (d) Manhattan plot for GI. (e) QQ plot for GP. (f) QQ plot for GR. (g) QQ plot for MGT. (h) QQ plot for GI. The threshold of 4.49 was adopted with a black line in the Manhattan plots. The X-axis represented chromosome number and Y-axis represented  $-\log_{10}(P)$ .