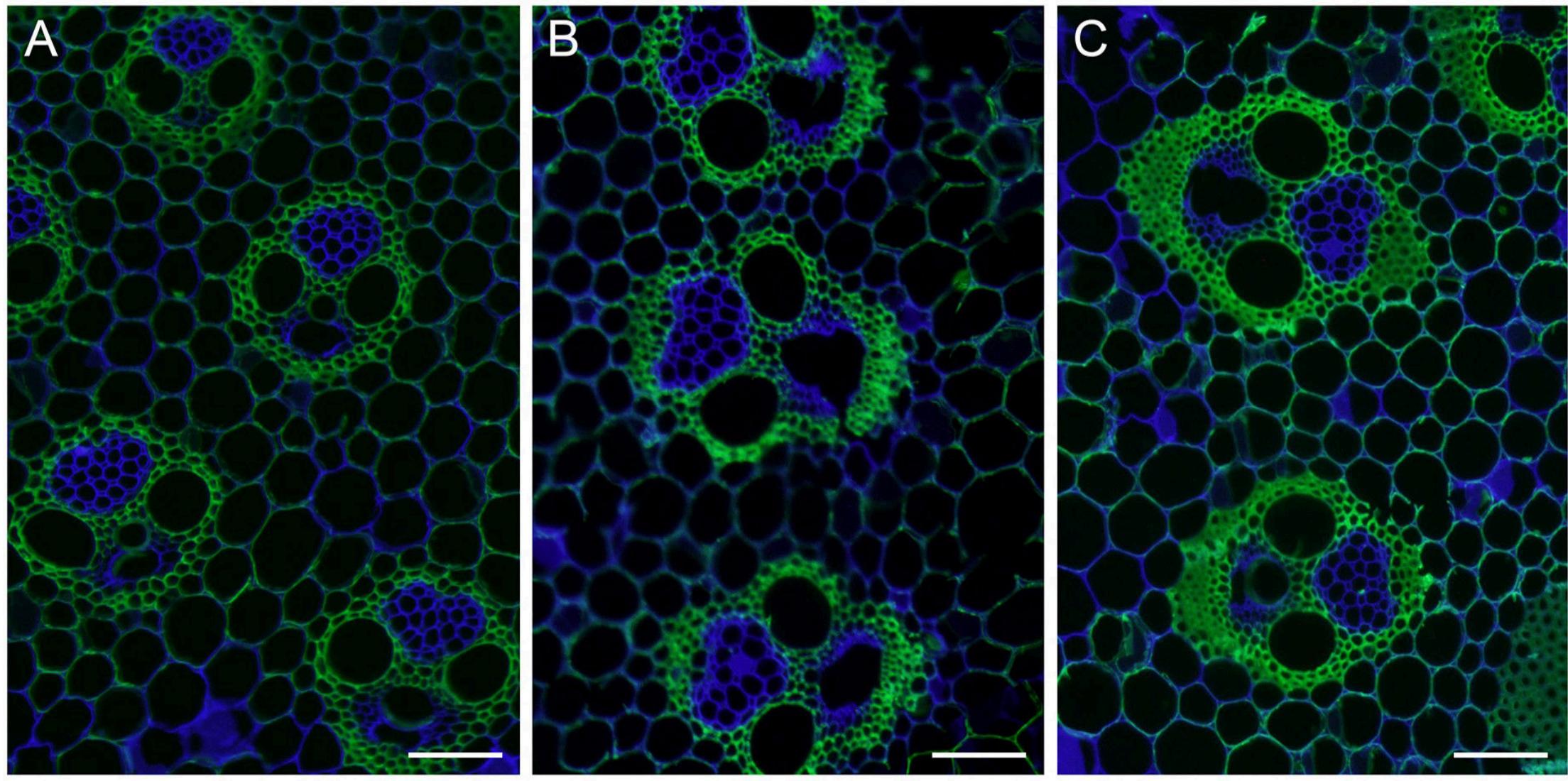


**Transcriptome analysis of genes involved in secondary cell wall  
biosynthesis in developing internodes of *Miscanthus lutarioriparius***

