

Supplemental Table 11. Genomic comparisons of Kitaake with referenced genomes across 101 genes.

Chromosome	MSU ID	Rice gene	Kitaake genome ^a		Comparisons with referenced genomes ^b		Graphic display ^c of early mutations	Graphic display ^c of later mutations	
			5'	Coding	5'	Coding			
1	Os01g09320.1	<i>ME</i>	Kitaake	Kitaake	1 subs: Kitaake type	1 nons:Kitaake type	No dispute	No dispute	
	Os01g10110.1	<i>CKX2</i>	Nipp	Nipp			No dispute	No dispute	
	Os01g27490.1	<i>ANS1</i>	Nipp	Nipp	No dispute	No dispute			
	Os01g44260.1	<i>DFR</i>	Nipp	Nipp	No dispute	No dispute			
	Os01g54860.1	<i>NOG1</i>	Nipp	Nipp	No dispute	No dispute			
	Os01g55870.1	<i>CM3</i>	Nipp	Nipp	No dispute	No dispute			
	Os01g60190.1	<i>iPGAM1</i>	Nipp	Nipp	No dispute	No dispute			
	Os01g62920.1	<i>qSH1</i>	Nipp	Nipp	No dispute	No dispute			
	Os01g66100.1	<i>SD1</i>	Nipp	Nipp	No dispute	No dispute			
2	Os02g32660.1	<i>SBE3</i>	Kitaake	9311	2 subs:Kitaake(G->T & G->A),3 SNPs same as 9311	9311	No dispute	No dispute	
	Os02g41680.1	<i>ZB8</i>	Kitaake	Nipp			one idl:Kitaake type	No dispute	No dispute
	Os02g45810.2	<i>TTG1</i>	Nipp	Nipp	one idl:Kitaake type	No dispute	No dispute		
	Os02g46220.1	<i>SK2</i>	Kitaake	Nipp		No dispute	No dispute		
	Os02g52840.1	<i>FLS</i>	Nipp	Nipp		No dispute	No dispute		
	Os02g49230.1	<i>DTH2</i>	Nipp	Kitaake		disagrees with Nipp at T(nons)	No dispute	One later nons(specific to J)is not in Kitaake.	
3	Os03g11614.1	<i>MADS1</i>	Nipp	Nipp			No dispute	No dispute	
	Os03g14990.1	<i>CS</i>	Kitaake	Kitaake	1 subs:Kitaake & 1(C)agrees with <i>Indica</i>	2 syn:One agrees with Or & one Kitaake	No dispute	One 5' later mut(C->G,specific to Nipp)and one coding (C->T,specific to Nipp)are not in Kitaake.	
	Os03g15360.2	<i>LAR</i>	Kitaake	Nipp	3 muts:Kitaake,2 SNP:Nipp, 5SNPs/idl:9311		No dispute	No dispute	
	Os03g21260.1	<i>Unknown</i>	Nipp	Nipp		No dispute	No dispute		
	Os03g22120.2	<i>SUS4</i>	Nipp	Nipp		No dispute	No dispute		
	Os03g27230.1	<i>DAHPS1</i>	Nipp	Nipp		No dispute	No dispute		
	not listed	<i>GS3</i>	Nipp	Nipp		No dispute	No dispute		
	Os03g29614.1	<i>OsMYB3</i>	Nipp	Nipp		No dispute	No dispute		
	Os03g30420.1	<i>GL3.2</i>	Nipp	Nipp		No dispute	No dispute		
	Os03g49880.1	<i>TB1</i>	Nipp	Nipp		No dispute	No dispute		
	Os03g55389.1	<i>Hd6</i>	Nipp	Nipp		No dispute	No dispute		
	Os03g57240.1	<i>Dst</i>	Kitaake	Nipp	1 subs:Kitaake, others as Nipp	No dispute	No dispute		
	Os03g60509.1	<i>CHI</i>	Nipp	Nipp		No dispute	No dispute		
	Os03g61120.1	<i>ASA1</i>	Nipp	Nipp		No dispute	No dispute		
	4	Os04g28280.2	<i>An-1</i>	Nipp	Kitaake	1 idl:Kitaake, others as Nipp	Kitaake=Guangluai4, Shuhui-like	No dispute	2 coding-idl disputes with Shuhui
		Os04g33740.1	<i>GIF1</i>	Kitaake	Nipp			No dispute	
Os04g43680.1		<i>MYB15</i>	Nipp	Nipp		No dispute	No dispute		
Os04g43840.1		<i>An-2</i>	Nipp	Nipp		No dispute	No dispute		
Os04g47040.1		<i>Unknown</i>	Kitaake	Nipp	1 later subs of Nipp is not present		No dispute	One 5' later subs(G->A,specific to Nipp)is not in Kitaake.	
