



Fig. S6 Genotype analysis of the key recombinants by sequencing of the target gene. (A), Schematic diagram of *MN2* coding region in B73. (B), Schematic diagram of *MN2* coding region in *mn2-m1*. Black boxes and lines indicate exons and introns, and numbers above them indicate their length, respectively. Red and blue vertical lines indicate SNPs and InDels in the coding region that cause missense mutations compared to the wild type, respectively. The bold vertical lines with asterisk indicate two SNPs nearby. The dark grey box and light grey boxes indicate heterozygosity (*MN2/mn2-m1*) and homozygosity (*mn2-m1/mn2-m1*) region, respectively. 11-25-2, 11-508-2, 1-4 and 10-110 represent the four key recombinants detected by markers P19 and P20.