Supplementary Figure 7

Article title:

Multi-locus Genome-wide Association Study of Fusarium Head Blight in relation to Days to Anthesis and Plant Height in a Spring Wheat Association Panel

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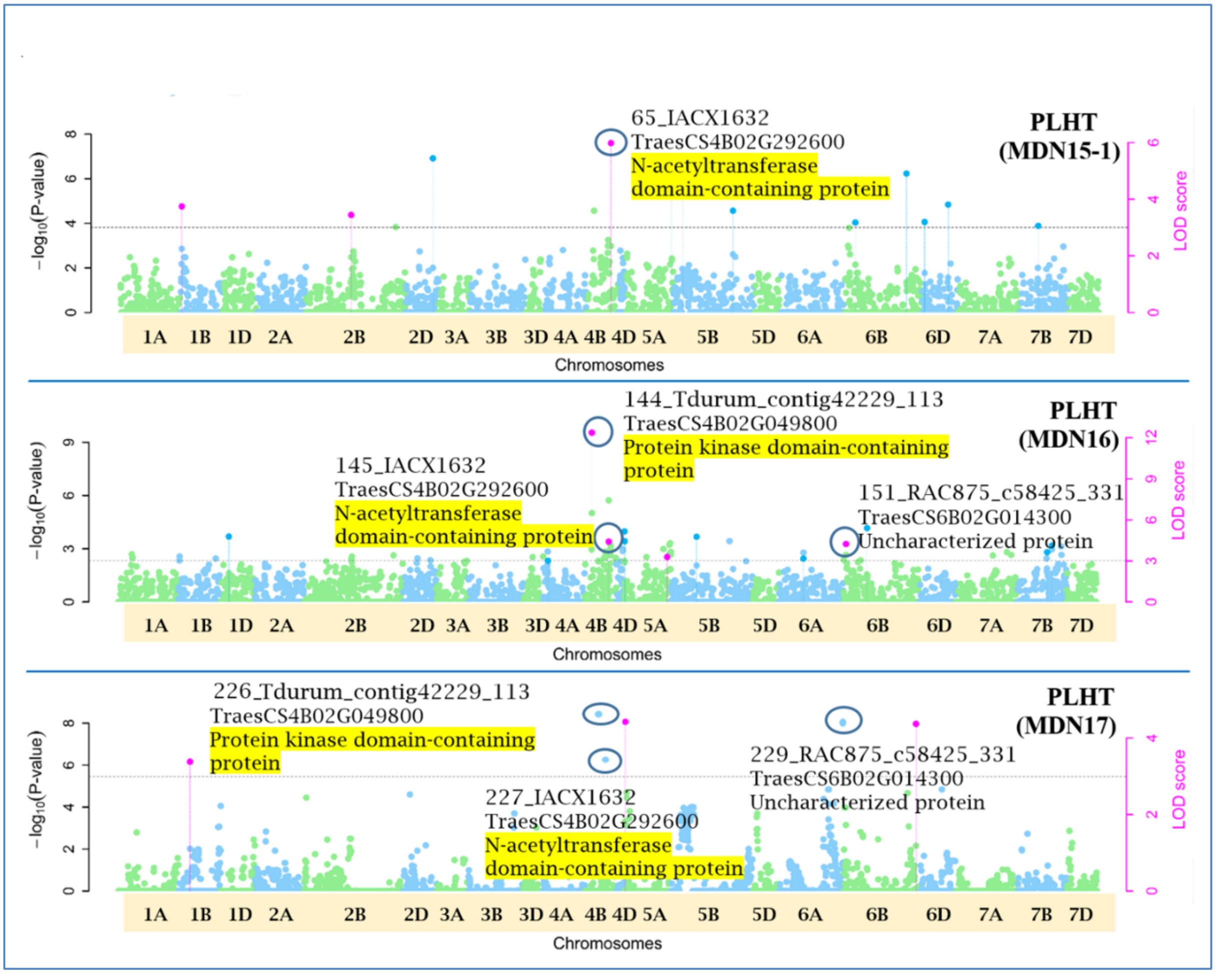

Supplementary Figure 7. Manhattan plots depicting three Quantitative Trait Nucleotides (QTN) for Plant Height (PLHT): two on chromosome 4B, *QTN4B-65-145-227* represented by SNP marker *IACX1632* co-located with an N-acetyltransferase domain-containing protein (*TraesCS4B02G292600*) and *QTN4B-144-226* represented by SNP *Tdurum_contig42229_113* co-located with a Protein kinase domain-containing protein (*TraesCS6B02G014300*); and one *QTN6B-151-229* on chromosome 6B represented by SNP marker *RAC875_c58425_331*, coinciding with an uncharacterized protein (*TraesCS6B02G014300*). The above three PLHT QTN were detected from datasets of MDN15-1 (*top*), MDN16 (*center*) and MDN17 *(bottom)* by the multi-locus random SNP-effect Mixed Linear Model (mrMLM) GWAS method deployed on an association mapping panel of 192 predominantly Canadian bread wheats. The horizontal black dotted line denotes the significance threshold (LOD=3), while pink dots above the threshold line represent QTN detected by more than one of the six multi-locus methods