

Supplementary_Material

Supplementary Figures

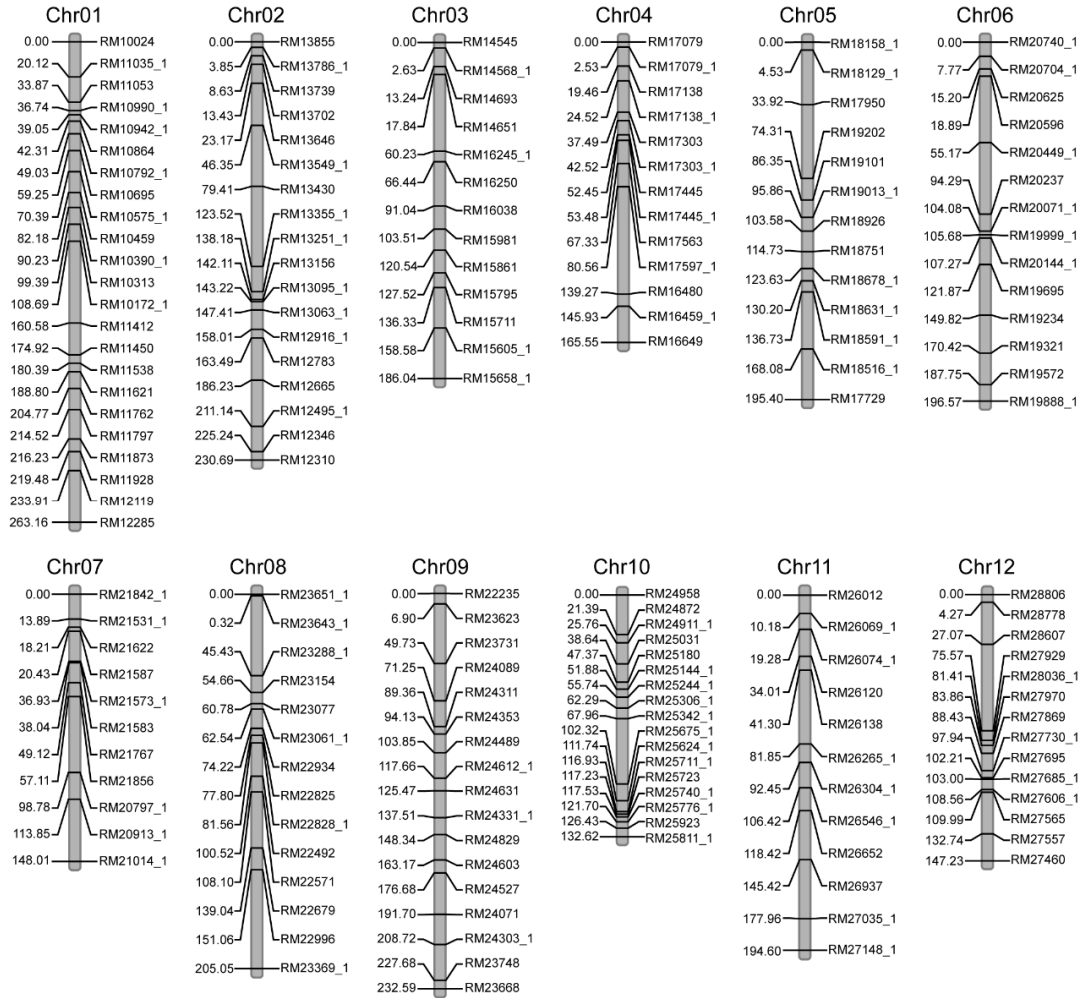


Figure S1. The genetic linkage map constructed by polymorphic SSR markers. SSR indicate simple sequence repeat.

