

**Supplementary Figure 1.** Quantile-Quantile plots of expected vs. observed association scores of 41,114 SNPs for nine qualitative traits. Different colors were attributed to SNPs basing on a classification in three categories depending on the ratio of SNP expected variances in different population strata (Milet et al., 2020), which were defined by DAPC cluster membership. The red line represents equality between the expected and observed quantiles and the grey area the associated 95% confidence interval.

