Additional File 6 (A) DAPC analysis revealed three main genetic clusters where the individuals shown as dots and the groups as inertia ellipses. Eigenvalues of the analysis are displayed inset. (B) Quantile-quantile (QQ) plot of GWA p-values where on x axis, are expected $-\log_{10} P$ values and on y axis observed $-\log_{10} P$ values. The plot is showing large deviation from the null distribution where the inflation factor was higher than the threshold of 1, indicating a high genomic inflation in Beech association data and an existence of the population stratification.



