

Figure S1a. Abscisic acid (ABA) metabolism-related gene description with the code of the putative homolog in *Arabidopsis thaliana*.

AAO1	ARABIDOPSIS ALDEHYDE OXIDASE 1	At5g20960
CYP707A2	CYTOCHROME P450 707 A2	At2g29090
CYP707A3	CYTOCHROME P450 707 A3	At5g45340
NCED3	NINE-CIS-EPOXYCAROTENOID DIOXYGENASE 3	At3g14440
UGT71C5	UDP-GLUCOSYL TRANSFERASE 71C5	At1g07240
ZEP	ZEAXANTHINE EPOXIDASE	At5g67030

Figure S1b. ABA signaling-related gene description with the code of the putative homolog in *A. thaliana*.

ATHB6	HOMEobox PROTEIN 6	At2g22430
HAB1	HYPERSENSITIVE TO ABA 1	At1g72770
PYL1	PYRABACTIN RESISTANCE LIKE 1	At5g46790
PYL2	PYRABACTIN RESISTANCE LIKE 2	At2g26040
PYL6	PYRABACTIN RESISTANCE LIKE 6	At2g40330
PYL7	PYRABACTIN RESISTANCE LIKE 7	At4g01026
PYL9	PYRABACTIN RESISTANCE LIKE 9	At1g01360
PYL10	PYRABACTIN RESISTANCE LIKE 10	At4g27920
HAB1	HYPERSENSITIVE TO ABA 1	At1g72770

Figure S2. Jasmonic acid (JA)-related gene description with the code of the putative homolog in *A. thaliana*.

AOC3	ALLENE OXIDE CYCLASE 3	At3g25780
AOS	ALLENE OXIDE SYNTHASE	At5g42650
COI1	CORONATINE INSENSITIVE 1	At2g39940
COS1	CORONATINE INSENSITIVE SUPPRESSOR 1	At2g44050
LOX1	LIPOXYGENASE 1	At1g55020
LOX2	LIPOXYGENASE 2	At3g45140
LOX5	LIPOXYGENASE 5	At2g22400
LOX6	LIPOXYGENASE 6	At1g67560
JAZ3	JASMONATE ZIM-DOMAIN PROTEIN 3	At3g17860
JAZ10	JASMONATE ZIM-DOMAIN PROTEIN 10	At5g13220

Figure S3. Salicylic acid (SA)-related gene description with the code of the putative homolog in *A. thaliana*.

GT	SALICYLIC ACID GLUCOSYLTRANSFERASE 1	At2g43820
NPR1	NONEXPRESSER OF PR GENES 1	At1g64280
TGA6	TGACG MOTIF-BINDING FACTOR 6	At3g12250

Figure S4. Cytokinin (CK)-related gene description with the code of the putative homolog in *A. thaliana*.

AHP2	HISTIDINE-CONTAINING PHOSPHOTRANSMITTER 2	At3g29350
AHP4	HISTIDINE-CONTAINING PHOSPHOTRANSMITTER 4	At3g16360
AHP5	HISTIDINE-CONTAINING PHOSPHOTRANSMITTER 5	At1g03430
AHP6	HISTIDINE-CONTAINING PHOSPHOTRANSMITTER 6	At1g80100
ARR9	RESPONSE REGULATOR 9	At3g57040
UGT73C1	UDP-GLUCOSYL TRANSFERASE 73C1	At2g36750
UGT76C2	UDP-GLUCOSYL TRANSFERASE 76C2	At5g05860

UGT85A1	UDP-GLUCOSYL TRANSFERASE 85A1	At1g22400
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Figure S5. Auxin (AUX)-related gene description with the code of the putative homolog in *A. thaliana*.

GH3.1	GRETCHEN HAGEN 3.1	At2g14960
GH3.6	GRETCHEN HAGEN 3.6	At5g54510
GH3.9	GRETCHEN HAGEN 3.9	At2g47750
NIT2	NITRILASE 2	At3g44300
YUC2	YUCCA2	At4g13260
YUC4	YUCCA4	At5g11320
YUC5	YUCCA5	At5g43890
YUC6	YUCCA6	At5g25620
YUC10	YUCCA10	At1g48910

Figure S6a. Brassinosteroid (BR) metabolism-related gene description with the code of the putative homolog in *A. thaliana*.

DWF1	DWARF1	At3g19820
DWF2	DWARF2	At4g39400
DWF3	DWARF3	At5g05690
DWF4	DWARF4	At3g50660
DWF5	DWARF5	At1g50430
DWF6	DWARF6	At2g38050
DWF7	DWARF7	At3g02580

Figure S6b. Brassinosteroid (BR) signaling-related gene description with the code of the putative homolog in *A. thaliana*.

BAK1	BRI1-ASSOCIATED RECEPTOR KINASE	At4g33430
BARK1	BAK1-ASSOCIATING RECEPTOR-LIKE KINASE 1	At3g23750
BEH4	BES1/BZR1 HOMOLOG 4	At1g78700
BIM2	BES1-INTERACTING MYC-LIKE PROTEIN 2	At1g69010
BIR1	BAK1-INTERACTING RECEPTOR-LIKE KINASE 1	At5g48380
BIR2	BAK1-INTERACTING RECEPTOR-LIKE KINASE 2	At3g28450
BKI1	BRI1 KINASE INHIBITOR 1	At5g42750
BRL2	BRI1-LIKE 2	At2g01950
BRS1	BRI1 SUPPRESSOR 1	At4g30610
BZR1	BRASSINAZOLE RESISTANT 1	At1g75080

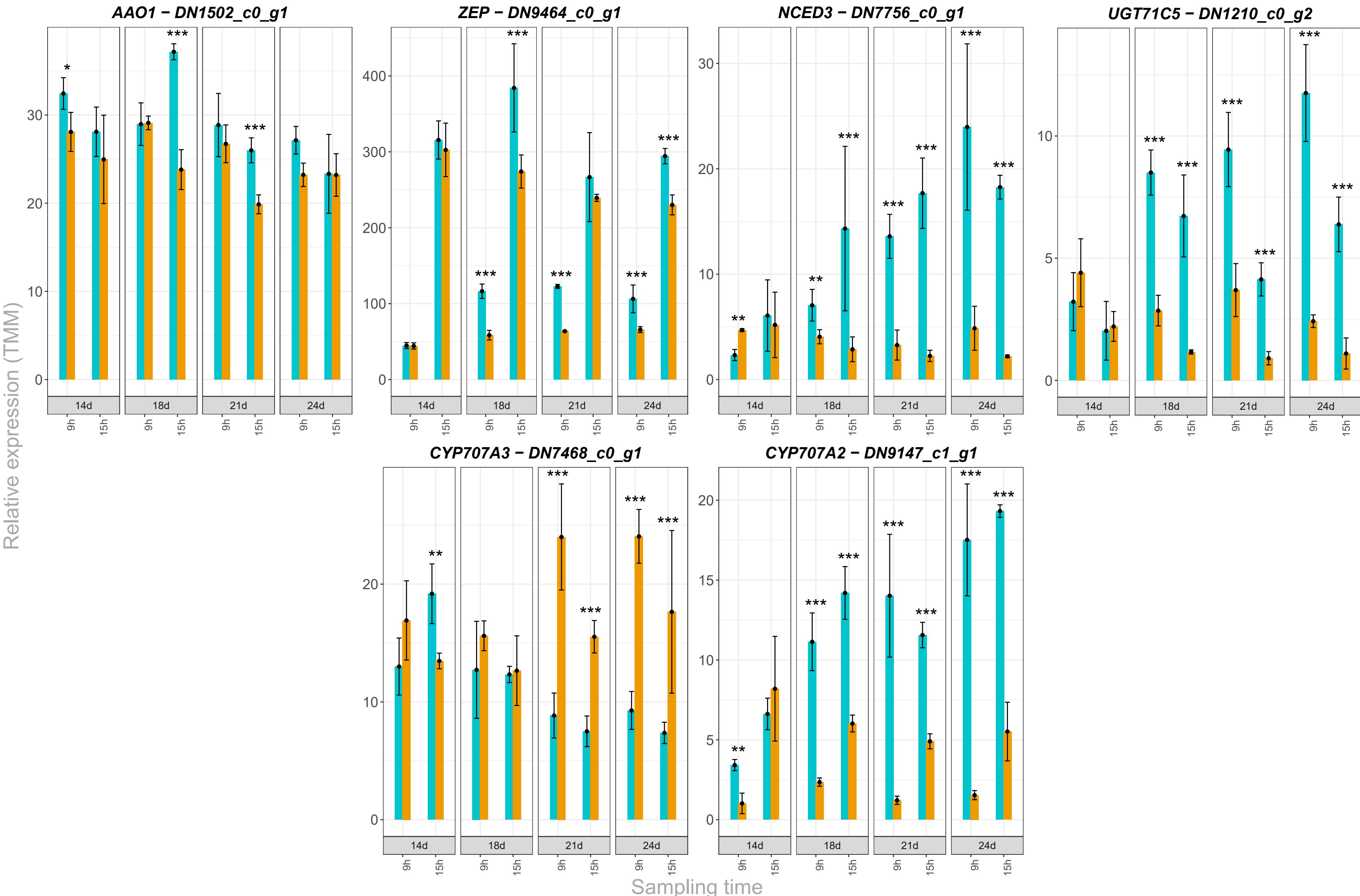
Figure S7. Strigolactone-related gene description with the code of the putative homolog in *A. thaliana*.

