

1 **Supplemental Table 1.** Nomenclature and description of the *ski3* alleles.

2

<i>ski3</i> allele	Alternate name	Ecotype	Mutagen	Description of mutation	Reference
<i>ski3-1</i>	<i>s37</i>	Col	EMS	Nonsense, Gln to STOP at amino acid 20	Zhang et al., 2015
<i>ski3-2</i>	<i>s40</i>	Col	EMS	Nonsense, Trp to STOP at amino acid 158	Zhang et al., 2015
<i>ski3-3</i>		Col	EMS	Nonsense, Trp to STOP at amino acid 240	Yu et al., 2015
<i>ski3-4</i>	FLAG 303H02	Col	T-DNA		Yu et al., 2015
<i>ski3-5</i>	GABI 140B07	Col	T-DNA	Insertion in 11 th exon	Yu et al., 2015 This work
<i>ski3-6</i>	GABI 007D02	Col	T-DNA		Yu et al., 2015
<i>ski3-7</i>	SALK_099525	Col	T-DNA	Insertion in 19 th exon	Yu et al., 2015 This work
<i>ski3-8</i>	<i>war1-1</i>	<i>Ler</i>	EMS	G->A mutation in first intron at nucleotide 148 from ATG	This work
<i>ski3-9</i>	<i>war1-2</i>	<i>Ler</i>	EMS	C deletion in 9 th exon at nucleotide 1952, causing Ser to Phe at amino acid 410 and Leu to STOP at amino acid 411	This work
<i>ski3-10</i>	<i>war1-3</i>	<i>Ler</i>	EMS	Nonsense, Gln to STOP at amino acid 131	This work

3

4

5 **Supplemental Table 2.** Nomenclature and description of the *ski2* alleles.

6

<i>ski2</i> allele	Alternate name	Ecotype	Mutagen	Description of mutation	Reference
<i>ski2-1</i>	<i>s28</i>	Col	EMS	Missense, Thr to Ile at amino acid 389	Zhang et al., 2015
<i>ski2-2</i>	SALK_129982	Col	T-DNA	Insertion in 19 th exon	Zhang et al., 2015
<i>ski2-3</i>	SALK_063541	Col	T-DNA	Insertion in 23 rd exon	Zhang et al., 2015 This work
<i>ski2-4</i>	SALK_118579	Col	T-DNA	Insertion in 9 th exon	Dorcey et al., 2012
<i>ski2-5</i>	SALK_141579	Col	T-DNA	Insertion in 3 rd intron	This work
<i>ski2-6</i>	SALK_122393	Col	T-DNA	Insertion in 23 rd exon	This work
<i>ski2-7</i>	<i>war7-1</i>	<i>Ler</i>	EMS	Nonsense, Arg to STOP at amino acid 1297	This work
<i>ski2-8</i>	<i>war7-2</i>	<i>Ler</i>	EMS	g->a change at 8 th exon/8 th intron junction	This work
<i>ski2-9</i>	<i>war7-3</i>	<i>Ler</i>	EMS	Nonsense, Gln to STOP at amino acid 418	This work

7 **Supplemental Table 3.** Nomenclature and description of the *ski8* alleles.

8

<i>ski8</i> allele	Alternate name	Ecotype	Mutagen	Description of mutation	Reference
<i>ski8-1</i>	<i>vip3-1</i>	Ler	T-DNA	Insertion in second exon	Zhang et al., 2003
<i>ski8-2</i>	<i>vip3-2</i> SALK_083364	Col	T-DNA	Insertion in first exon	Jolivet et al., 2006
<i>ski8-3</i>	<i>vip3-3</i> SALK_117732	Col	T-DNA	Insertion in second exon	Jolivet et al., 2006
<i>ski8-4</i>	<i>vip3^{zwg}</i>	Sav-0	Natural genetic variation	Deletion of nucleotides 861-867 of the ORF	Dorcey et al., 2012
<i>ski8-5</i>	<i>boq-1</i>	Col	EMS	Nonsense, Gly to Glu at amino acid 219	Takagi and Ueguchi, 2012
<i>ski8-6</i>	SALK_060207	Col	T-DNA	Insertion in first exon	This work
<i>ski8-7</i>	SALK_139885	Col	T-DNA	Insertion in second exon	This work

9

10

11 **Supplemental Table 4.** Cuticular wax composition of inflorescence stems of Arabidopsis wild type (WT), *cer7*,
 12 suppressors and double mutants. Mean values (μgcm^{-2}) of total wax loads and coverage of individual
 13 compound classes are given with SD ($n=3$).

