

Table S1: Datasets used for Rice Blast analysis.

GEO ID	Genotype	Tissue	Stage	Strain
GSE7256	Nipponbare (S)	Leaf	Seedling Stage	FR13
GSE18361	Nipponbare (S)	Root/leaf	Seedling Stage	Guy11
GSE28308	Non-transgenic Taipei 309 (S)	Seedling	Seedling Stage	PLP-1
	Transgenic line OX-Pi54 (R)			
GSE30941	Nipponbare (S)	Leaf	Seedling Stage	FR13
				CL367
				BR29
GSE39635	Nipponbare [Pia] (R)	Leaf	Fourth Leaf Stage	Ina86-137
	Transgenic line OX-OsWRKY28 (S)			
GSE41798	IRBL18 (Pi9 NIL of LTH) (R)	Leaf	Seedling Stage	CH63
	IRBL22 (Pi9 NIL of LTH) (R)			
	LTH (S)			
GSE62893	Nipponbare (Pia) (R)	Leaf	Fourth Leaf Stage	P91-15B
	Nipponbare (S)			
GSE62894	Nipponbare (Pish) (R)	Leaf	Fourth Leaf Stage	Kyu77
	Nipponbare (S)			
GSE62895	Nipponbare (Pia) (R)	Root	Fourth Leaf Stage	P91-15B
	Nipponbare (S)			
GSE62422	Nipponbare (Pia) (R)	Leaf	Fourth Leaf Stage	P91-15B
	Nipponbare (S)			

Table S2: Datasets used for Bacterial blight analysis.

GEO ID	Genotype	Tissue	Stage	Strain
GSE36272	Nipponbare (S)	Leaf	14 Days	PXO99A
				PXO99AME7
				PXO99AME5
				T7174
				PXO86
				BLS303
				PXO99AME1
				PXO99AME2
				PXO99A-2
				MOCK
GSE36272	IR24 (S)	Leaf	14 Days	PXO99A
				PXO99AME7
				PXO99AME5
				T7174
				PXO86
				BLS303
				PXO99AME1
				PXO99AME2
				PXO99A-2
				MOCK
GSE33411	IR24 (S)	Whole plants	2 Weeks	PXO86
	IRBB5 (R)			
	IRBB7 (R)			
GSE16793	Nipponbare (S)	Shoot	2 Weeks	PXO99A
GSE43050	IR24 (R)	Leaf	35 Days	PXO71
GSE63337	Osaba1-1 (R)	Leaf	6.5 Leaf Stage	PXO99
	Nipponbare (S)			

Table S3: List of primers used for quantitative real time PCR.

Locus id	WRKY name	Primer sequence
LOC_Os01g40260	OsWRKY77_qF	GAGGAAGTACGGCAAGAAGAT
	OsWRKY77_qR	CTCCACCCGCTTCTTCAC
LOC_Os01g51690	OsWRKY26_qF	GAGGTCGGACGATGAGATACT
	OsWRKY26_qR	CCGGTAGTAGTTCCTCGGATTA
LOC_Os01g53260	OsWRKY23_qF	GCAACGTGAAGAAGCAAGTG
	OsWRKY23_qR	AACTGGGAGAGGAACTGGA
LOC_Os03g21710	OsWRKY79_qF	GTTTCATGCAGTGGGACGA
	OsWRKY79_qR	GTTTCCGCCGTCGTTCT
LOC_Os05g39720	OsWRKY70_qF	TACTCTTACACGAGCCAGCA
	OsWRKY70_qR	GGCTGCTCAAAGAACGACAT
LOC_Os05g45230	OsWRKY58_qF	CAGAAGGCCGTCAAGAACA
	OsWRKY58_qR	CAGGTTCTCTGTTGCAGTTTG
LOC_Os05g49620	OsWRKY19_qF	AGGTAGTGGCAGAGCCTAT
	OsWRKY19_qR	AGAAGTCGCTGCTGAACTG
LOC_Os06g44010	OsWRKY28_qF	TACGAGGGCGAGCACAA
	OsWRKY28_qR	CTGGTGCTGTGAGTGCTTG
LOC_Os09g25070	OsWRKY62_qF	GAGGAGGTGGTGCAAGTG
	OsWRKY62_qR	GTGGGATTTGATCCACAACCTA
LOC_Os12g02450	OsWRKY64_qF	TCGTCTGAAGCATCACAGATTAG
	OsWRKY64_qR	AACAGGTGACGGAGATGTTG
LOC_Os05g46020	OsWRKY07_qF	TCCGGACGAAGTCAGAGAT
	OsWRKY07_qR	CGGTAGTAGTTCCTTGGGTTG
LOC_Os09g25060	OsWRKY76_qF	GTGCTCCATCTCCATCAACT
	OsWRKY76_qR	CGGCACACCTCCTTGAG
LOC_Os03g50885	OsActin_qF	GATCTGGCATCACACCTTCTAC
	OsActin_qR	CTGGGTCATCTTCTCACGATTG

Table S4: Structural variations at nucleotide level in Tetep and HP2216 in comparison with Nipponbare.

