Supplementary Figure 5

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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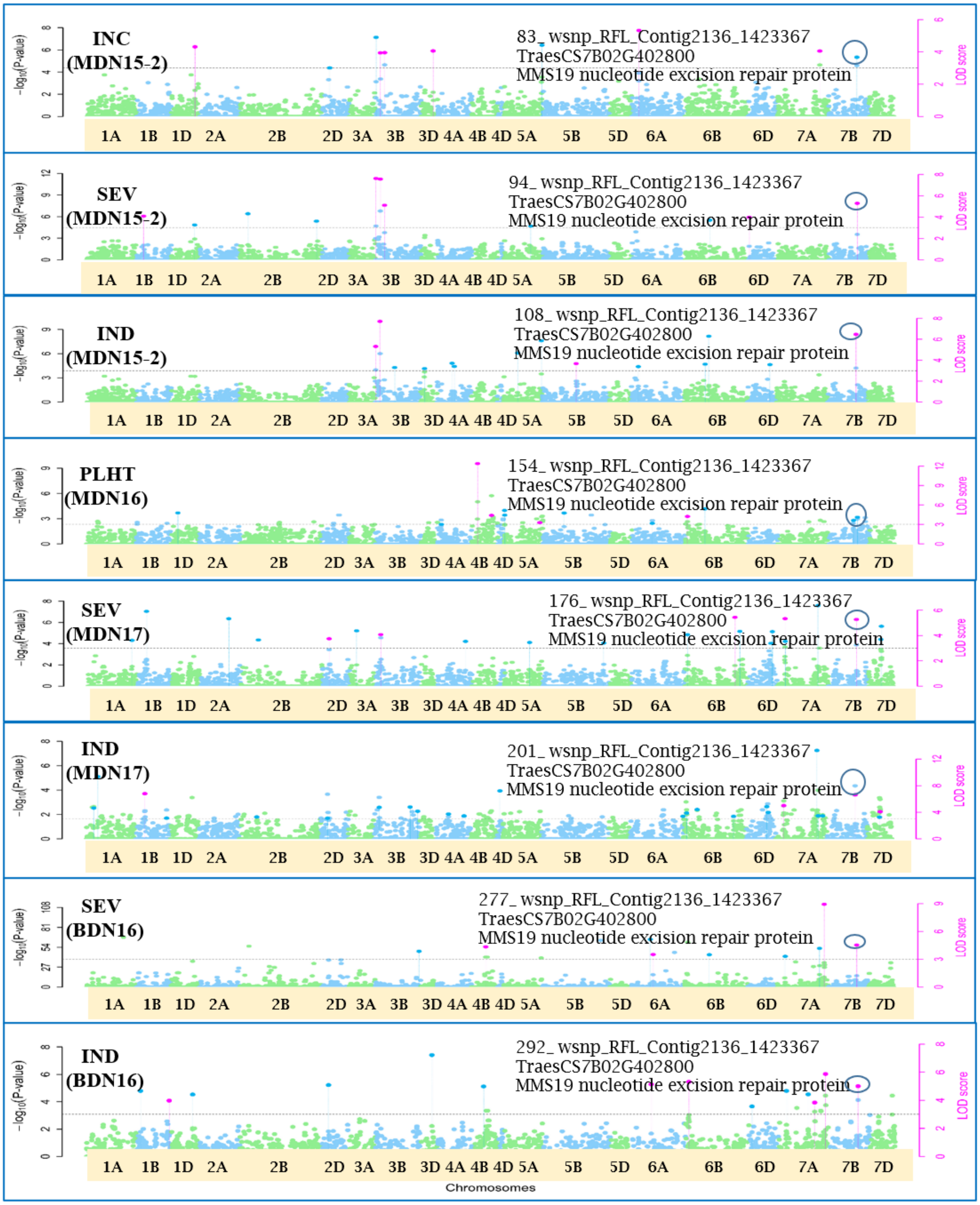

Supplementary Figure 5. Manhattan plots depicting a pleiotropic Quantitative Trait Nucleotide (QTN) *QTN7B_13-45-83-94-108-154-176-201-277-292* for FHB traits and Plant height (PLHT) on chromosome 7B, detected in MDN 2015, 2016, 2017 and BDN 2016 environments by the multi-locus random SNP-effect Mixed Linear Model (mrMLM) method deployed on an association mapping panel of 192 predominantly Canadian bread wheats. The QTN is represented by SNP marker *wsnp_RFL_Contig2136_1423367* which co-locates with an MMS19 nucleotide excision repair protein (*TraesCS7B02G402800*). 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