D14	DWARF 14	At3g03990
DLK2	D14-LIKE 2	At3g24420
MAX1	MORE AXILLARY BRANCHES 1	At2g26170
MAX2	MORE AXILLARY BRANCHES 2	At2g42620
SMAX1	SUPPRESSOR OF MAX2 1	At5g57710
SMXL3	SMAX1-LIKE 3	At3g52490
SMXL7	SMAX1-LIKE 7	At2g29970

(a)

ABA Metabolism

Treatment LD SD

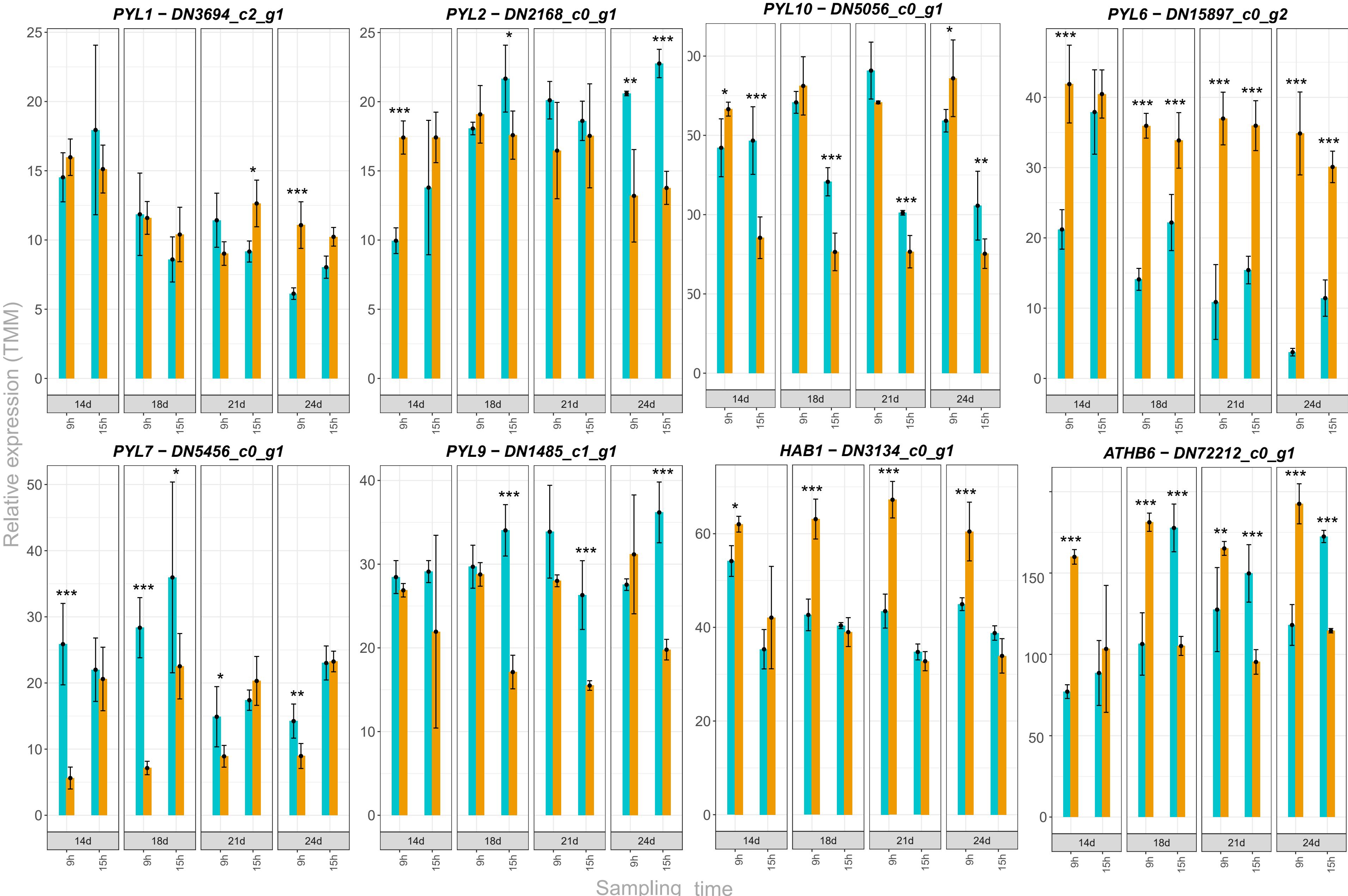


Supplementary Figure 1a. ABA metabolism-related gene expression: blue columns correspond to long day (18h light, 6h dark) treated samples, golden ones represent short day (6h light, 18h dark) treated samples. Transverse lines at each dot (median value of three biological replicates) represent standard deviation. Statistical significance (pvalues * < 0.05, ** < 0.01 and *** < 0.001) between pairs of differentially treated samples is represented by asterisks. The x-axis represents eight sampling points (two sampling points per day: morning -9.00, and afternoon -15.00; during four days corresponding to 14, 18, 21 and 24 days after sowing respectively). The y-axis represents relative expression in transcript coverage (TMM).

(b)

ABA Signaling

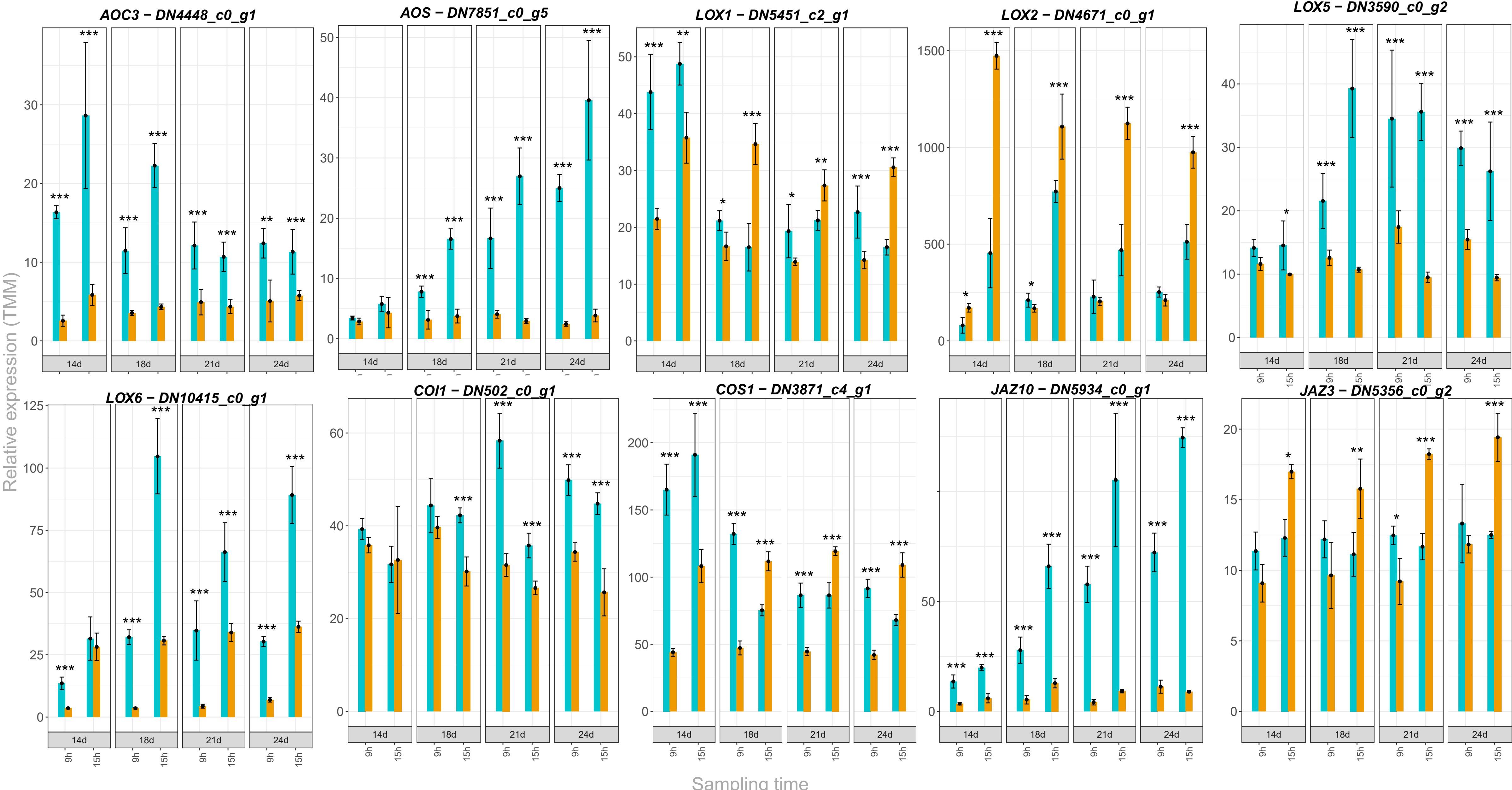
Treatment LD SD



Supplementary Figure 1b. ABA signaling-related gene expression: blue columns correspond to long day (18h light, 6h dark) treated samples, golden ones represent short day (6h light, 18h dark) treated samples. Transverse lines at each dot (median value of three biological replicates) represent standard deviation. Statistical significance (p values * < 0.05 , ** < 0.01 and *** < 0.001) between pairs of differentially treated samples is represented by asterisks. The x-axis represents eight sampling points (two sampling points per day: morning -9.00, and afternoon -15.00; during four days corresponding to 14, 18, 21 and 24 days after sowing respectively). The y-axis represents relative expression in transcript coverage (TMM).