Gene name	Position	Nipponbare	HP2216	Tetep
WRKY7	116	T	T	C
	500	G	G	A
	507	G	G	A
	511-522	CCGTGTTCAATG	deletion	CCGTGTTCAATG
	584	C	T	T
	900	T	T	C
	935	T	T	C
	1006-1192	*	*	ATATACTATGGCTGTGTTTCGTCC AGTGACATTGGGTGAGAAAAGGTC CTCGTTTTCCGCGCGCACGTTCC CAAACACTAAACGGTGCGTTTTT TGNNAATAGTTAATACTCAATTA ATCATATGCTAATGGCCACCTCG TTTTGCGTATCTTCCAATCTCCCT ACTCCCCTTCTCCTCAAACACACC CTAT
	1516	T	T	C
	1895	C	C	T
WRKY19	88	C	C	G
	558	A	A	T
	559	A	A	C
	623	C	C	T
	625-632	CCGCCGCCG	CCGCCGCCG	deletion
	799	G	G	A
WRKY23	514	C	C	A
	524	G	G	A
	731	G	G	A
	947	T	T	C
	1190	A	A	*
	1246	G	G	A
	1326	*	*	A
	1578	G	G	T
	1945-1947			AAA INSERTION
	2161-2162			GG INSERTION
	2442	T	T	C
	2655	G	G	A
	2762	*	*	C
	2791	*	*	A
	2859-2864	ACTTGA	ACTTGA	deletion
	2999	T	T	C
	3022	A	A	*
	3024	A	A	T
	3074			TA INSERTION
	3186-3189			TATA INSERTION
WRKY26	78	A	A	G

	114-116	*	*	ACG INSERTION
	188	G	G	T
	189-230	GCTCCGGCAGCGGCTACGG CGCCGCCTCGTACGTTGCTC CA	GCTCCGGCAGCGGCTACGGCG CCGCCTCGTACGTTGCTCCA	DELETION
	241	G	G	C
	314-316			CCA INSERTION
	363	C	C	G
	410-412			GGC INSERTION
	455	T	T	A
	499	C	C	G
	516	T	T	*
	523-525	ATA	ATA	DELETION
WRKY28	95	C	C	T
	205-206	TC	TC	AA
	1043-1056	ACAACCCGTGCCCG	DELETION	ACAACCCGTGCCCG
WRKY58	257	A	A	C
	277	C	C	A
	825	C	C	T
	837-839	TCT	TCT	DELETION
WRKY62	902	T	T	A
	1117	C	C	A
	1124	A	A	*
	1158	T	T	C
	1175	A	A	G
	1331	A	A	G
	1359-1368	*	*	GTTGGTTTT
	1385	G	G	A
	1917	G	G	A
WRKY64	99	G	C	C
	111	A	G	G
	142	A	G	G
	154	C	T	T
	163	T	C	C
	168	T	C	C
	169	C	T	T
	187-190	TAGC	*	*
	222	A	G	G
	231	T	G	G
	246-247	TC	AT	AT
	256-258	*	CAT	CAT
	281	C	T	T
	289	T	T	A
	354	G	G	A
	419	G	G	T
	430	C	C	T
	463	C	C	G

	469	A	A	G
	473	A	A	G
	479	G	G	C
	484	A	A	G
	492	A	A	T
	503-507	GATTC	GATTC	CCACA
	509-512	CCGC	CCGC	GATG
	521	G	G	C
	524-526	GGC	GGC	CAT
	530	C	C	G
	559-560	TG	TG	CA
	570-572	CTT	CTT	*
	590	A	A	T
	700	G	G	T
	749	G	G	A
	753	T	T	*
	766	A	A	C
	785-787	CAA	CAA	*
	794	G	G	A
	803	T	T	C
	878	C	C	A
	902	A	A	G
	905	*	*	T
	924	T	T	C
	1005-1010	*	ATATAT	*
	1043	T	C	C
	1079	T	A	T
	1112	C	C	A
	1115	T	C	T
	1139	T	C	T
	1143	G	A	G
	1157	G	T	G
	1175	C	T	C
	1195	C	C	T
	1201	C	T	C
	1488	G	G	T
	1498	C	T	C
WRKY70	57	T	T	G
	107	T	T	C
	483	T	T	G
	509	T	T	C
	534	A	A	G
	764	A	A	T
	1250	C	C	A
	1825	G	G	T