Genotype	Total Load	Fatty acids	Aldehydes	Alkanes	Secondary alcohols	Ketones	Primary Alcohols	Esters
Ler WT	20.0±0.3	0.1±0.0	1.0±0.0	8.9±0.2	2.6±0.1	6.4±0.2	0.5±0.2	0.4±0.0
<i>cer7-1</i>	4.2±0.3	0.1±0.1	0.2±0.0	0.1±0.2	0.2±0.0	1.2±0.1	1.1±0.3	0.3±0.0
<i>war1-1cer7-1</i>	15.0±1.2	0.1±0.0	0.2±0.0	6.1±0.7	1.4±0.1	4.9±0.4	1.9±0.1	0.5±0.0
<i>war1-2cer7-1</i>	14.8±0.9	0.1±0.0	0.4±0.1	7.1±0.5	1.6±0.1	4.6±0.5	0.6±0.2	0.4±0.1
<i>war1-3cer7-1</i>	19.6±1.9	0.1±0.0	0.8±0.1	8.9±1.0	2.4±0.1	6.6±0.9	0.4±0.1	0.4±0.0
<i>war7-1cer7-1</i>	23.4±1.4	0.2±0.0	1.2±0.3	13.6±0.9	2.1±0.2	4.6±0.2	1.1±0.1	0.7±0.0
<i>war7-2cer7-1</i>	16.1±0.8	0.2±0.0	0.7±0.0	7.3±0.5	2.0±0.2	4.6±0.3	1.0±0.1	0.2±0.0
<i>war7-3cer7-1</i>	19.2±1.0	0.2±0.0	0.6±0.0	7.7±0.4	2.0±0.3	6.5±0.3	1.7±0.1	0.4±0.0
Col 0 WT	22.6±0.8	0.1±0.0	0.9±0.1	10.3±0.1	2.0±0.2	6.7±0.3	1.7±0.3	0.7±0.0
<i>wer7-3</i>	8.0±0.8	0.1±0.0	0.3±0.1	2.4±0.3	0.5±0.1	2.0±0.2	2.4±0.2	0.4±0.0
<i>ski3-5cer7-3</i>	15.1±0.8	0.2±0.0	0.6±0.1	5.9±0.5	1.3±0.2	4.3±0.2	2.2±0.2	0.6±0.0
<i>ski3-7cer7-3</i>	15.8±1.7	0.3±0.0	0.6±0.1	6.7±1.1	1.2±0.4	4.1±0.6	2.2±0.3	0.5±0.0
<i>ski2-5cer7-3</i>	12.9±1.1	0.2±0.0	0.4±0.0	5.0±0.6	1.0±0.2	3.4±0.3	2.3±0.1	0.5±0.0
<i>ski2-6cer7-3</i>	18.1±2.2	0.2±0.0	0.6±0.1	7.6±1.1	1.7±0.3	5.1±0.6	2.3±0.3	0.6±0.0
<i>ski2-3cer7-3</i>	16.7±1.3	0.2±0.0	0.5±0.1	7.2±0.6	1.4±0.2	4.6±0.3	2.3±0.3	0.6±0.0
<i>ski8-6cer7-3</i>	14.4±2.1	0.2±0.0	0.5±0.1	5.9±1.0	1.4±0.3	3.8±0.6	2.2±0.1	0.5±0.0
<i>ski8-7cer7-3</i>	14.3±0.5	0.1±0.0	0.7±0.1	6.3±0.2	1.8±0.1	3.6±0.2	1.3±0.4	0.5±0.0

14

15

16

17

18 **Supplemental Table 5.** Primers used in this study.