JA-related genes

Treatment LD SD



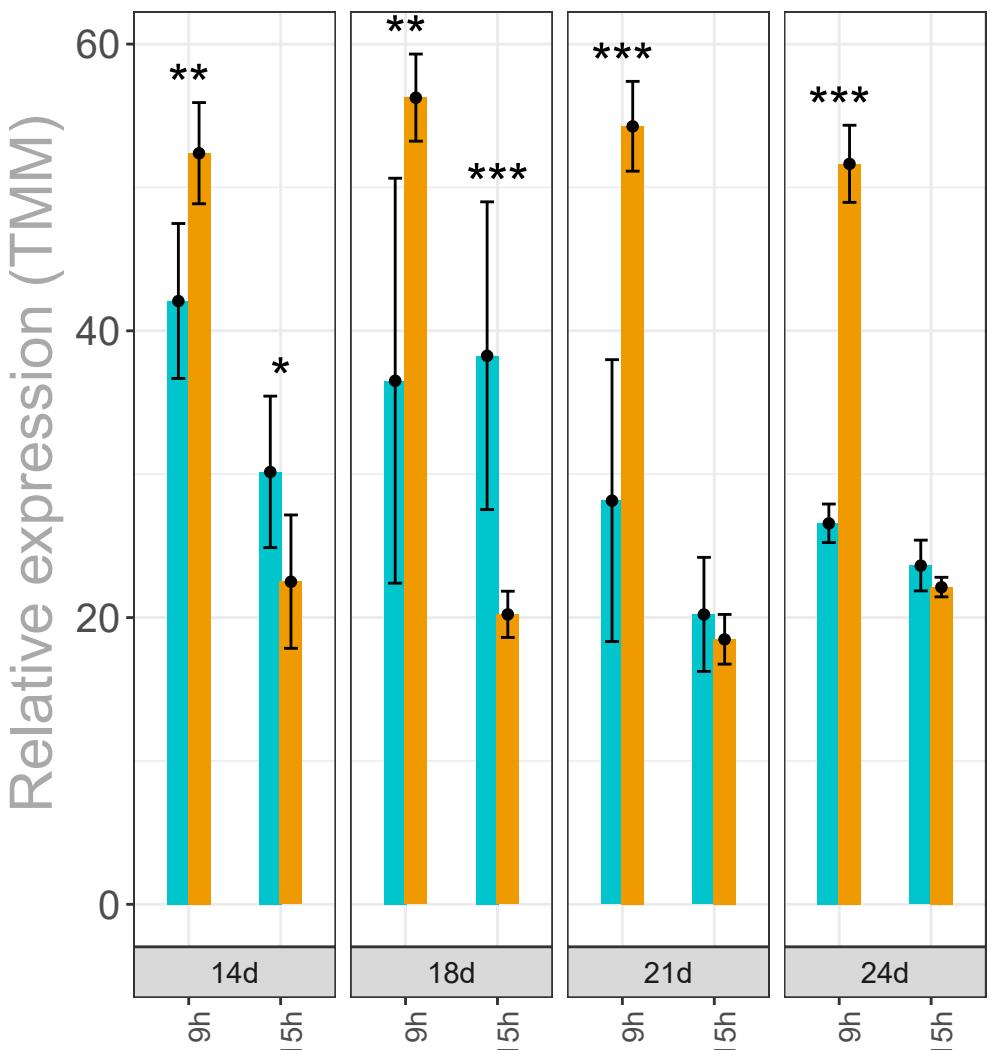
Supplementary Figure 2. JA-related gene expression: blue columns correspond to long day (18h light, 6h dark) treated samples, golden ones represent short day (6h light, 18h dark) treated samples.

Transverse lines at each dot (median value of three biological replicates) represent standard deviation. Statistical significance (p -values * < 0.05 , ** < 0.01 and *** < 0.001) between pairs of differentially treated samples is represented by asterisks. The x-axis represents eight sampling points (two sampling points per day: morning -9.00, and afternoon -15.00; during four days corresponding to 14, 18, 21 and 24 days after sowing respectively). The y-axis represents relative expression in transcript coverage (TMM).

