



**Figure S1** Results of the QTL detection with each model for DMC for **(A)** the dent design and **(B)** the flint design. The  $-\log_{10}(p\text{-values})$  of the connected model are represented by black lines, the QTL positions of the connected models by black dots. The  $-\log_{10}(p\text{-values})$  of the LDLA – 5 cM model are represented by blue lines and the QTL positions by blue diamonds. The  $-\log_{10}(p\text{-values})$  of the LDLA – 2 cM model are represented by red lines and the QTL positions by red crosses. The  $-\log_{10}(p\text{-values})$  of the QTL detected by the LDLA – 1-marker model are represented by green stars. Horizontal lines correspond to the threshold values of the different models.