Primer	Sequence (5' to 3')
Lb1.3	ATTTTGCCGATTCGGAAC
GABI_140B07 LP	CATTTTGTCTTTCTGGCTTCG
GABI_140B07 RP	CATCAAGCAAACCTTTTGGAG
SALK_099525 LP	CTCCGACAAGAAGGATCAGTG
SALK_099525 RP	CACGTGAGCAGAGATTCCTC
SALK_141579 LP	ATTTTGATTGGTTTTCCAGGG
SALK_141579 RP	GACTTCATTGCTTATGCTCGC
SALK_122393 LP	TTTCTCATTTGAACGTACCCG
SALK_122393 RP	CGCCAAGCTTTTTGTAGTCTC
SALK_063541 LP	TTTCGGTGTGAAGAGTCGTC
SALK_063541 RP	TCGATCACTCTGTCCCTTC
SALK_060207 LP	GAACAGCTTCAACGCAAGTTC
SALK_060207 RP	AAGGAGGAGCTTCCAAAACAG
SALK_139885 LP	GACTGCAAGTACCACTTTCGC
SALK_139885 RP	TAATGGGAAACGACTTGCTTG
o8409	ATATTGACCATCATACTCATTGC
AtSKI3RT-F	GTTC AAGCGAGTTCATTGTTTC
AtSKI3RT-R	GTCTTGCGAGTATATGCATCTG
AtSKI2RT-F	GGTGAACCTCAAGCTCAGTAC
AtSKI2RT-R	CAATCTCACAATGGTTCGAACT
AtSKI8RT-F	TCGATTGATAGCTTTGTCCGTG
AtSKI8RT-R	ATCTCCAGCTTGCAGTGCC
ACTIN2-F	TCCCTCAGCACATTCCAGCAGAT
ACTIN2-R	AACGATTCCTGGACCTGCCTCATC
CER3-qPCR-F	CTCATCTCCTGTTCCACATCC
CER3-qPCR-R	TCAATGGAACACCAGCTACG
AtSKI3p-attB1	GGGGACAAGTTTGTACAAAAAAGCAGGCTGATG CAAGGAAAATTGCTG
AtSKI3-attB2-noSTOP	GGGGACCACTTTGTACAAGAAAGCTGGGTCGCT CATGGGATGTTGAACA
ScSKI3-attB1	GGGGACAAGTTTGTACAAAAAAGCAGGCTTCAT GTCGGATATTAACAGCTATTGA
ScSKI3-attB2	GGGGACCACTTTGTACAAGAAAGCTGGGCTTAG AAACATTCGTTTAGCGCCTT
AtSKI3p-attB4	GGGGCAACTTTGTATAGAAAAGTTGGATGCAAGG AAAATTGCTG
AtSKI3p-attB1R	GGGGCTGCTTTTTTGTACAACTTGCTGAATATAA CCCAATCTACAAAATG
AtSKI3-F	AAACACGAAGACCAGAGGAAATATGGAATTAGA GCAGCTTAAGAA
AtSKI3-R	GCTCTAGATCAGCTCATGGGATGTTGAAC

ScSKI3p-F	TCCCCCGGAAGCTTACACCTTCTTCTCAA
ScSKI3p-R	TTCTTAAGCTGCTCTAATTCATATTCCTCTGCTCT TCGTGTTT
ScSKI3t-F	GCTCTAGAAAATTTGGATTCAGAATAGTCAAT
ScSKI3t-R	CCCAAGCTTGATCCCGGCGCTACCTGC
AtSKI2p-attB1	GGGGACAAGTTTGTACAAAAAGCAGGCTGATG CAAGGAAAATTGCTG
AtSKI2-attB2-noSTOP	GGGGACCACTTTGTACAAGAAAGCTGGGTCGCTC ATGGGATGTTGAACA
ScSKI2-attB1	GGGGACAAGTTTGTACAAAAAGCAGGCTTCATG TCGGATATTAACAGCTATTGA
ScSKI2-attB2	GGGGACCACTTTGTACAAGAAAGCTGGGTCTTAG AAACATTCGTTTAGCGCCTT
AtSKI2p-attB4	GGGGCAACTTTGTATAGAAAAGTTGGATGCAAGG AAAATTGCTG
AtSKI2p-attB1R	GGGGCTGCTTTTTGTACAACTTGCTGAATATAA CCCAATCTACAAAATG
AtSKI2-F	AAACACGAAGACCAGAGGAAATATGGAATTAGAG CAGCTTAAGAA
AtSKI2-R	GCTCTAGATCAGCTCATGGGATGTTGAAC
ScSKI2p-F	TCCCCCGGAAGCTTACACCTTCTTCTCAA
ScSKI2p-R	TTCTTAAGCTGCTCTAATTCATATTCCTCTGCTCT TCGTGTTT
ScSKI2t-F	GCTCTAGAAAATTTGGATTCAGAATAGTCAAT
ScSKI2t-R	CCCAAGCTTGATCCCGGCGCTACCTGC

19
20
21
22
23
24
25
26
27
28
29
30
31
32