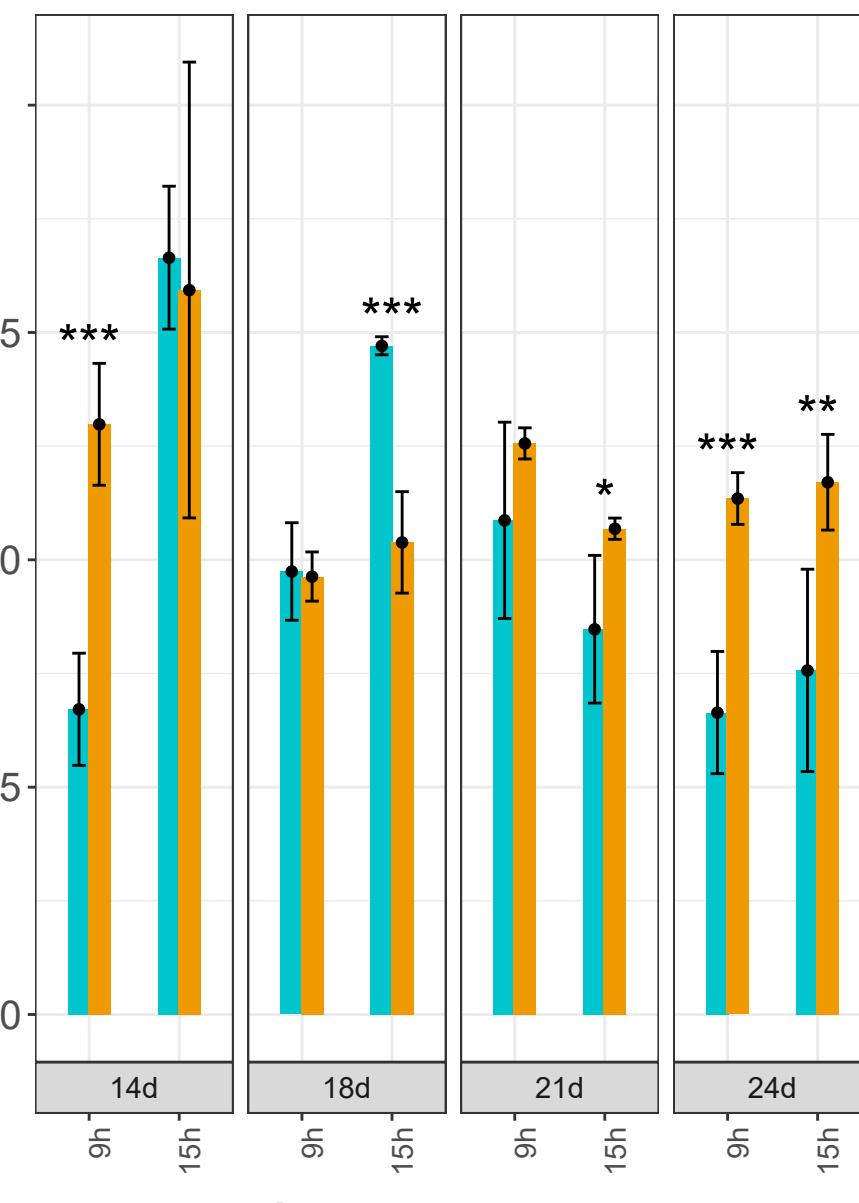
SA-related genes

Treatment LD SD

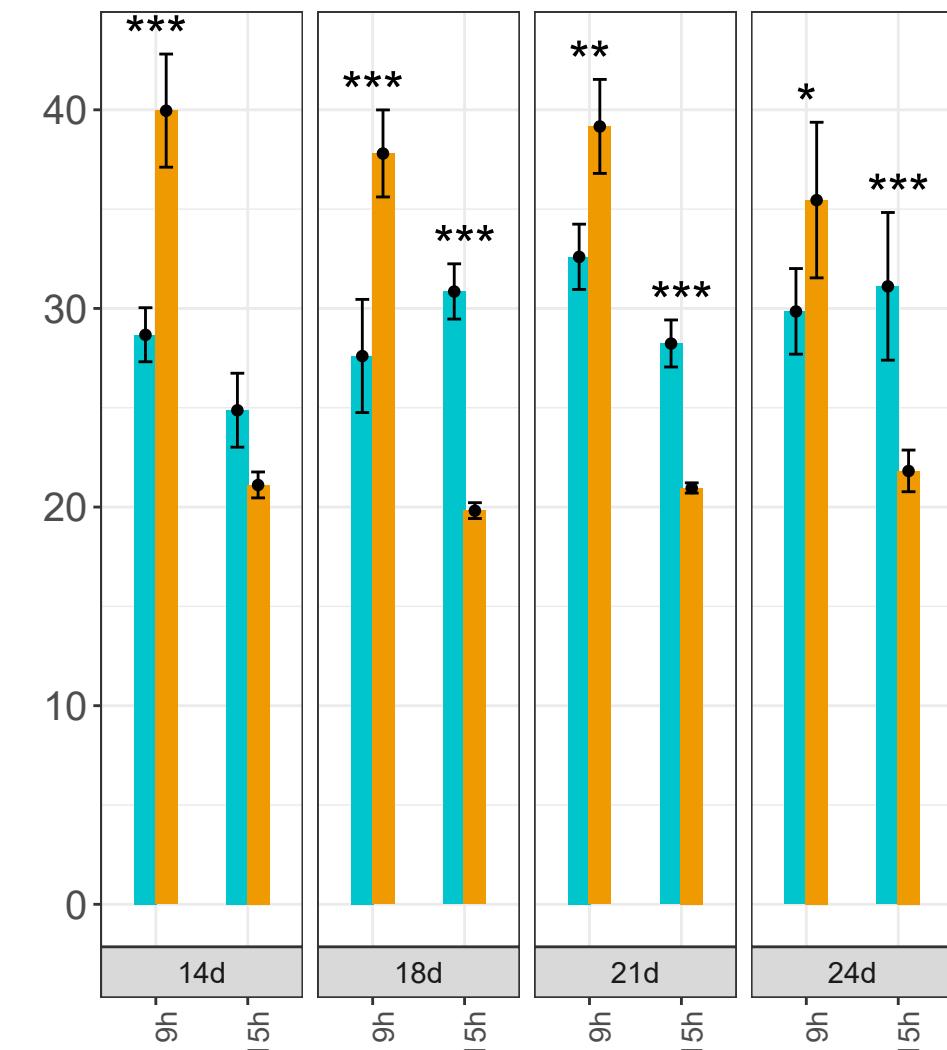
NPR1 - DN1795_c0_g2



GT - DN12468_c0_g3



TGA6 - DN41_c0_g1



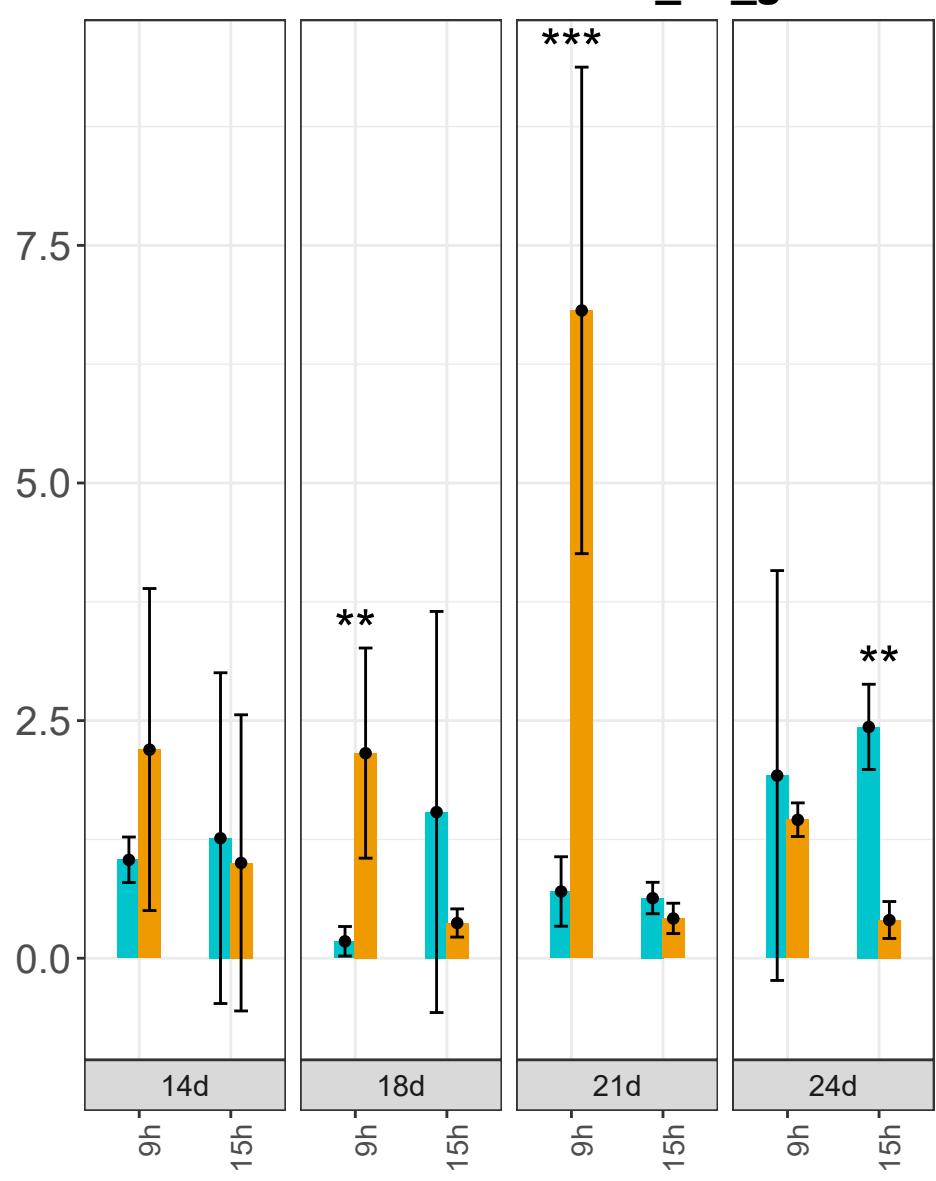
Sampling time

Supplementary Figure S3. SA-related gene expression: blue columns correspond to long day (18h light, 6h dark) treated samples, golden ones represent short day (6h light, 18h dark) treated samples. Transverse lines at each dot (median value of three biological replicates) represent standard deviation. Statistical significance (pvalues * < 0.05, ** < 0.01 and *** < 0.001) between pairs of differentially treated samples is represented by asterisks. The x-axis represents eight sampling points (two sampling points per day: morning -9.00, and afternoon -15.00; during four days corresponding to 14, 18, 21 and 24 days after sowing respectively). The y-axis represents relative expression in transcript coverage (TMM).