	1860	T	T	C
	2243	C	C	T
	2484	G	G	A
	2789	T	T	*
WRKY76	569	G	G	A
	895-944	CGAGCGCGGACAGCTCGCT GCTGGTGGCGACGTACGAG GGCGAGCAC	deletion	CGAGCGCGGACAGCTCGCTGCTG GTGGCGACGTACGAGGGCGAGCA C
	901	C	C	T
WRKY77	824-826	CAC	deletion	CAC
WRKY79	86	T	T	C
	492	A	A	T
	898	*	*	T
	1363	A	A	C
	1365	C	C	T

Table S5: Variations at amino acid level in HP2216 and Tetep in comparison with Nipponbare

Gene name	Position	Nipponbare	HP2216	Tetep
WRKY7	80	A	A	T
	81-84	AVFN	*	AVFN
WRKY19	85-97	QVMPPGHGGLISG		QVMPPGHGGLISG
	184	A	A	T
WRKY23	155	T	T	K
WRKY26	15	N	S	N
	27	*	D	*
	52-65	GSGSGYGAASYVAP	*	GSGSGYGAASYVAP
	66	T	S	T
	94	*	P	*
	110	A	G	A
	126	*	G	*
	147	T	M	T
	184	N	N	*
	186	Y	Y	F
	187	R	R	G
	188	C	C	T
	190-209	TEGCNVKKRVERDK NDPRYVV	TEGCNVKKRVERDKN DPRYVV	*
	210	T	T	F
	211	M	T	V
	214	G	G	L
	215	I	I	V
	216	H	H	F
	217	N	N	K
	218	H	H	F
	219	V	V	G
	221	P	P	F
WRKY28	13	P	P	S
	50	P	P	T
WRKY58	72	A	A	E
	153	L	L	*
WRKY62	29-31	*	*	CVQ
WRKY64	9	P	S	S
	33	R	R	K
	55	G	G	C
	73	I	I	V
	75	E	E	Q
	79	Q	Q	L
	83	D	D	P
	84	S	S	H
	85	P	P	D

	86	H	H	D
	89	D	D	H
	90	G	G	H
	92	L	L	V
	102	V	V	I
	106	S	S	*
	112	S	S	C
	160	N	N	K
	192	H	H	Q
	220	A	A	V
	222	S	L	S
	318	A	A	S
	321	A	V	A
WRKY70	90	I	I	M
	99	I	I	T
	178	T	T	N
	370	A	A	S
	477	P	P	L
WRKY76	73	L	*	M
	74	T	*	D
	75	E	*	A
	76	V	*	A
	77	I	*	W
	78	A	*	R
	79	R	*	G
	80	L	*	G
	81	Y	*	V
	82	G	*	G
	83	G	*	C
	84	Q	*	S
	85	I	*	P
	86	P	*	V
	87	R	*	C
	88	L	*	L
	89	G	*	D
	90	L	*	L
	91	D	*	C
	92	G	*	V
	93	S	*	G
	94	A	A	L
	97	P	P	V
	99	P	P	E
	100-134	*	*	PSAARHELLDRPAGCR GGGDSKSMTNDEAKIL EAK

	136	S	S	T
	137	P	P	Q
	138	L	L	M
	140	G	G	E
	141	K	K	E
	142-147	*	*	NRRLTE
	220-311	TRDNPSPRAYFRCAF APSCPVKKKVQRSAE DSSLLVATYEGEH PHPSPRAGELPAAAG GAGGSLPCISISINSSGP TITLTLTKNGGAVQV	*	TRDNPSPRAYFRCAFAP SCPVKKKVQRSAEDSS LLVATYEGEHHPHPS PRAGELPAAAGGAGGS LPCISISINSSGPTITLTLT KNGGAVQV
WRKY77	93	H	H	*
WRKY79	29	V	V	A
	216	N	N	H

Table S6: Selected known Transcription factor (TF) binding elements in the promoters of DEG WRKYs.