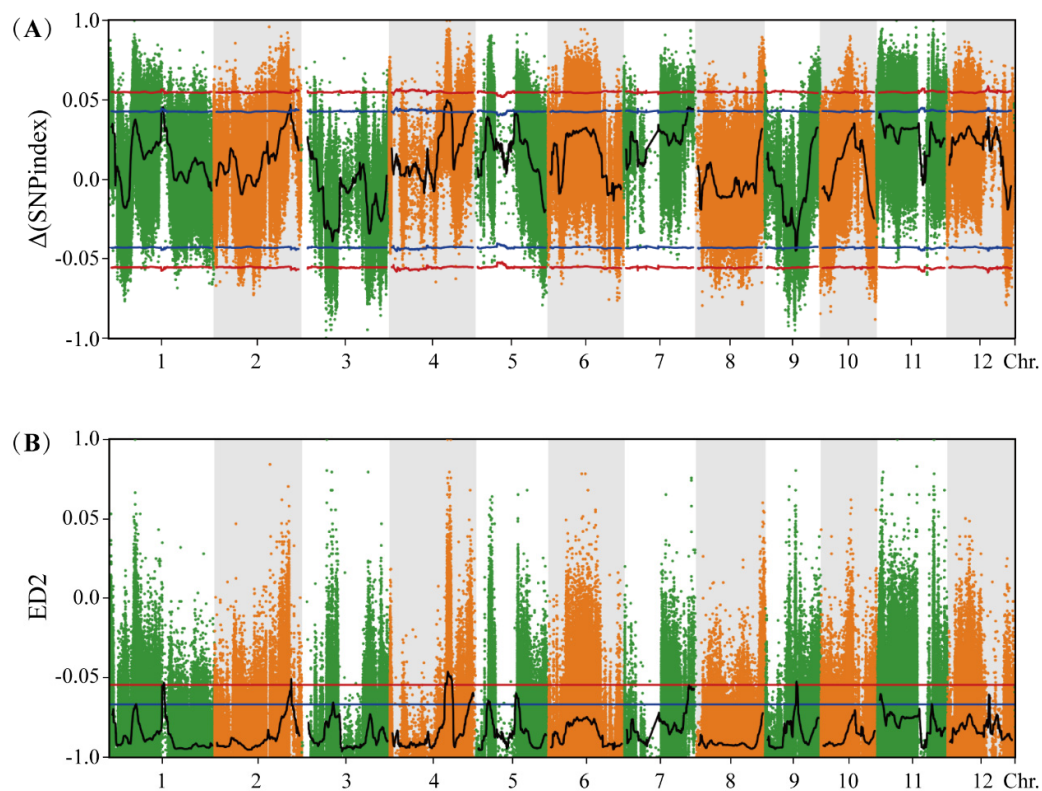


Figure S2. The QTLs determined by SNP-index algorithm and ED algorithm. QTL indicates quantitative trait locus, SNP indicates single-nucleotide polymorphism, ED indicates Euclidean distance.

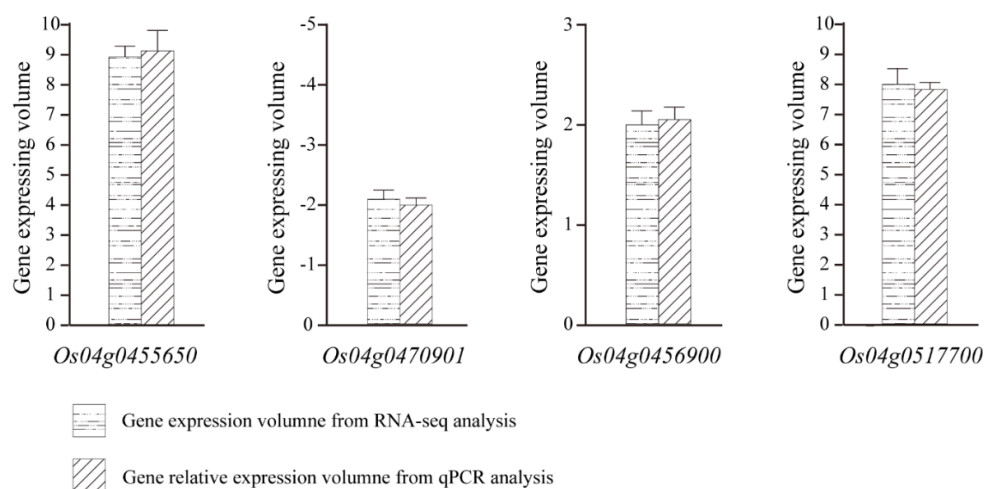


Figure S3. Gene expression pattern verified by qPCR. Four genes were randomly selected, and the gene expression pattern from RNA-seq analysis and qPCR analysis were shown in the same histogram. qPCR was performed according to our previous method (Liao et al., *BMC Genomics* 2015) and ACT1 (GenBank ID: AK100267) was the rice reference gene.

The relative expression level of each gene was calculated using the 2-($\Delta\Delta C_t$) method as our previous method (Liao et al., *BMC Genomics* 2015). Three biological replicates were performed for the qPCR experiment.

Figure S4. The flow chart of the BIL group construction. ♂ indicates male and ♀ indicates female; × and ⊗ indicate crossing and selfing, respectively.

Table S1. Mapping results of RNA sequencing reads from rice tillering nodes.

“SM” and “TM” indicate the mix sample of early-tillering rice lines and late-tillering rice lines; “1”, “2”, “3” and “4” indicate four biological replicates.

Table S2. Differentially expressed genes in the candidate region and their functional annotation.

Gene ID	Location (bp)	Symbol	Functional Description	log ₂ FC(T/S)
<i>Os04g0455650</i>	22795530- 22796751	-	Conserved hypothetical protein	9.06
<i>Os04g0470901</i>	23527103- 23527678	-	Hypothetical gene	-2.03
<i>Os04g0456900</i>	22834019- 22835912	OsEIL6	Ethylene-insensitive 3, putative, expressed	2.04
<i>Os04g0497300</i>	24875271- 24875935	-	ATOZI1, putative, expressed	9.74
<i>Os04g0500600</i>	24982051- 24983036	-	Hypothetical protein	-4.21
<i>Os04g0506800</i>	25307143- 25308493	-	Sialyltransferase family domain containing protein, expressed	2.61
<i>Os04g0507400</i>	25346878- 25348347	-	Transferase family protein, putative, expressed	7.85
<i>Os04g0517700</i>	25884579- 25885741	OsWAK51	OsWAK51 - OsWAK receptor-like protein kinase, expressed	7.98
<i>Os04g0522500</i>	26130711- 26134356	OsGA2ox6	Gibberellin 2-beta-dioxygenase 7, putative, expressed	2.40
<i>Os04g0534600</i>	26720079- 26721025	PEX11-4	Peroxisomal biogenesis factor 11, putative, expressed	2.44