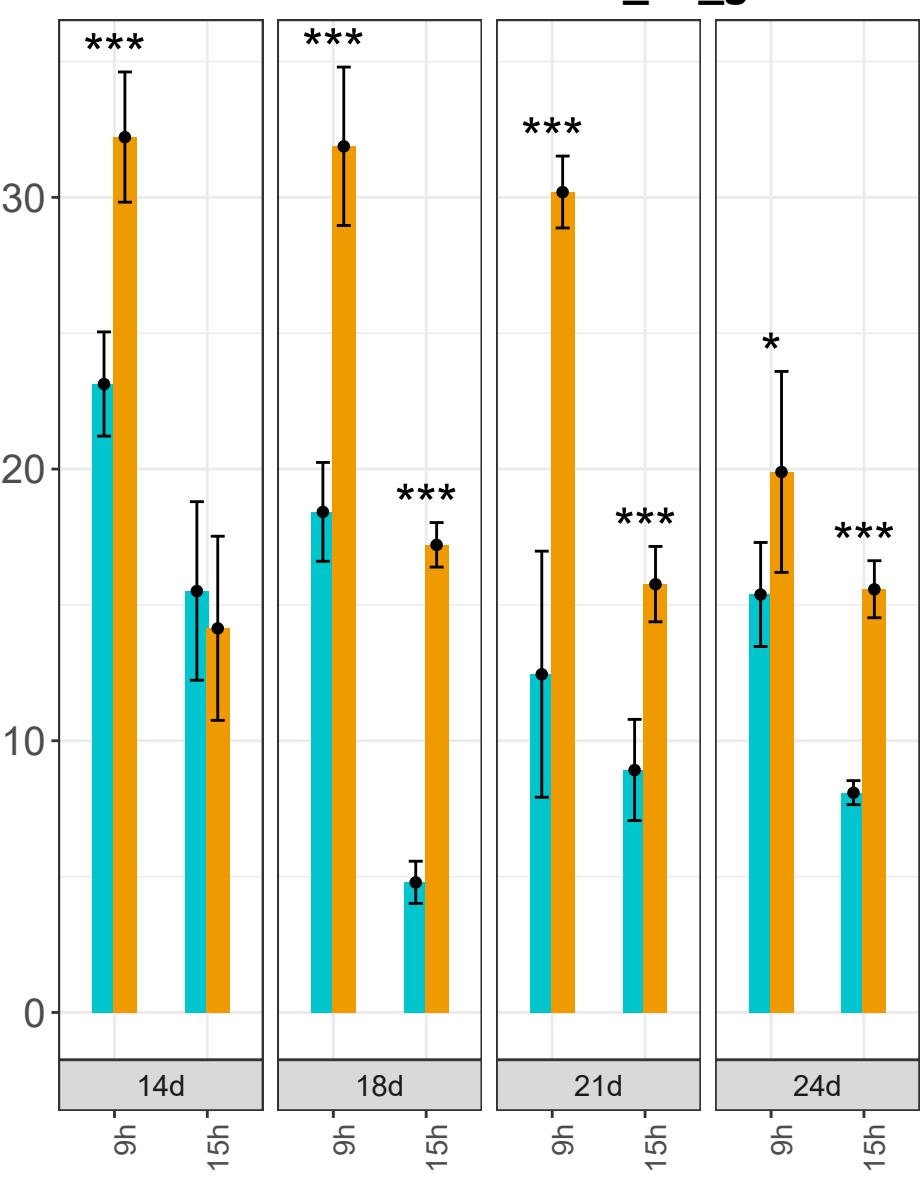
CK-related genes

Treatment LD SD

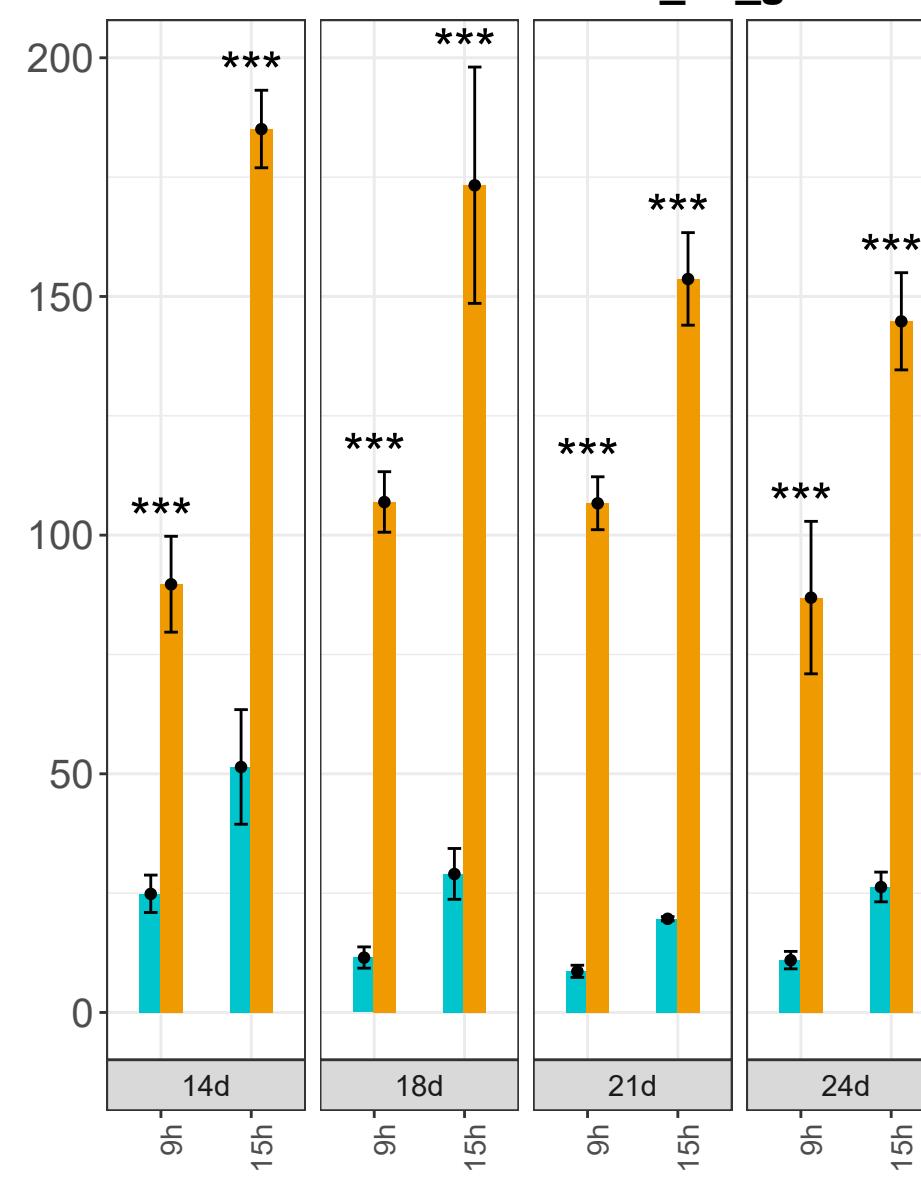
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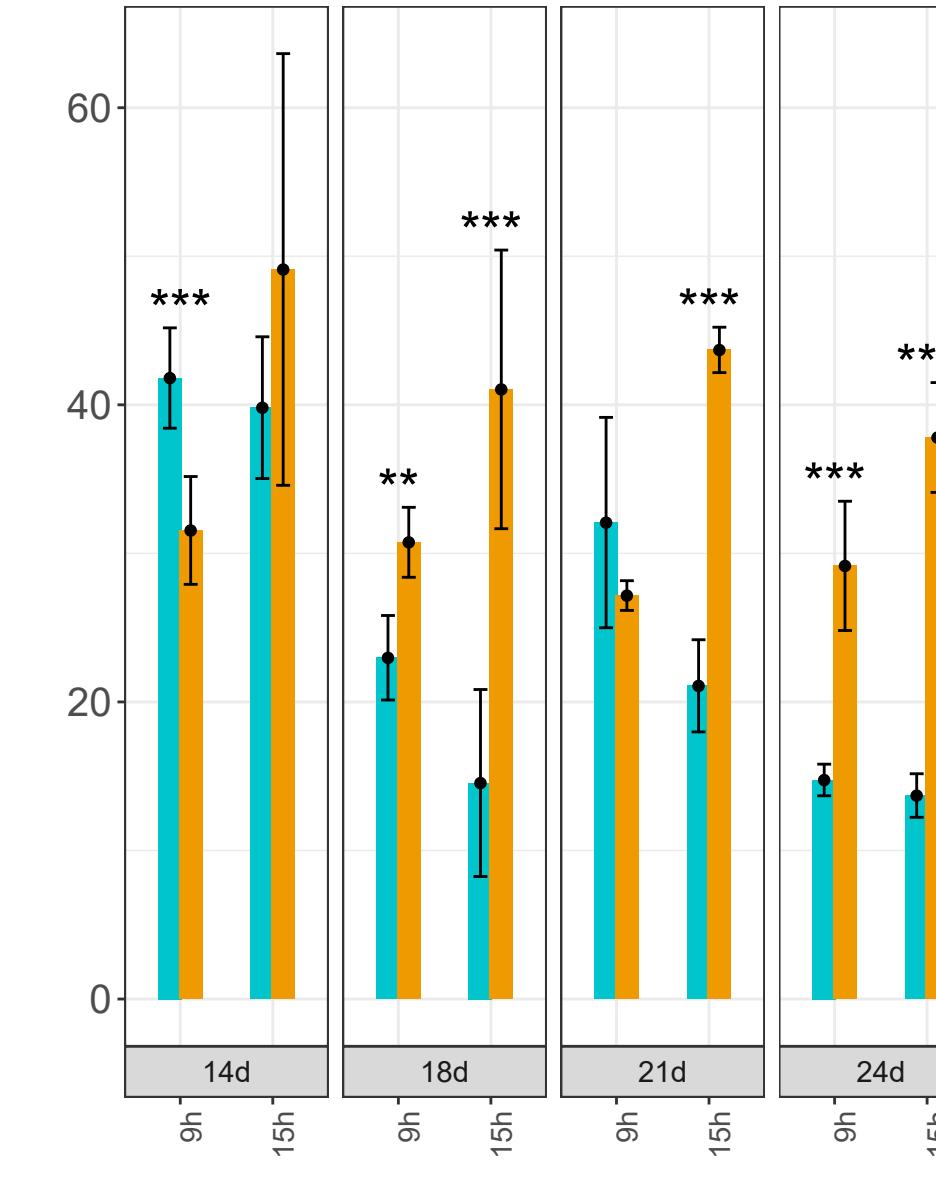
UGT76C2 - DN2758_c0_g1



