

Convergent loss of awn in two cultivated rice species *Oryza sativa* and *Oryza glaberrima* is caused by mutations in different loci

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		<u>1st exon</u>	<u>2nd exon</u>	
<i>O. glaberrima</i>	1	MNPTTAAAADQPSKPS	AAAARKRKSSAKPKASSSSLPTATAAT	NASPKRSKVAAGAGDD 59
<i>O. sativa</i>	1	MNPTTAAAADQPSKPSA	AAAARKRKSSAKPKASSSSLPTATAAT	TNASPKRSKVAAGAGDD 60
		Ins(GCC)	Sub(GCG -> ACG)	
			<u>3rd exon</u>	<u>4th exon</u>
<i>O. glaberrima</i>	60	GDGDADAAE EKPEPAKDYIHVRARRGQATDSHSLAERVRRERISERMKLLQLQSLVPGCNKI		119
<i>O. sativa</i>	61	GDADADAAE EKPEPAKDYIHVRARRGQATDSHSLAERVRRERISERMKLLQLQSLVPGCNKI		120
		Sub(GGC -> GCC)		
			<u>5th exon</u>	<u>6th exon</u>
<i>O. glaberrima</i>	120	TGKALMLDEIINYVQSLQRQVEFLSMKLATMNPQLDFDSHYMPSKDMSHMPVPAYPSGDP		179
<i>O. sativa</i>	121	TGKALMLDEIINYVQSLQRQVEFLSMKLATMNPQLDFDSHYMPSKDMSHMPVPAYPSDDP		180
			Sub(GGC -> AGC)	
<i>O. glaberrima</i>	180	TTTTAFSYTGSPATADPFTVYNCWELDLHTAMQMGATT	VGLSQDGPIATMAPSPSPLPHH	239
<i>O. sativa</i>	181	TTTTAFSYTGSPATADPFTVYNCWELDLHTAMQMGATT	GLSQDGPIATMAPSPSPLPHH	239
		<u>7th exon</u>	Del(TCG)	
<i>O. glaberrima</i>	240	PPLHGFYGGQQQQGTTVNHMKAEP		263
<i>O. sativa</i>	240	PPLHGFYGGQQQQGTTVNHMKAEP		263

Figure S1 Amino acid sequences of RAE1/An-1 in *O. glabeerima* and *O. sativa*

Amino acid sequences of RAE1/An-1 in *O. glaberrima* and *O. sativa* are aligned by ClustalW. Mutations in the DNA sequence are shown below the mutation sites. The thick gray bar under the aligned sequences represents a conserved bHLH domain. The thin black bars and gray bars above the aligned sequences indicate the region of exons.

Table S1 Primers used in this study

Primers for linkage analysis of <i>RAE1</i>		
RAE1-38F	AGATTGGTTAGGCTGCAGG	SSR
RAE1-38R	AAGGGCAGCAAATCAGGTAC	
RAE1-54F	TCACTAGCACAAATCCTCCTC	SSR
RAE1-54R	GGCAAAGAACTTGTTTGATGTTGTGAAG	
RAE1-78F	TTCTAGCACTACTAGAAAACACGTTCTGC	dCAPS(PstI)
RAE1-78R	ATATTTTGCAGGCCGGTGG	
RAE1-63F	GCTACAGTCCACGCCGCAACCCTCCGGTAC	dCAPS(KpnI)
RAE1-63R	CGTGCATGTTTAATCCGCC	
RAE1-69F	GAAGGGCAGGAAAACAAGAG	SSR
RAE1-69R	TTGTGTCCGGTGAGATTGG	
RAE1-86F	TGTATGAAATGTTACAGAACATTGCTCTGA	dCAPS(Xhol)
RAE1-86R	GTCATATGCGTGCACTTGAC	
RAE1-53F	TTGGAAAACACAGTGCCGT	SSR
RAE1-53R	CGATGGAGCAGTAGTTAGAG	
RAE1-44F	AGCGTTCAACGTTGGATGG	SSR
RAE1-44R	TCAGAGACAGAGTCAAGTGC	
Primers for linkage analysis of <i>RAE3</i>		
RM341-F	CAAGAACCTCAATCCGAGC	SSR
RM341-R	CTCCTCCCGATCCCAATC	
RM6346-F	ACTTGATCGATCAGCCACC	SSR
RM6346-R	AGGTGGTGGAGATGAAGCAG	
RM20699-F	CCCGAGCCAGACAACATTCC	SSR
RM20699-R	GAGGTGTGAGGTGAGGAAGATGC	
6KG27612-F	TAGGTAGGAGTAGGCCGGAT	Indel
6KG27612-R	GCATGCACATATGTCACTGTGTA	
6KG28331-F	CGATCTCCTTGCATCTTC	Indel
6KG28331-R	GGTGGTTAGCACCTTGTGT	
6KG28941-F	CTCCTCTGATCACCTCGCT	Indel
6KG28941-R	GGAGAGGAGCAGCTTCTTG	
6KG29384-F	GTTCGCTCAGGCAAATGAT	Indel
6KG29384-R	GCACCCAAGATTATTGGA	
6KG29722-F	ATGTTAGCCTTTCCCTCCA	Indel
6KG29722-R	GGTCTCGTTAGTCTTATGCATCT	
6KG30196-F	CTTGTTCATTTGTTGGG	Indel
6KG30196-R	GGAGGAAGAAGAGGACGAAG	