Os04g47059.1		<i>B2</i>	Nipp	Kitaake*		Nipp is a mutant, Plw differs from Kitaake in 1 syn (C->A). Kitaake was used as reference	No dispute	No dispute	
Os04g47080.1		<i>B1</i>	Nipp	Kitaake		9311,Nipponbare, Kitaake each has a different deletion in one of the last 2 exons.	No dispute	No dispute	
Os04g52540.1		<i>AGO2</i>	Nipp	Nipp			No dispute	No dispute	
Os04g56580.1		<i>IPK1</i>	Nipp	Nipp			No dispute	No dispute	
Os04g56700.1		<i>F3H</i>	Nipp	Nipp			No dispute	No dispute	
Os04g57530.1		<i>SH4</i>	Kitaake	Nipp	1 idl:Kitaake=9311, others as Nipp		No dispute	One 5' later idl(A string,specific to Nipp)is not in Kitaake.	
Os04g58110.1		<i>PK3</i>	Nipp	Nipp			No dispute	No dispute	
Os04g55560.1		<i>SHAT1</i>	Nipp	Nipp			No dispute	No dispute	
5		Os05g06480.1	<i>Chalk5</i>	Nipp	Nipp			No dispute	No dispute
		Os05g06660.1	<i>GSS</i>	Nipp	Nipp			No dispute	No dispute
	Os05g09520.1	<i>qSW5</i>	Kitaake	Nipp	1 idl:Kitaake=9311, others same as Nipp		No dispute	One 5' later idl(T insertion,specific to Nipp)is not in Kitaake.	
	Os05g10780.1	<i>unknown</i>	9311	9311	Nipp allele is unique				
	Os05g25490.1	<i>ACC7</i>	Kitaake	Nipp	1 idl:Kitaake, others same as Nipp		No dispute	No dispute	
	Os05g25640.1	<i>C4H</i>	Kitaake	Nipp	1 idl:Kitaake, others same as Nipp		No dispute	No dispute	
	Os05g38120.1	<i>SH5</i>	Nipp	Nipp			No dispute	No dispute	
	Os05g44210.1	<i>T6PS</i>	Nipp	Nipp			No dispute	No dispute	
6	Os06g04280.1	<i>EPSPS</i>	Nipp	Nipp			No dispute	No dispute	
	Os06g06320.1	<i>Hd3a</i>	Nipp	Kitaake		1 nons:Kitaake, others same as Nipp	No dispute	No dispute	
	Os06g06560.1	<i>SSY1</i>	Nipp	Nipp			No dispute	No dispute	
	Os06g10340.1	<i>C1</i>	Nipp	Kitaake		2 nons:Kitaake, others same as Nipp	No dispute	No dispute	
	Os06g12230.1	<i>TCP19</i>	Kitaake	Nipp	1 idl:Kitaake, others same as Nipp		No dispute	No dispute	
	Os06g16370.1	<i>Hd1</i>	Kitaake	Kitaake	1 idl:Kitaake, others same as Nipp	1 nons:Kitaake, others same as Nipp	No dispute	No dispute	
	Os06g18790.1	<i>3GT</i>	Nipp	Nipp			No dispute	No dispute	
	Os06g37180.1	<i>vATPB1</i>	Kitaake	Nipp			No dispute	One 5' later idl(specific to Nipp)is not in Kitaake.	
	Os06g45540.1	<i>GL6</i>	Nipp	Nipp			No dispute	No dispute	
7	Os07g05900.1	<i>PROG1</i>	Kitaake	Nipp	1 idl:Kitaake=Or, others same as Nipp		1 idl of 2 5'mutations not in Kitaake	No dispute	
	Os07g08420.1	<i>bZIP58</i>	Nipp	Nipp				No dispute	
	Os07g11030.1	<i>Rc</i>	Kitaake	Nipp	1 idl:Kitaake=Or, others same as Nipp			No dispute	
	Os07g13170.1	<i>SSH1</i>	Nipp	Nipp				No dispute	
	Os07g15770.1	<i>Ghd7</i>	Nipp	Kitaake		1 nons:early stop codon in Kitaake, others same as Nipp	No dispute	No dispute	
	Os07g39700.1	<i>SDR4</i>	Kitaake	Nipp	mixed sites of I & J, no specific site		No dispute	No dispute	
	Os07g41240.1	<i>BG2</i>	Kitaake	Nipp	1 idl of Nipp not in Kitaake, others same as Nipp		No dispute	One 5' later idl(specific to Nipp)is not in Kitaake.	
	Os07g42960.1	<i>DAHPSp</i>	Nipp	Nipp			No dispute	No dispute	
