

## Description of Additional Supporting Information

File name: Supplementary Data 1.

Description: The haplotype of *RppK* loci in 500 inbred lines of the association mapping panel.

File name: Supplementary Data 2.

Description: The information of 288 landrace accessions.

File name: Supplementary Data 3.

Description: The information of 166 teosinte accessions.

File name: Supplementary Data 4.

Description: The information of 74 hybrids commercially cultivated in China.

File name: Supplementary Data 5.

Description: Primers used in this study.