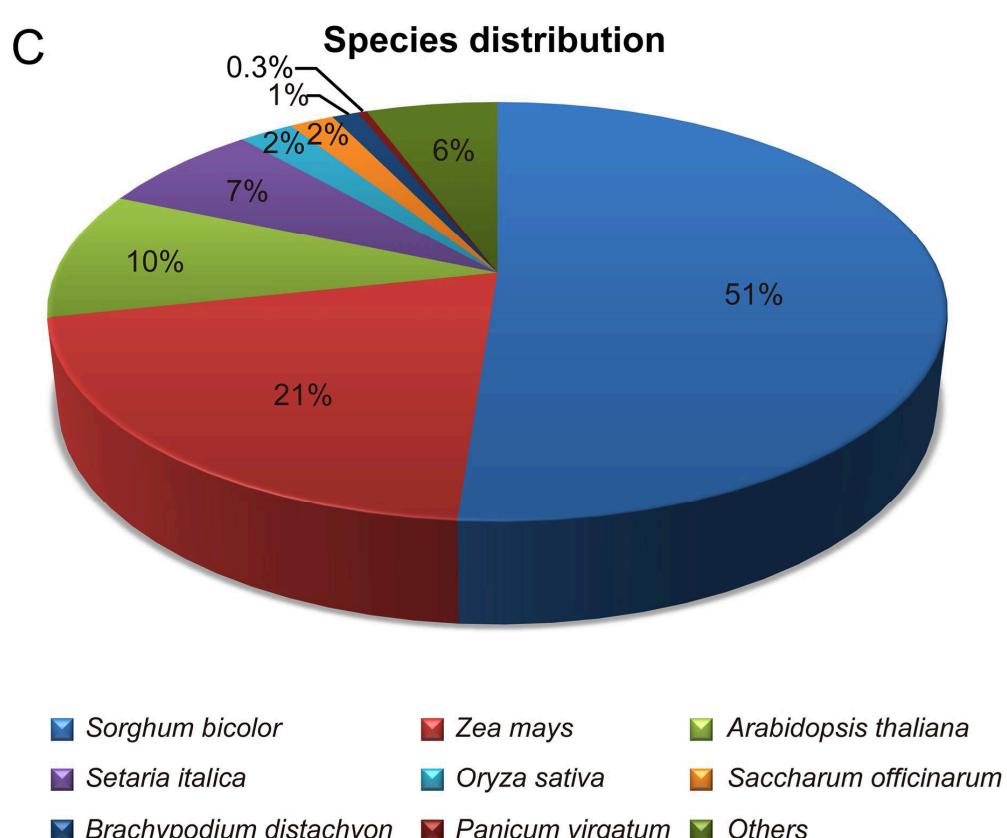
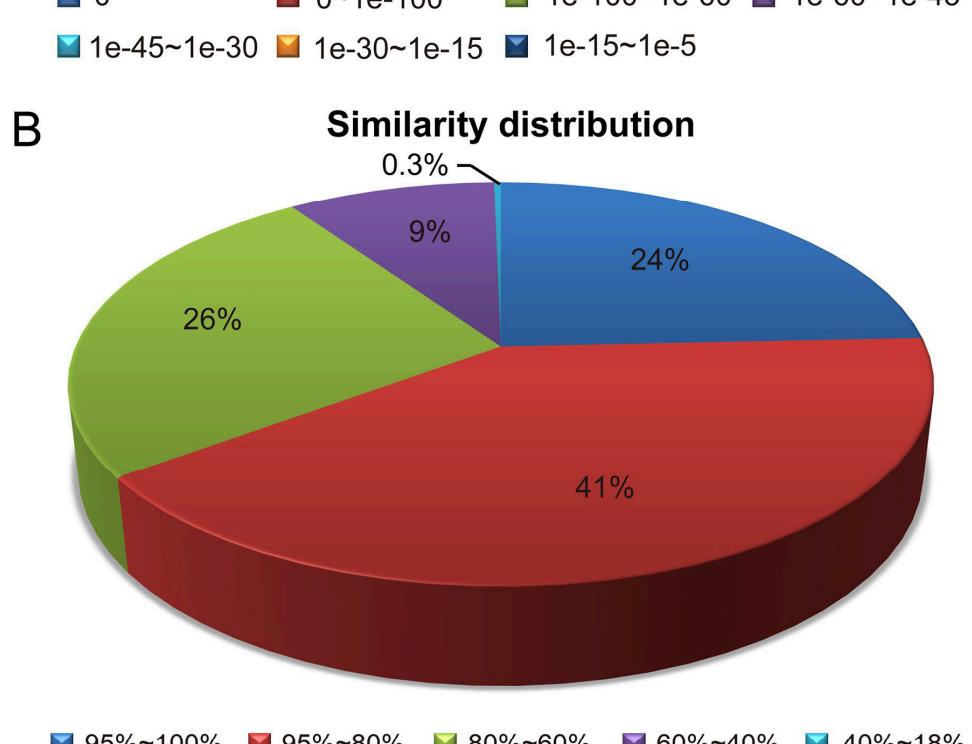
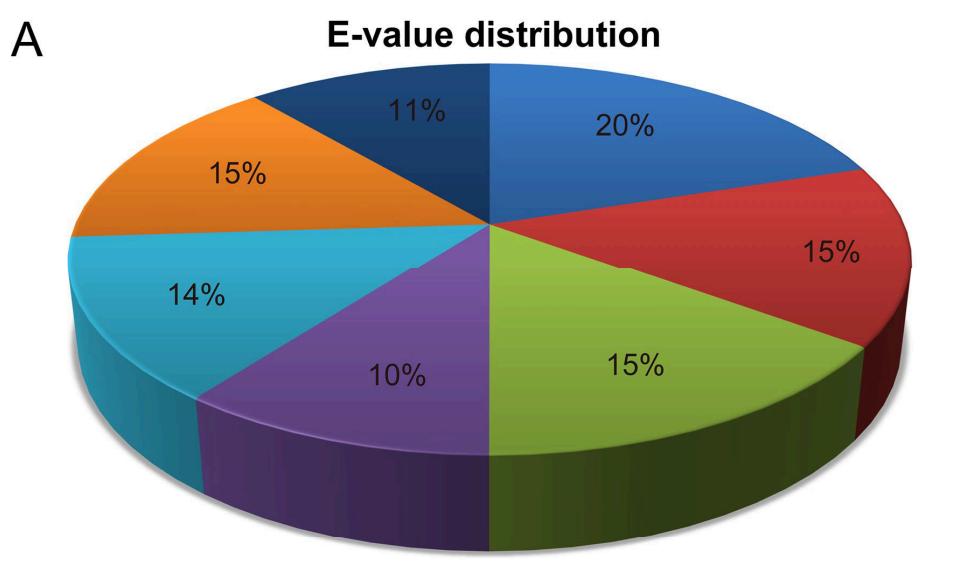
Ruibo Hu, Yan Xu, Changjiang Yu, Kang He, Qi Tang, Chunlin Jia, Guo He, Xiaoyu Wang, Yingzhen Kong, Gongke Zhou

