



Figure S1 Diagram of the development of a double cross population from four inbred lines A, B, C, and D, which are highly homozygous at most loci. Assuming locus 1 and locus 2 were two linked polymorphism markers. A_1 - D_1 were the four alleles at marker locus 1. A_2 - D_2 were the four alleles at marker locus 2. Linkage phases in the two single crosses were known when the four inbred lines were genotyped.