

Figure S1 Heat map of the elements of the realized relationship matrix estimated according to Habier et al. (2007) for (A) the 413 rice genotypes where individuals are ordered by subpopulations (ADMIX (n = 62), AROMATIC (n = 14), AUS (n = 57), IND (n = 87), TEJ (n = 96), and TRJ (n = 97)), (B) for the 254 wheat genotypes, and (C) for the 199 *Arabidopsis* genotypes.