**Supplementary material**

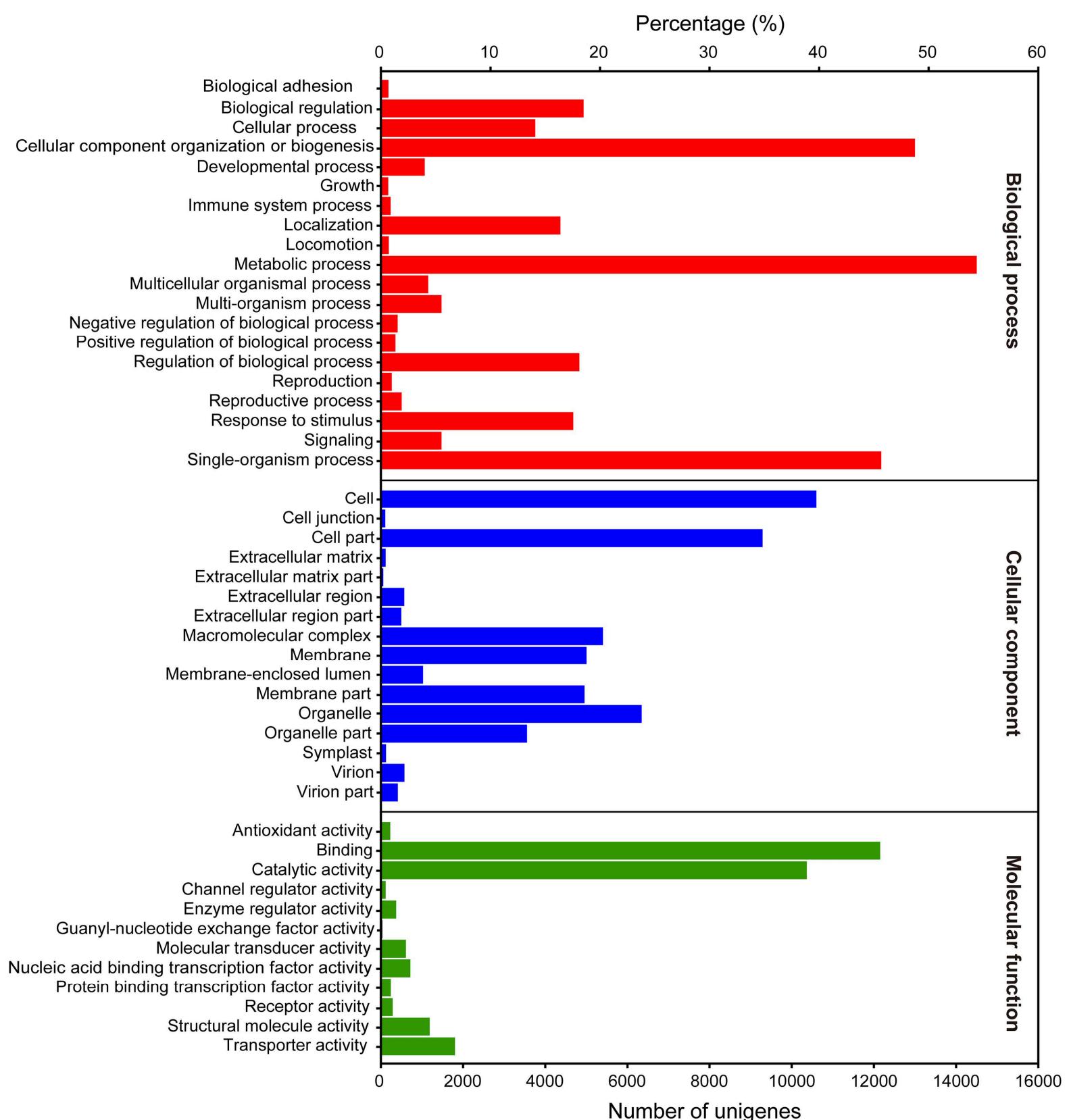


**Supplemental Fig. 1.** Immuno-detection of (arabino)xyran epitopes in *M. lutarioriparius* internode.

The sections were immunolabeled with LM10 monoclonal antibody and counterstained with Calcofluor. A, upper internode (UI), B, middle internode (MI), C, basal internode (BI). Bar=100  $\mu$ m.