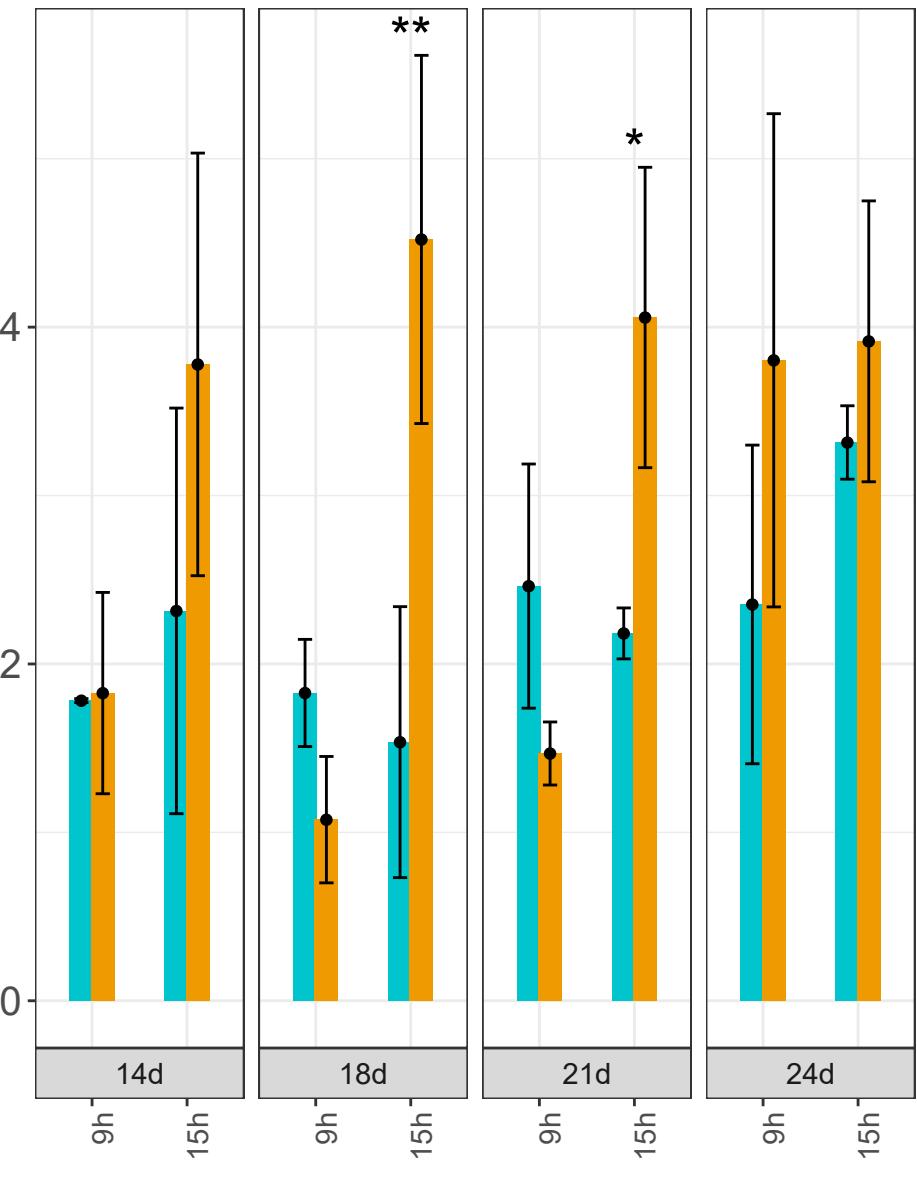
UGT85A1 - DN5653_c0_g1



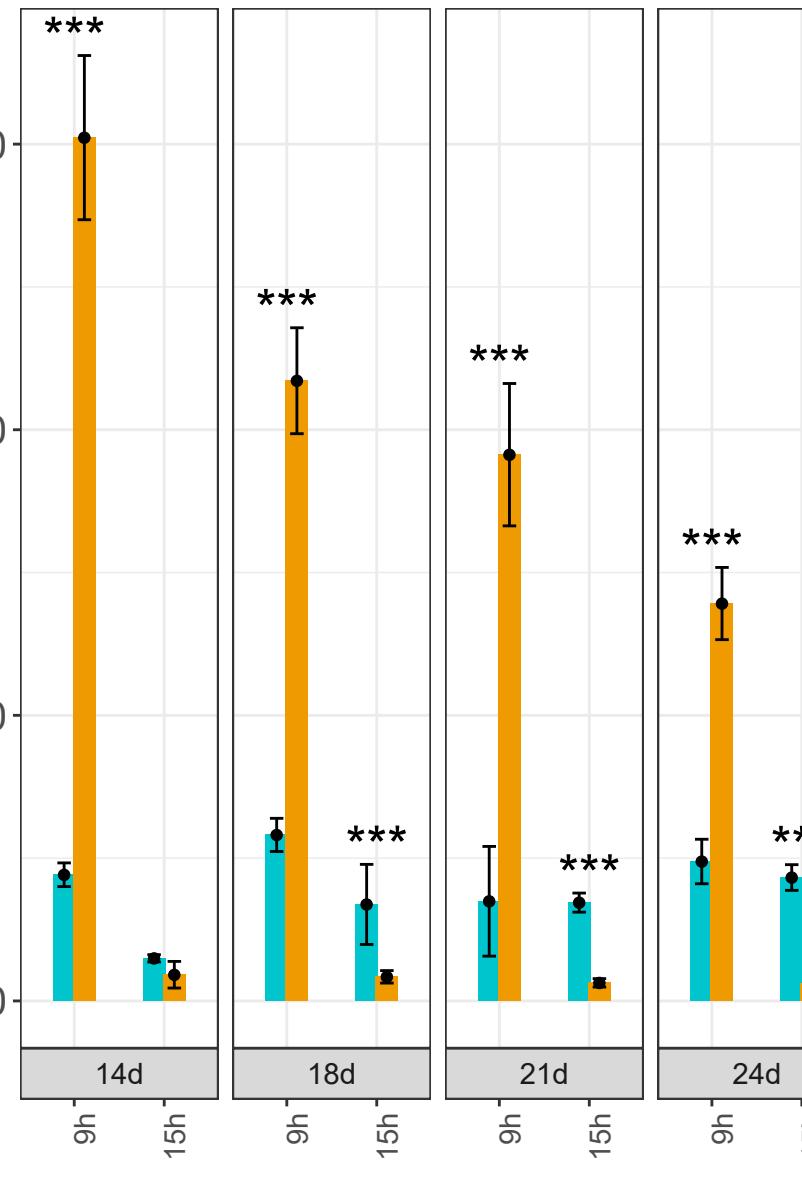
ARR9 - DN2235_c0_g1



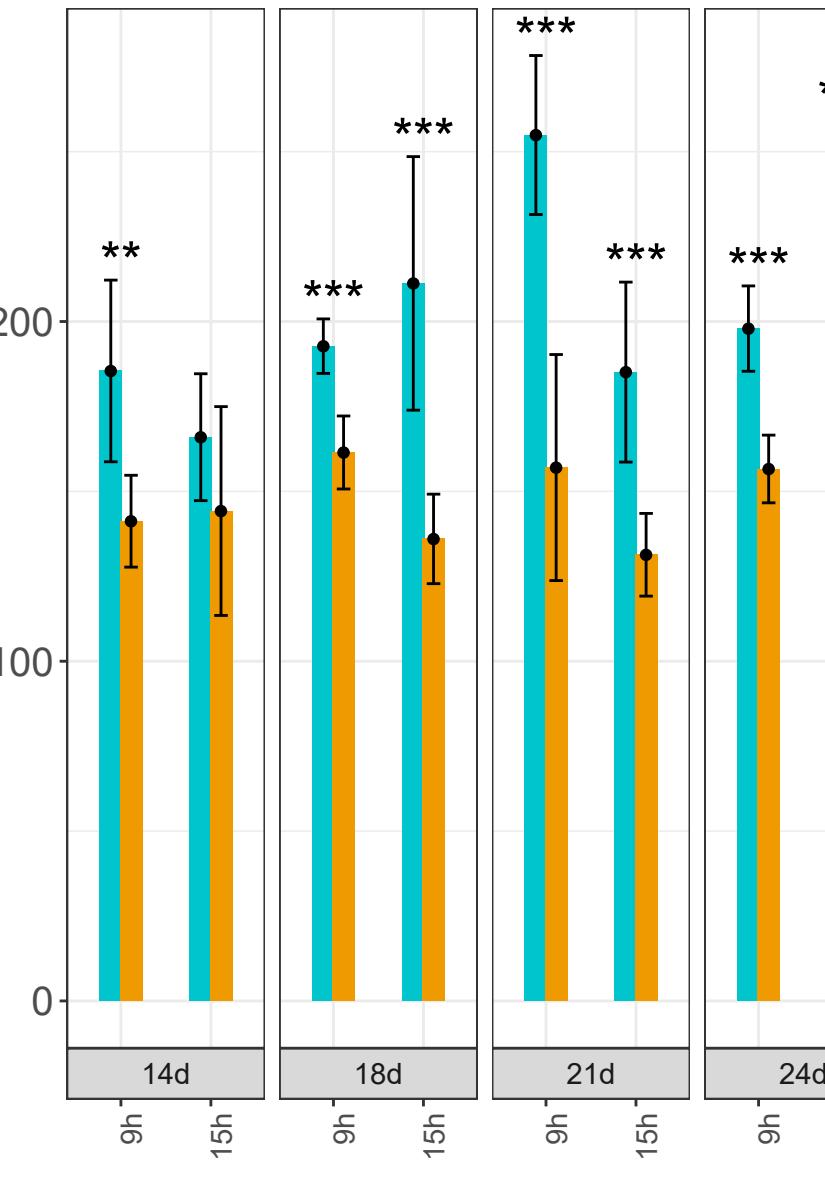
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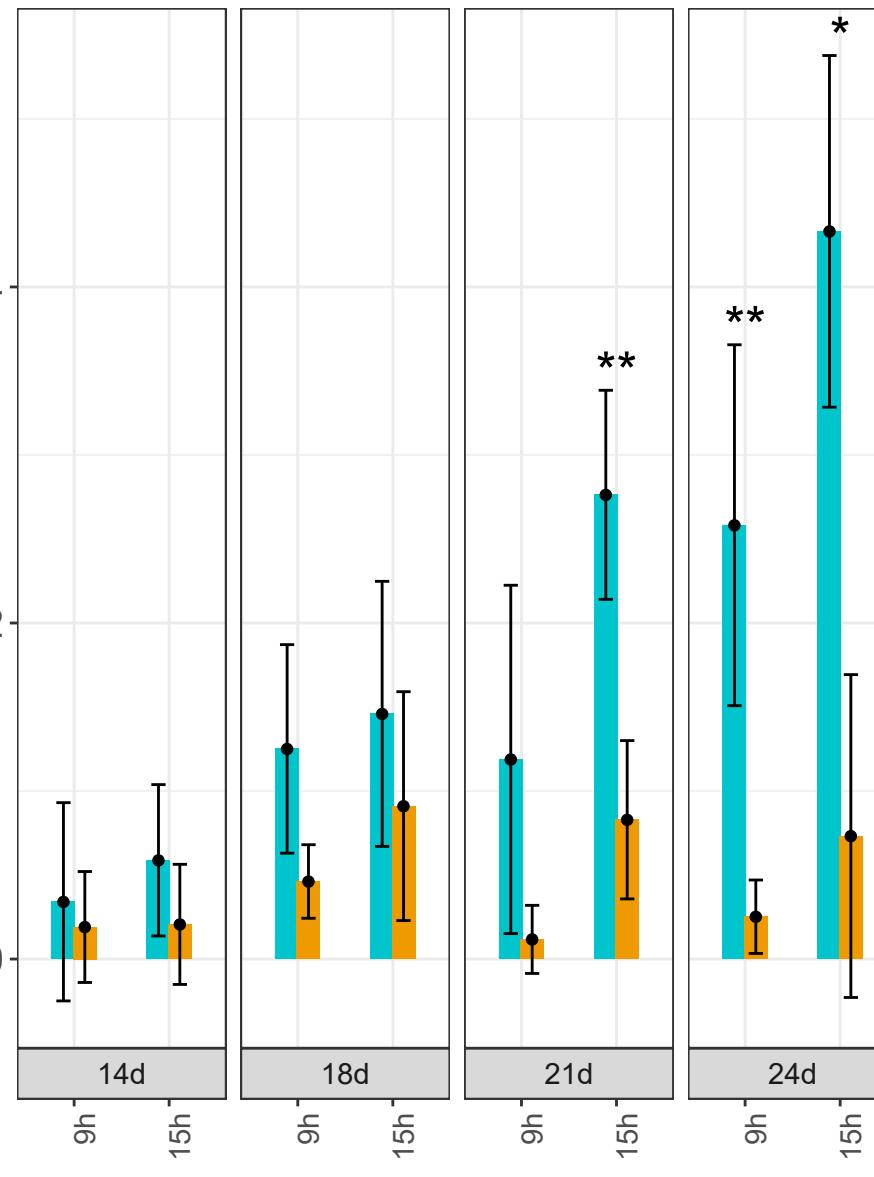
AHP4 - DN2578_c0_g1



