## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1 Description: Genes expressed in tiller buds across B73 developmental series, gt1 and tb1.

File Name: Supplementary Data 2 Description: Genes expressed in tiller buds across B73 developmental series, gt1 and tb1.

File Name: Supplementary Data 3 Description: Genes differentially expressed in tiller buds across B73 developmental series.

File Name: Supplementary Data 4 Description: Genes differentially expressed in tiller buds between B73 and the two tillering mutants (tb1 and gt1) at 8 and 12 DAP (days after planting).

File Name: Supplementary Data 5 Description: Genes differentially expressed both across B73 developmental series and between B73 and the two tillering mutants (tb1 and gt1).

File Name: Supplementary Data 6 Description: Dynamically expressed genes across B73 developmental series, gt1 and tb1 were grouped by K-Means clustering method in coseq package.

File Name: Supplementary Data 7 Description: Genes differentially expressed between B73 and tb1 at 8 DAP (days after planting).

File Name: Supplementary Data 8 Description: Genes differentially expressed between B73 and tb1 at 12 DAP (days after planting).

File Name: Supplementary Data 9 Description: Genes differentially expressed between B73 and tb1 at both 8 and 12 DAP (days after planting).

File Name: Supplementary Data 10 Description: Genes differentially expressed between B73 and gt1 at 8 DAP (days after planting).

File Name: Supplementary Data 11 Description: Genes differentially expressed between B73 and gt1 at 12 DAP (days after planting).

File Name: Supplementary Data 12 Description: Genes differentially expressed between B73 and gt1 at both 8 and 12 DAP (days after planting).

File Name: Supplementary Data 13 Description: Shared differentially expressed genes between tb1 vs. B73 and gt1 vs. B73 at 8 DAP (days after planting).

File Name: Supplementary Data 14

Description: Shared differentially expressed genes between tb1 vs. B73 and gt1 vs. B73 at 12 DAP (days after planting).

File Name: Supplementary Data 15 Description: Shared differentially expressed genes between tb1 vs. B73 and gt1 vs. B73 at both 8 and 12 DAP (days after planting).

File Name: Supplementary Data 16 Description: TB1 targeted genes by ChIP-seq.

File Name: Supplementary Data 17 Description: Sequence alignment of the TB1 binding region in the tb1, prolificacy locus and tga1 promoter.

File Name: Supplementary Data 18 Description: Genes expressed in tiller buds across B73 developmental series, gt1 and tb1.