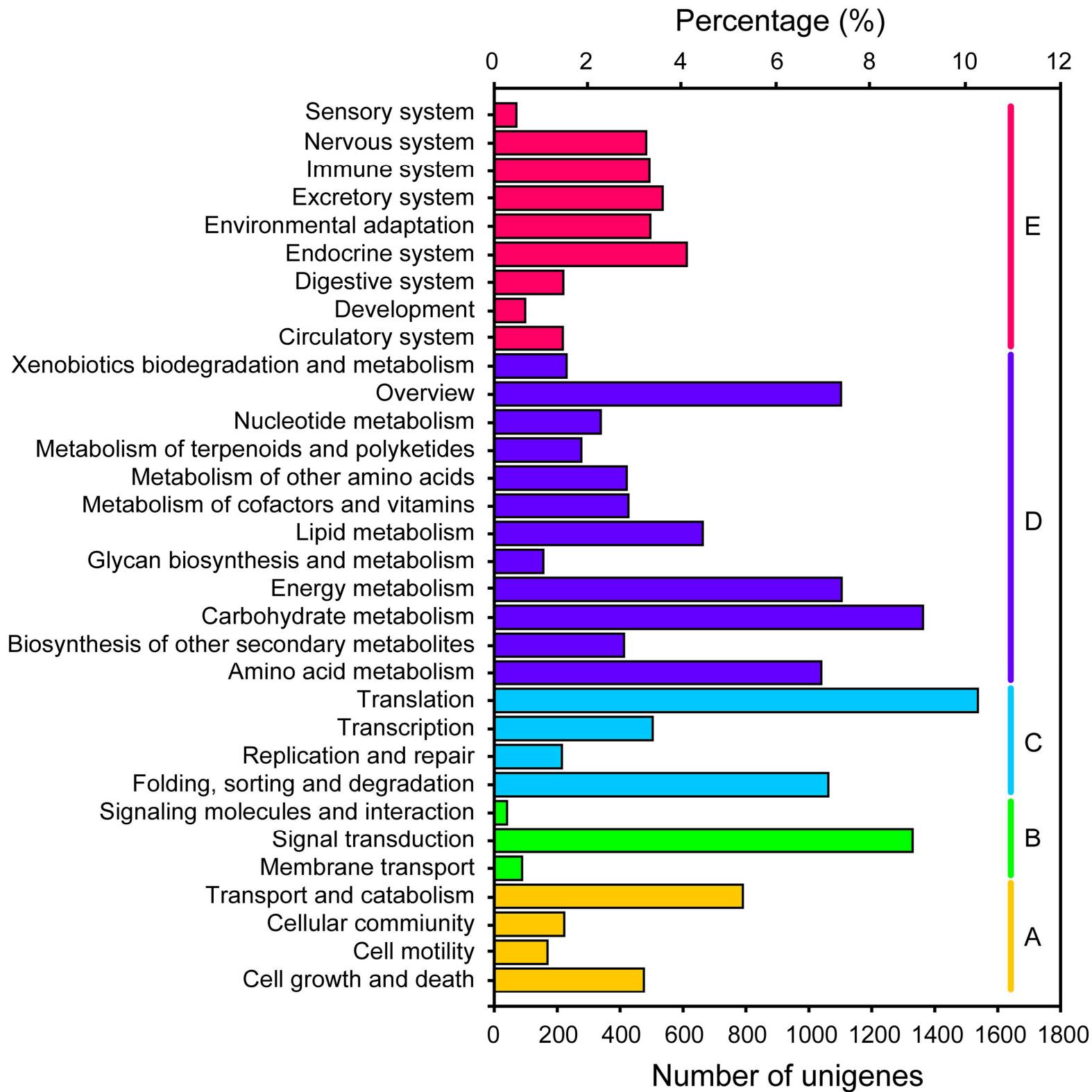


**Supplemental Fig. 2.** Functional annotation of the transcriptome data.

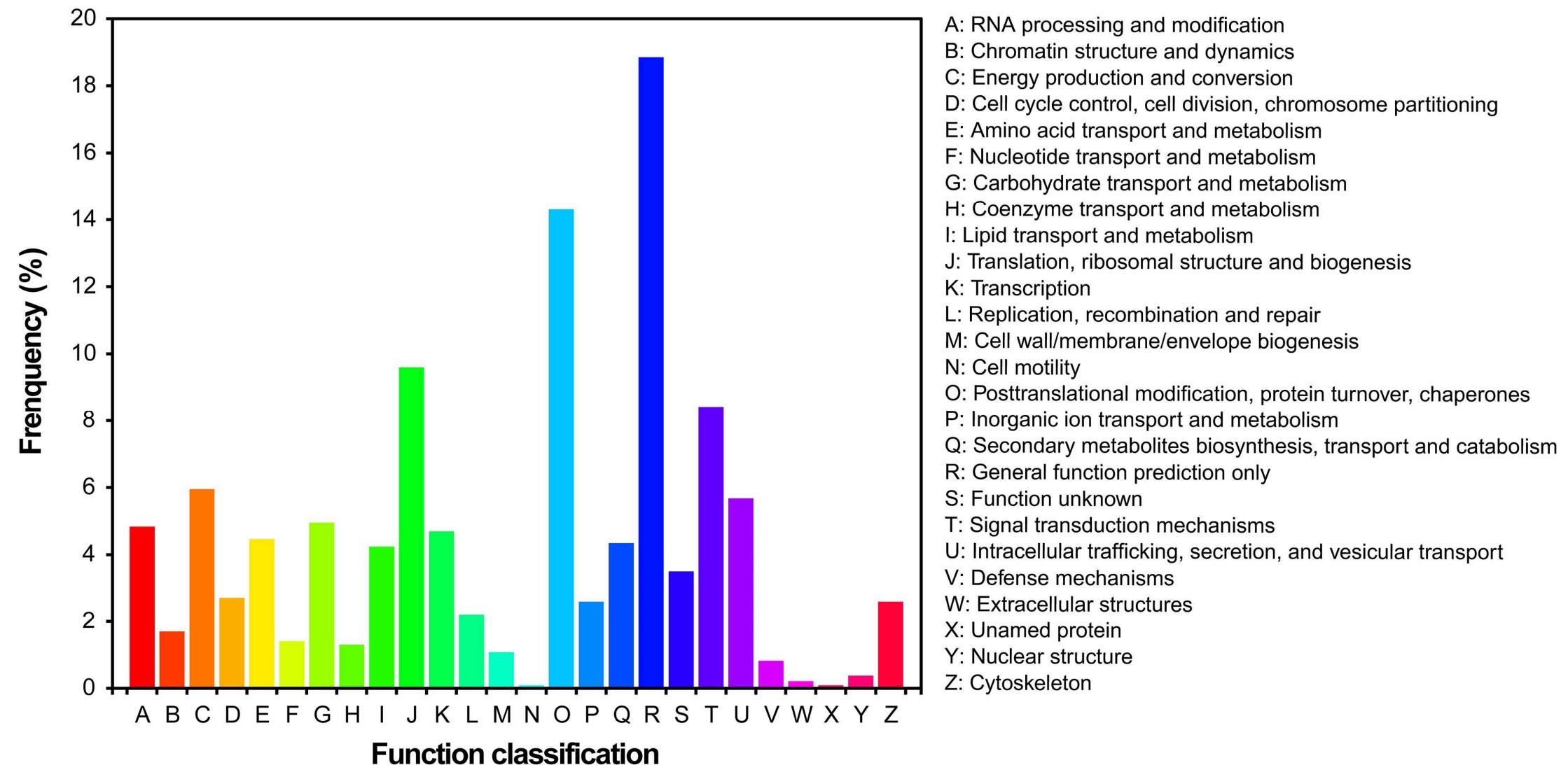


**Supplemental Fig. 3.** Histogram presentation of GO classification.

Bars represent the numbers and percentages of unigenes matched to GO terms of three categories.