AHP5 - DN12788_c0_g1



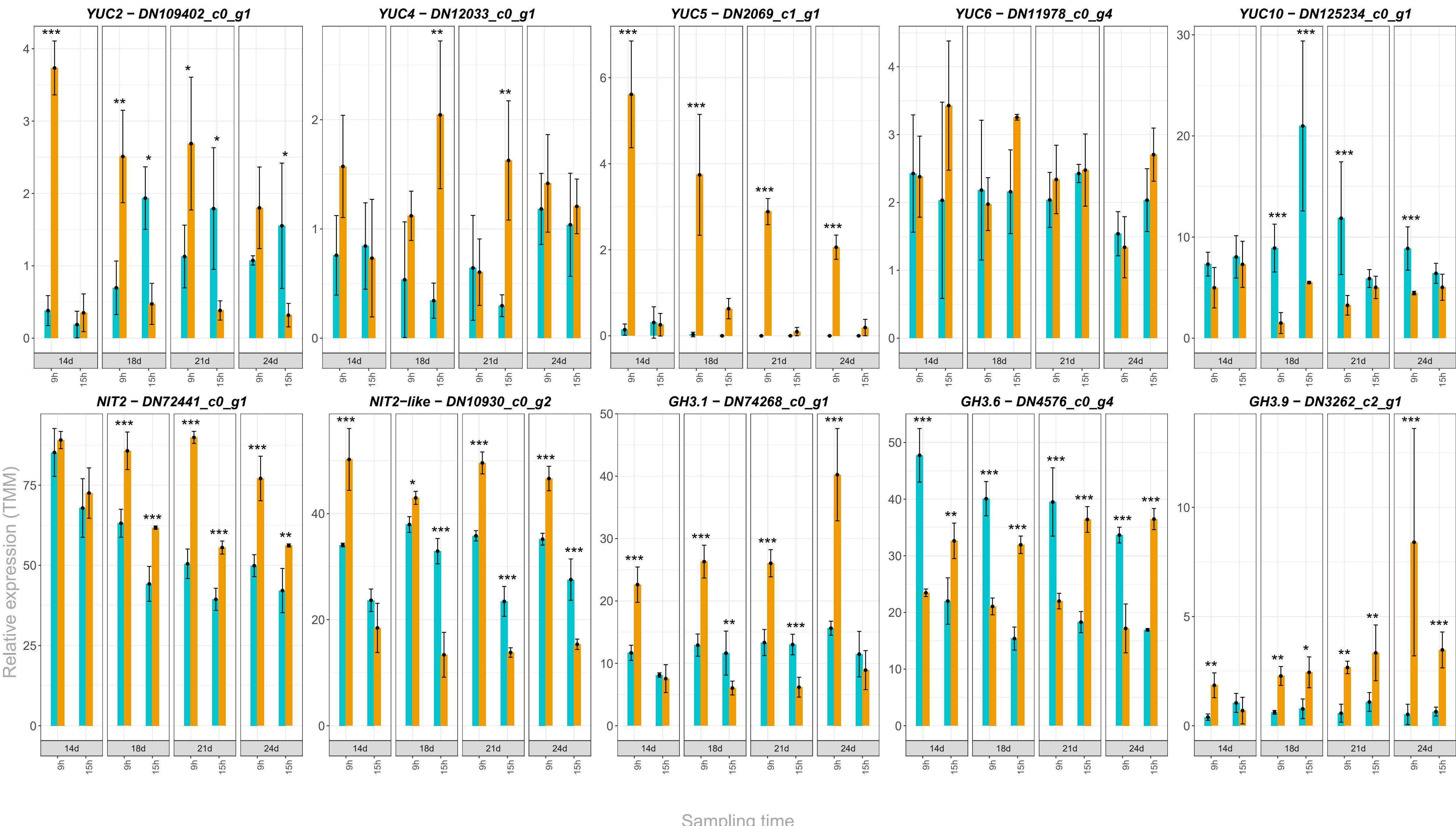
AHP6 - DN10609_c0_g1



Supplementary Figure S4. CK-related gene expression: blue columns correspond to long day (18h light, 6h dark) treated samples, golden ones represent short day (6h light, 18h dark) treated samples. Transverse lines at each dot (median value of three biological replicates) represent standard deviation. Statistical significance (pvalues * < 0.05, ** < 0.01 and *** < 0.001) between pairs of differentially treated samples is represented by asterisks. The x-axis represents eight sampling points (two sampling points per day: morning -9.00, and afternoon -15.00; during four days corresponding to 14, 18, 21 and 24 days after sowing respectively). The y-axis represents relative expression in transcript coverage (TMM).

AUX-related genes

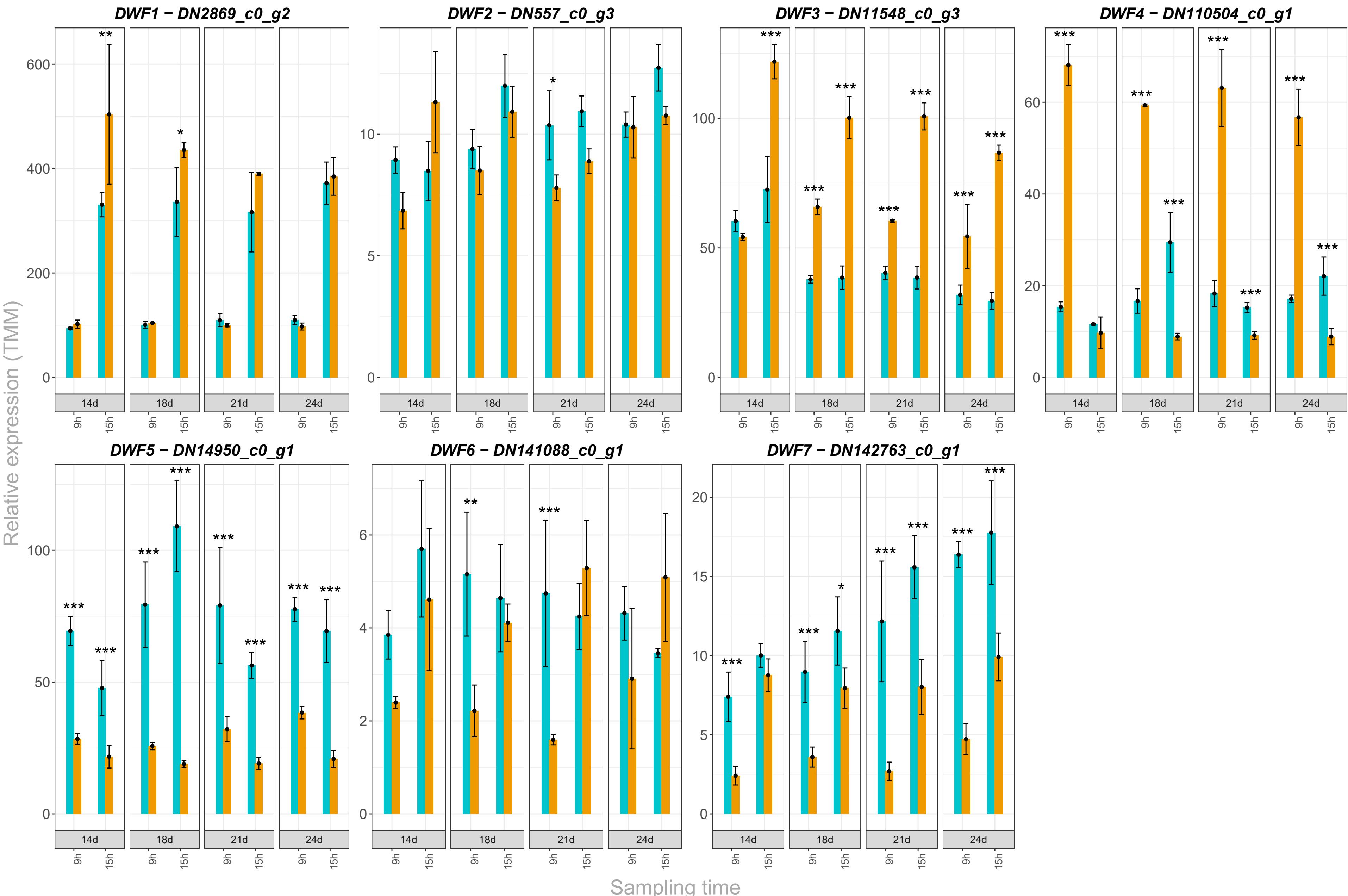
Treatment LD SD



Supplementary Figure S5. AUX-related gene expression: blue columns correspond to long day (18h light, 6h dark) treated samples, golden ones represent short day (6h light, 18h dark) treated samples. Transverse lines at each dot (median value of three biological replicates) represent standard deviation. Statistical significance (p values * < 0.05 , ** < 0.01 and *** < 0.001) between pairs of differentially treated samples is represented by asterisks. The x-axis represents eight sampling points (two sampling points per day: morning -9.00, and afternoon -15.00; during four days corresponding to 14, 18, 21 and 24 days after sowing respectively). The y-axis represents relative expression in transcript coverage (TMM).

