

Figure S6 Linkage disequilibrium (LD) between the two causal SNPs (+646 and +666) in intron 3 and 18 polymorphic sites of *TaPHS1* analyzed in 82 wheat cultivars. The upper part is the gene structure of *TaPHS1*, and the lower part is the LD graph. From left to right, each grid indicates one SNP or InDel of the 84 SNPs or InDels in the order from the 5'-end of *TaPHS1* promoter. Among the 84 sequence variations, only 20 variations that were significantly associated with PHS resistance were labeled on the graph, including two causal SNPs (+646 and +666) in intron 3 and the 18 non-causal polymorphic sites (Figure 5A) associated with sprouting resistance due to their LD to the two causal SNPs.

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