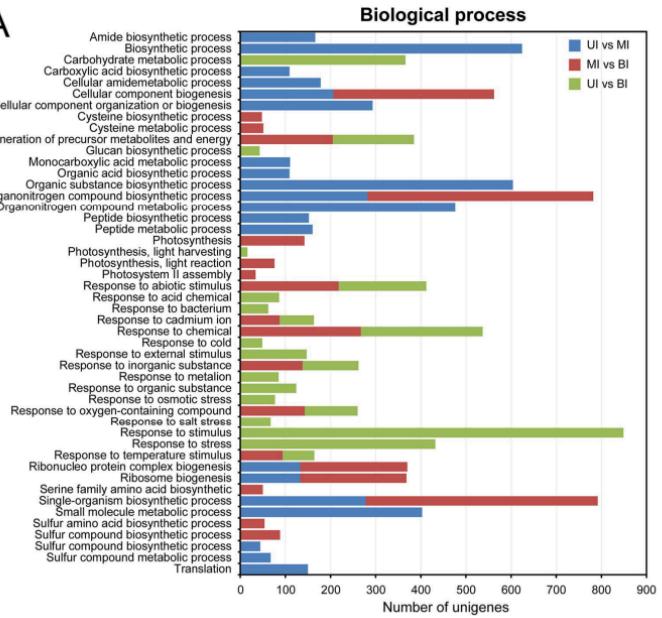


**Supplemental Fig. 4.** Classification of unigenes in KEGG pathways.

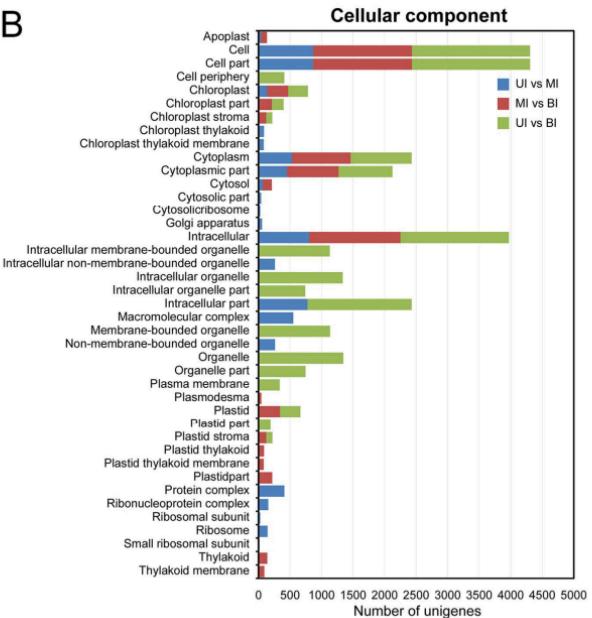