	Os07g45090.1	<i>NADH</i>	Nipp	Nipp			No dispute	No dispute	
	Os07g49460.1	<i>PRR37</i>	Nipp	Kitaake		1 nons (C->G) of Nipp not in Kitaake & 1 nons(T->C) of Kitaake not in Nipp	No dispute	One later nons(specific to Nipp)is not in Kitaake.	
8	Os08g07740.1	<i>Hd5(Gdh8)</i>	Kitaake	Nipp	1 idl:Kitaake, others same as Nipp		No dispute	No dispute	
	Os08g07740.1	<i>SSY3</i>	Nipp	Nipp			No dispute	No dispute	
	Os08g09230.2	<i>APS1</i>	Nipp	Nipp			No dispute	No dispute	
	Os08g34290.1	<i>CM4</i>	Nipp	Nipp			No dispute	No dispute	
	Os08g37890.1	<i>RAE2</i>	Nipp	Nipp & 9311			No dispute	No dispute	
	Os08g39890.1	<i>IPA1</i>	Kitaake	Kitaake	1 idl:Kitaake, others same as Nipp	1 nons:Kitaake, others same as Nipp	No dispute	No dispute	
	Os08g41940.1	<i>SPL16</i>	Nipp	Nipp			No dispute	No dispute	
9	Os09g26890.1	<i>unknown</i>	Nipp	Nipp			No dispute	No dispute	
	Os09g26900.1	<i>unknown</i>	Nipp	Nipp			No dispute	No dispute	
	Os09g26999.1	<i>DEP1</i>	Nipp	Nipp			No dispute	No dispute	
	Os09g29070.1	<i>PGI</i>	Nipp	Nipp			No dispute	No dispute	
	Os09g29820.1	<i>bZIP73</i>	Nipp	Nipp			No dispute	No dispute	
	Os09g36220.1	<i>PRR95</i>	Kitaake	Nipp	1 subs:Kitaake, others same as Nipp		No dispute	No dispute	
	Os09g36800.1	<i>DHQS</i>	Nipp	Kitaake			No dispute	One later syn(specific to Nipp)is not in Kitaake.	
10	Os10g11140.2	<i>PGMp</i>	Nipp	Nipp			No dispute	No dispute	
	Os10g17260.1	<i>F3'H</i>	Nipp	Nipp			No dispute	No dispute	
	Os10g32600.1	<i>Ehd1</i>	Kitaake	Nipp	Mixed sites of I & J, 1 idl:Kitaake		No dispute	No dispute	
	Os10g41480.1	<i>DAHPS2</i>	Kitaake	Nipp	1 idl:not in Kitaake, others same as Nipp		No dispute	One later 5' idl(specific to Nipp)is not in Kitaake.	
	Os10g42430.1	<i>MYC2</i>	Nipp	Nipp			No dispute	No dispute	
	Os10g40600.1	<i>NRT1.1B</i>	Nipp	Nipp			No dispute	No dispute	
11	Os11g05110.2	<i>PK1</i>	Nipp	Nipp			No dispute	No dispute	
	Os11g07910.1	<i>unknown</i>	Nipp	Nipp			No dispute	No dispute	
	Os11g10510.1	<i>ADH2</i>	Nipp	Nipp			No dispute	No dispute	
	Os11g29350.2	<i>unknown</i>	Nipp	Nipp			No dispute	No dispute	
	Os11g29400.1	<i>unknown</i>	Kitaake	Nipp	1 idl:Kitaake, others same as Nipp		No dispute	No dispute	
	Os11g32650.1	<i>CHS</i>	Nipp	Nipp			No dispute	No dispute	
12	Os12g01760.1	<i>unknown</i>	Nipp	Nipp			No dispute	No dispute	
	Os12g34860.1	<i>unknown</i>	Nipp	Nipp			No dispute	No dispute	
	Os12g34874.1	<i>SDH2(DHQD2)</i>	Nipp	Nipp			No dispute	No dispute	
	Os12g34920.1	<i>unknown</i>	Nipp	Nipp			No dispute	No dispute	
	Os12g38920.1	<i>unknown</i>	Nipp	Nipp			No dispute	No dispute	
	Os12g38900.1	<i>CM2</i>	Nipp	Nipp			No dispute	No dispute	
	Non-Nipponbare regions		27	16					
	Disputed later mutations		7	6					
	Disputed early mutations		1	0					

^a Nipp is for Nipponbare

^b Mut stands for mutation, subs for substitution, and idl is for indel. Synonymous substitution is abbreviated as syn and nonsynonymus as nons.

^c The graphic displays are in Additional file 2: Fig. S1.