

## Supplementary Tables

**Table S1** Comparative analysis of epidermal features of YT and WT.

Histological parameters	YT	WT
Stomata length (um)	33.65±1.76a	35.06±0.73a
Stomata width (um)	31.08±2.52a	28.67±1.52a
Stomata density (per um <sup>2</sup> )	317.70±13.30b	358.14±5.79a
Closed stomata density (per um <sup>2</sup> )	240.55±5.30a	5.14±0.72b

Note: The values represented the mean±SD. Different lowercase letters indicate significant differences at  $P<0.05$ .

**Table S2** Summary of the sequencing and mapping results between YT and WT.

Samples	Total reads	Clean reads	Q20	Q30	GC Content	Mapping rate
YT-1	44,070,410	42,578,268	96.77%	91.42%	44.33%	68.08%
YT-2	47,481,470	46,073,680	96.80%	91.39%	44.08%	67.57%
YT-3	45,437,032	44,412,792	96.94%	91.75%	44.30%	67.94%
WT-1	43,600,624	42,072,156	96.98%	91.88%	44.52%	67.44%
WT-2	43,523,698	42,160,692	97.17%	92.24%	44.49%	68.32%
WT-3	44,402,320	43,096,068	96.87%	91.65%	44.37%	67.81%
Total	268,515,554	260,393,656	96.98%	91.88%	44.35%	67.86%

**Table S9** List of primers used for qRT-PCR analysis.

Gene ID	Forward primer	Reverse primer
<i>GLK1(Ila20G011400)</i>	ATGAGCCTTTGGGTAGCACC	GTCTGCTGGTGGTGGATGA A
<i>PORA(Ila17G009680)</i>	CCCATTGTTTCAGGGCTCTGT	CACCTTCCTGGCCTTCTCTG
<i>HEMD(Ila09G014230)</i>	ACTGGTATTTGGAAGGGGC G	TGAATCGGTGTCAGCTGCAT
<i>SGR(Ila05G008020)</i>	ATTGTTATGTGAGCGGGCCA	TTAGTGGCCCCCAACATTCC
<i>NCED1(Ila20G005950)</i>	CCAGTGTCCAAATTGCAGG C	GTAGCTTGCTGACCCGTTCT
<i>CYP707A1(Ila10G003260)</i>	TTCAATGGGGTGGCCTCTTG	GCCTGAACCAGCTTCCTCAT
<i>ANR(Ila16G002080)</i>	TTCAATGCCCCCATAGCAGG	TCGCCTGAGCTGATCGTTAC
<i>LHCA(Ila16G017490)</i>	CATTGCTTCCACTGCGCTTT	TTGCCCATCTGCCATGGATT
<i>PsbC(Ila0G015340)</i>	GGCCGGAGCAATGAACCTA T	GTCTCAGGTCCCAGAAGTG C
<i>LHCB(Ila15G017050)</i>	CTTGGGGCTCTTGATGTGT	CCAATGGGTCTGAAGCTTCC T
<i>petF(Ila17G015180)</i>	GGCGAAGAGACCGAGTTTG A	GCAAGTGAGCAGGTAACCC T
<i>DVR(Ila11G009290)</i>	TGTCTCTTGCTTGTAGCC	CCTGTCCTCCCAAGCTCTTG
<i>Actin</i>	CCACCTACAACCTCCATCAT	TTCCTTGCTCATACGATCA