**Supplemental Fig. 5.** KOG classification of unigenes

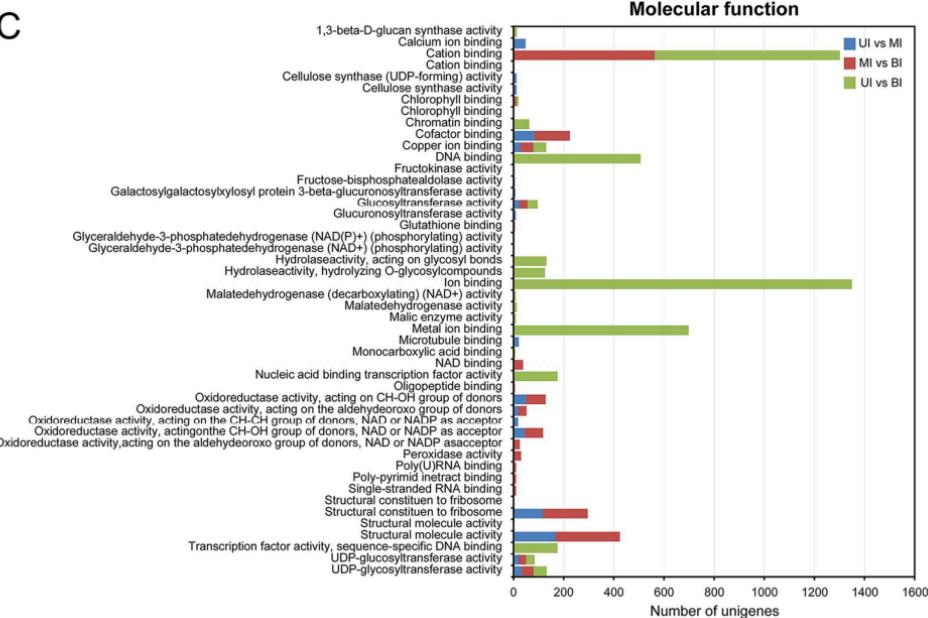
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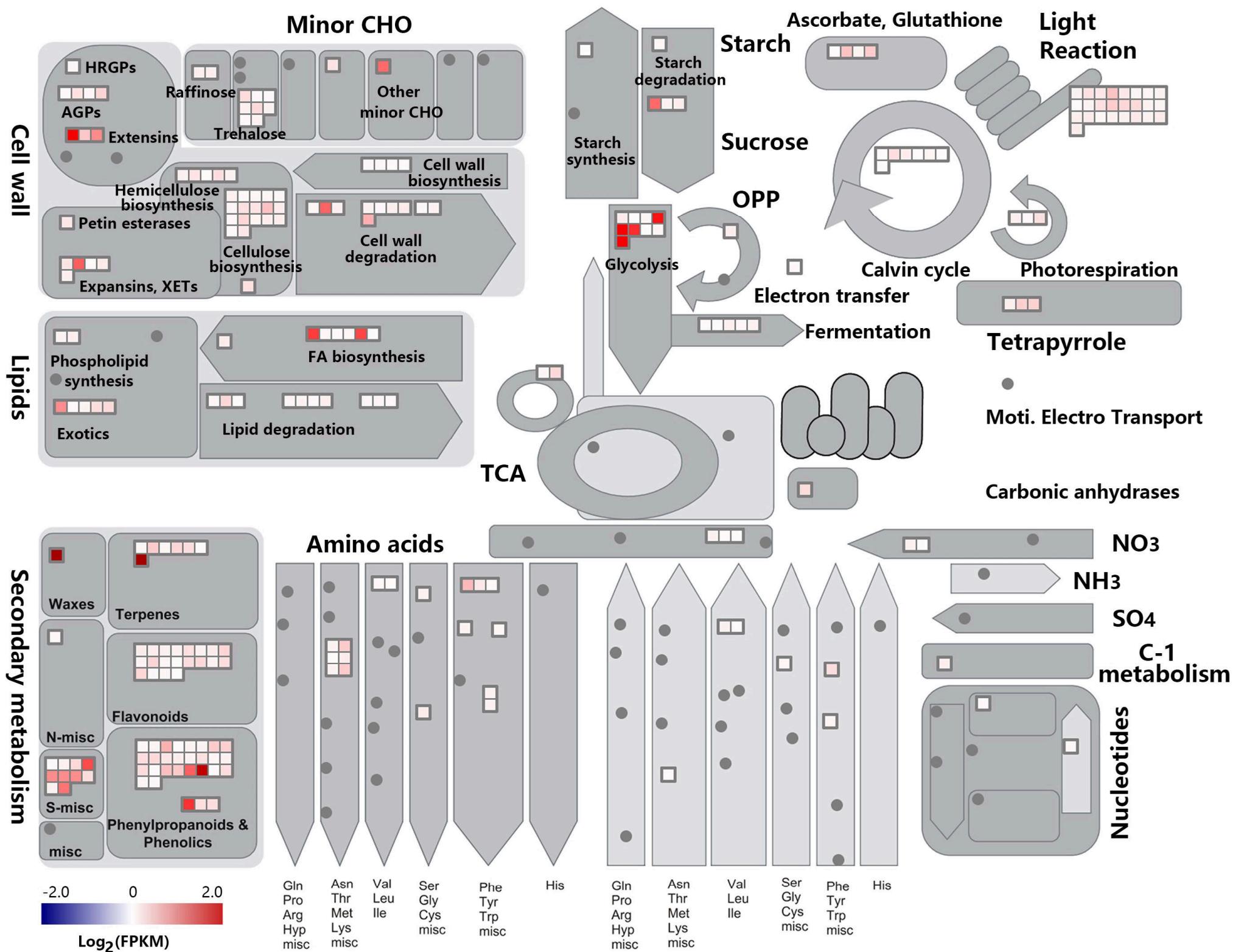
B