BR Metabolism-related genes

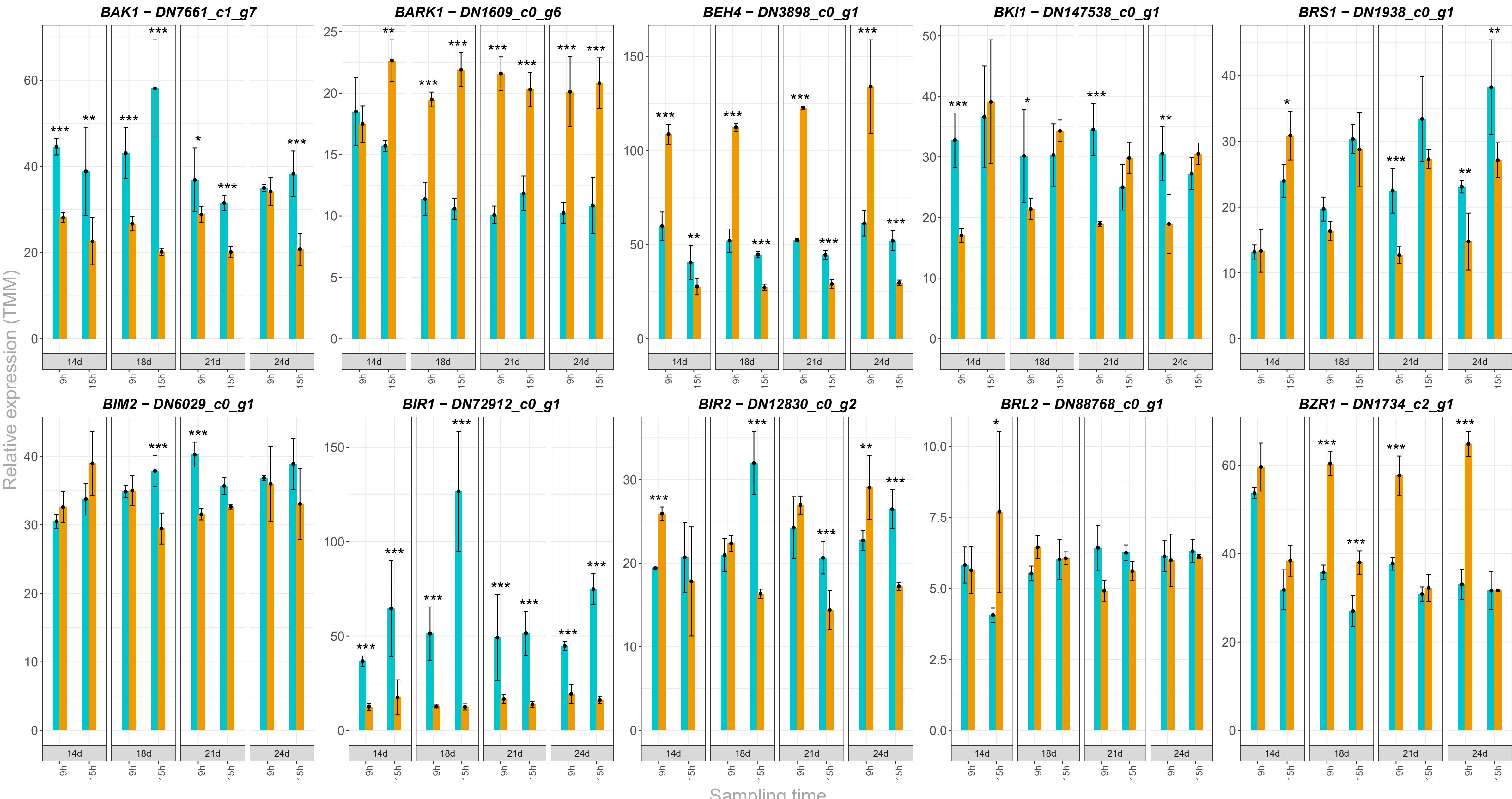
Treatment LD SD



Supplementary Figure S6a. Brassinosteroid (BR) metabolism-related gene expression: blue columns correspond to long day (18h light, 6h dark) treated samples, golden ones represent short day (6h light, 18h dark) treated samples. Transverse lines at each dot (median value of three biological replicates) represent standard deviation. Statistical significance (pvalues * < 0.05, ** < 0.01 and *** < 0.001) between pairs of differentially treated samples is represented by asterisks. The x-axis represents eight sampling points (two sampling points per day: morning -9.00, and afternoon -15.00; during four days corresponding to 14, 18, 21 and 24 days after sowing respectively). The y-axis represents relative expression in transcript coverage (TMM).

BR Signaling-related genes

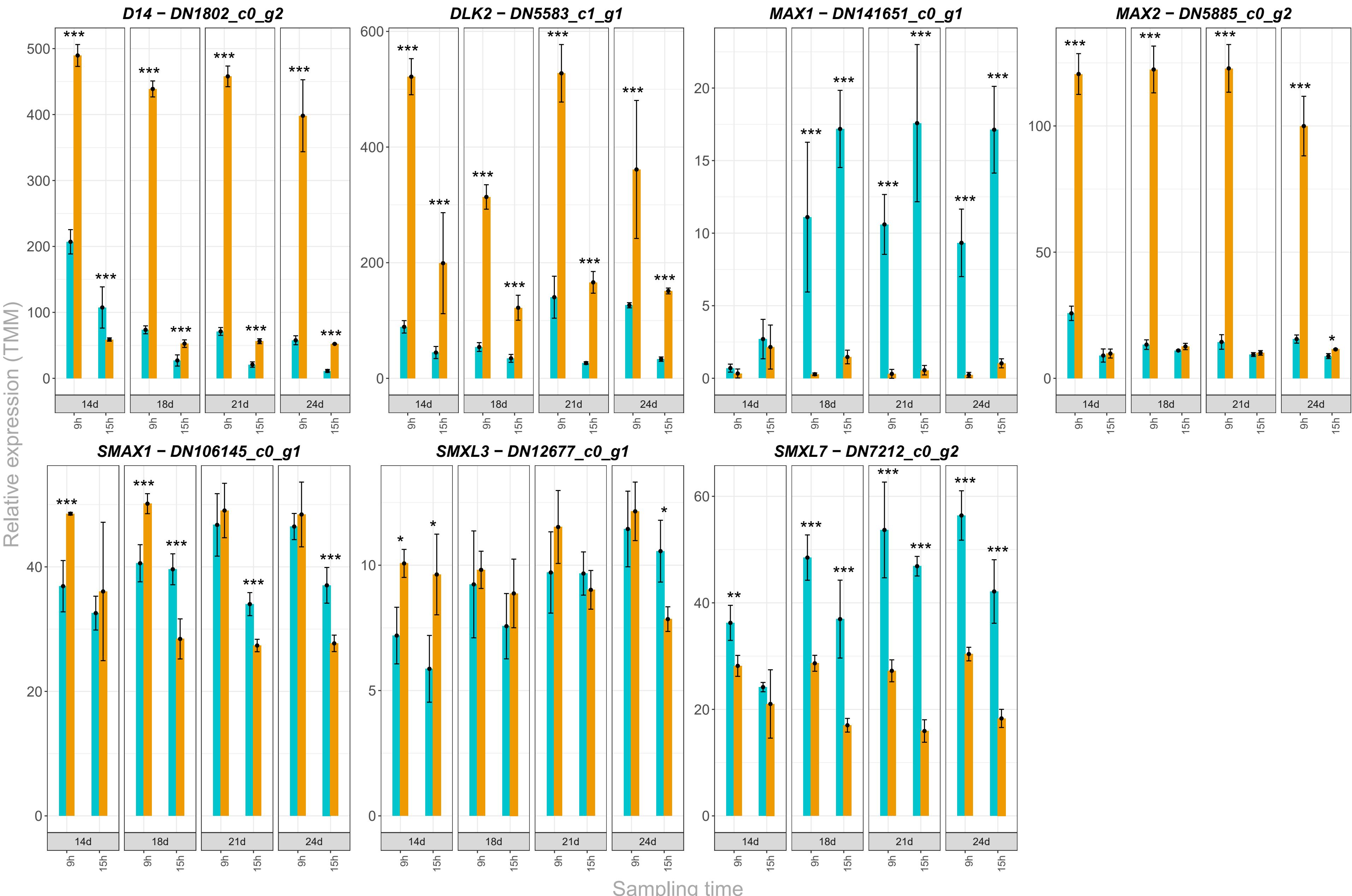
Treatment LD SD



Supplementary Figure S6b. Brassinosteroid (BR) signaling-related gene expression: blue columns correspond to long day (18h light, 6h dark) treated samples, golden ones represent short day (6h light, 18h dark) treated samples. Transverse lines at each dot (median value of three biological replicates) represent standard deviation. Statistical significance (pvalues * < 0.05, ** < 0.01 and *** < 0.001) between pairs of differentially treated samples is represented by asterisks. The x-axis represents eight sampling points (two sampling points per day: morning -9.00, and afternoon -15.00; during four days corresponding to 14, 18, 21 and 24 days after sowing respectively). The y-axis represents relative expression in transcript coverage (TMM).

Strigolactone-related genes

Treatment LD SD



Supplementary Figure S7. Strigolactone-related gene expression: blue columns correspond to long day (18h light, 6h dark) treated samples, golden ones represent short day (6h light, 18h dark) treated samples. Transverse lines at each dot (median value of three biological replicates) represent standard deviation. Statistical significance (p values * < 0.05 , ** < 0.01 and *** < 0.001) between pairs of differentially treated samples is represented by asterisks. The x-axis represents eight sampling points (two sampling points per day: morning -9.00, and afternoon -15.00; during four days corresponding to 14, 18, 21 and 24 days after sowing respectively). The y-axis represents relative expression in transcript coverage (TMM).