C

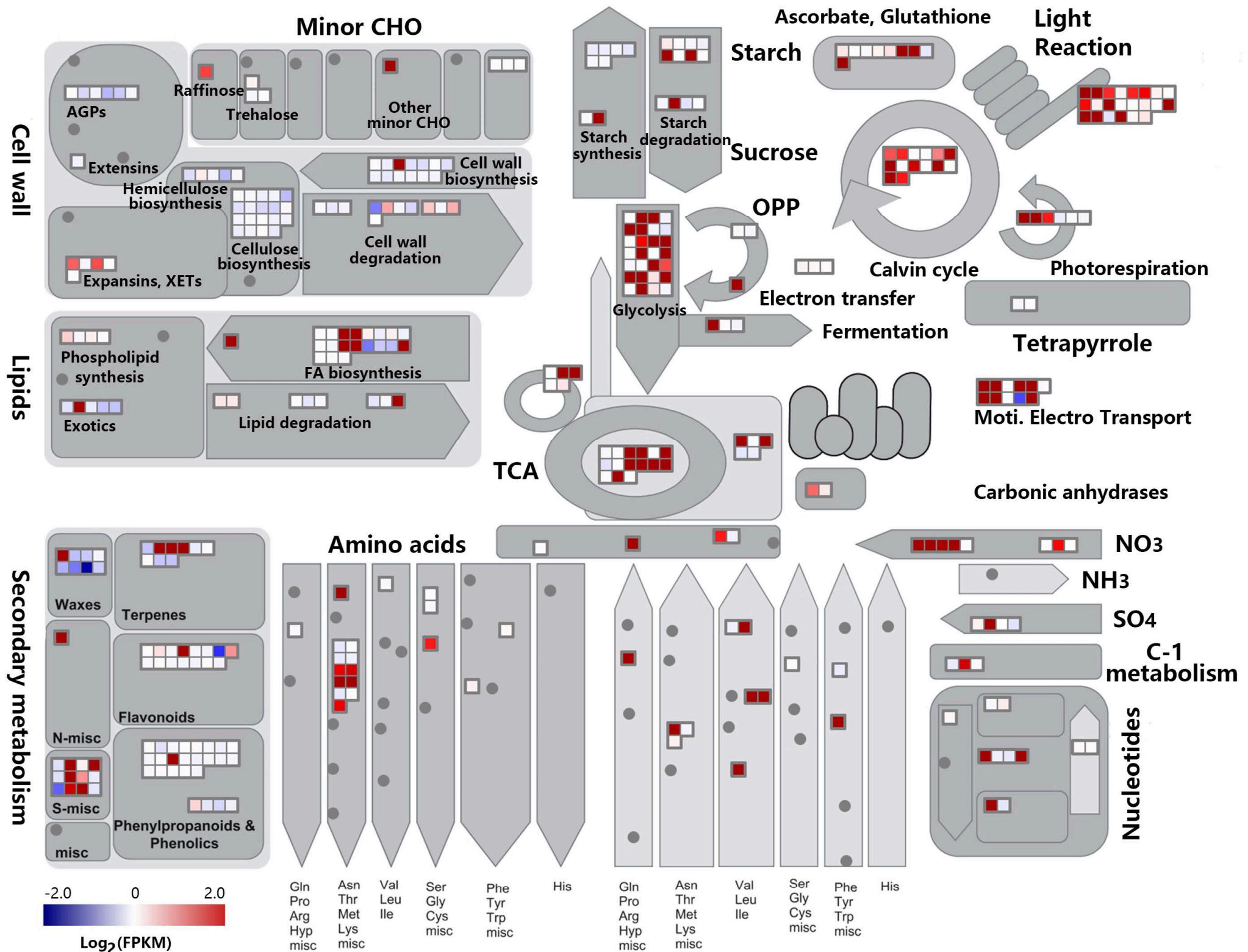


**Supplemental Fig. 6.** GO enrichment of differential expressed genes among three internode segments.



**Supplemental Fig. 7.** A schematic overview of transcriptional changes in the basal internode compared to the upper internode.

DEGs are represented by colored squares. The fold change is indicated by the scale bar. Red indicates up-regulation, whilst blue indicates down-regulation.



**Supplemental Fig. 8.** A schematic overview of transcriptional changes in the basal internode compared to the middle internode.

DEGs are represented by colored squares. The fold change is indicated by the scale bar. Up-regulated genes are shown in red, whilst down-regulated genes are in blue.

**Table S1.** Primer sequences for qRT-PCR analysis.

Gene_ID	Forward primer (5'-3')	Reverse primer (5'-3')
<i>c57730_g1</i>	ATTATTCTCCCTGCCATT	TGAGACAACGACATTACAT
<i>c59729_g1</i>	ATCTCGTTCTCACTAATCTC	TGTTGTCTCGTAAGTTGAT
<i>c59835_g2</i>	ATGCTGTGCTATATGGTTAT	CCTTGCTGGAGTTATTCA
<i>c66537_g2</i>	ACATTCACCAACAAAGTTCA	TACTGCTGCTGTCTACTA
<i>c66866_g1</i>	CATTAGCCACTGACTGAA	TACTTGTGCCTATCTCTG
<i>c67932_g1</i>	CACAACAACATTCACATCA	CAAGAGCAGAGAACAA
<i>c72147_g2</i>	GCTTCATCTAATTACCATAG	TAGTGTATGTGAGGAAGAATA
<i>c72684_g3</i>	TACGGTTGGAAAGTTCTC	AACACTCTTCTGATGACA
<i>c73909_g1</i>	ATGTCGTTGTGATGTTGA	GCTTGGAAAGAACTGATAATG
<i>c74238_g1</i>	TGAGTGACAACAACCTAC	CTCTGCCTGAAACAAGAT
<i>c75870_g1</i>	CACCATCTCATCCATCTC	GAGCATAACCATCCTTGT
<i>c76350_g3</i>	CATAACAGACAGCACAATAC	CCTTATCCAGCACAGTAAT
<i>c76662_g3</i>	CGAGAGAGTTGACTGTAG	CCTTGATTGATGGAGCAT
<i>c76807_g3</i>	GAGTTTCAGTTCAGTTCA	TCCATCAGTCTTCAGAGA
<i>c78299_g1</i>	GTAGTTGTGGTGGTAGTG	CTTCTCCTGCTCTTCTC
<i>ACTIN11</i>	CTCGTCTCCTCACCGTTATCAC	GCGTCATCTCCAGCGAACCC