Sl. No.	Pro ID	Nipponbare		HP2216		Tetep	
		Binding sequence	TF family	Binding sequence	TF family	Binding sequence	TF family
	pW07	acGTCGGtgt	AP2	acGTCGGtgt	AP2	acGTCGGtgt	AP2
		acgccCACGTcggtgctc	bHLH	acgccCACGTcggtgctc	bHLH		
		cCCACGtcg	bZIP	cCCACGtcg	bZIP	cCCACGtcg	bZIP
		cTTGACta	WRKY	cTTGACta	WRKY	tGTCAA	WRKY
		ccAACCAact	MYB	ccAACCAact	MYB	ccAACCAact	MYB
		aaaafTTTCT	HSF	aaaafTTTCT	HSF		
		CTCGG	Dehydrin	CTCGG	Dehydrin	CTCGG	Dehydrin
		agCGGCT	ERF	agCGGCT	ERF	agCGGCT	ERF
	pW19	aACGTGc	bHLH	aACGTGc	bHLH		
		aaaACGTGct	bZIP	aaaACGTGct	bZIP	aaaACGTGct	bZIP
		cgGTCAAagt	WRKY	cgGTCAAagt	WRKY	cgGTCAAagt	WRKY
		tggTAGGTtg	MYB	tggTAGGTtg	MYB	tggTAGGTtg	MYB
		caaCCTTAg	AP2	caaCCTTAg	AP2	caaCCTTAg	AP2
		AGAAAgtttt	HSF	AGAAAgtttt	HSF	AGAAAgtttt	HSF
		CCGAG	Dehydrin	CCGAG	Dehydrin		
	pW23	tcCGGCCgcc	AP2	tcCGGCCgcc	AP2	tcCGGCCgcc	AP2
		gtggcgCACGTccggccg	bHLH	gtggcgCACGTccggccg	bHLH		
		taaCGTGGc	bZIP	taaCGTGGc	bZIP		
		ttTTGACttc	WRKY	ttTTGACttc	WRKY	ttTTGACttc	WRKY
		aaACCTAtct	MYB	aaACCTAtct	MYB	gggTGGTTgt	MYB
		TCGAC	Dehydrin	TCGAC	Dehydrin	AGAACTtttt	HSF
	pW26	ccaCCGACgt	AP2	ccaCCGACgt	AP2	ccaCCGACgt	AP2
		cGAAGCttca	HSF	cGAAGCttca	HSF	cGAAGCttca	HSF
		gCACGTg	bHLH	gCACGTg	bHLH	gCACGTg	bHLH
		acatgCACGTgta	bZIP	acatgCACGTgta	bZIP	acatgCACGTgta	bZIP
		actTTGACca	WRKY	actTTGACca	WRKY	CCAAC	Dehydrin
		GTAGG	Dehydrin	GTGGG	Dehydrin	TGACC	WRKY
		ggCGGCT	ERF	ggCGGCT	ERF	AGCCGca	ERF
	pW28	GCATGtgg	bHLH	GCATGtgg	bHLH	GCATGtgg	bHLH
		tacCAGCTgg	bZIP	tacCAGCTgg	bZIP	tacCAGCTgg	bZIP
		gaGTCAAcaa	WRKY	gaGTCAAcaa	WRKY	gaGTCAAcaa	WRKY
		gcAACCAgcc	MYB	gcAACCAgcc	MYB	gcAACCAgcc	MYB
		AGAACTtttt	HSF	AGAACTtttt	HSF	AGAACTtttt	HSF
		GTCGT	Dehydrin	GTCGT	Dehydrin	GTCGT	Dehydrin
	pW58	ccgACGTCac	bZIP	ccgACGTCac	bZIP	ccgACGTCac	bZIP
		gcaCCGACac	AP2	gcaCCGACac	AP2	gcaCCGACac	AP2
		ctgcccCACGTgttctg	bHLH	ctgcccCACGTgttctg	bHLH	ctgcccCACGTgttctg	bHLH
		ccgTTGACga	WRKY	ccgTTGACga	WRKY	ccgTTGACga	WRKY
		gcAACCAacta	MYB	gcAACCAacta	MYB	gcAACCAacta	MYB
		CCGAG	Dehydrin	CCGAG	Dehydrin	CCGAG	Dehydrin

Sl. No.	Pro ID	Nipponbare		HP2216		Tetep	
		Binding sequence	TF family	Binding sequence	TF family	Binding sequence	TF family
	pW62	ctcgggCACGTAagcacg	bHLH	ctcgggCACGTAagcacg	bHLH	ctcgggCACGTAagcacg	bHLH
		ttCACGTttt	bZIP	ttCACGTttt	bZIP	ttCACGTttt	bZIP
		cgGTCAAag	WRKY	cgGTCAAag	WRKY	cgGTCAAag	WRKY
		gaAACCAacg	MYB	gaAACCAacg	MYB	gaAACCAacg	MYB
		ccTACGAagc	AP2	ccTACGAagc	AP2	ccTACGAagc	AP2
		CCAAC	Dehydrin	CCAAC	Dehydrin	CCAAC	Dehydrin
		AGCCGcg	ERF	AGCCGcg	ERF	AGCCGcg	ERF
		ACGGCgcc	NAC	ACGGCgcc	NAC	ACGGCgcc	NAC
	pW64	GAACGtac	bHLH	GAACGtac	bHLH		
		atgCGTCAca	bZIP	atgCGTCAca	bZIP		
		tagTGGTTgc	MYB	tagTGGTTgc	MYB	tagTGGTTgc	MYB
		tgaagGTTCT	HSF	tgaagGTTCT	HSF	tgaagGTTCT	HSF
		ATCGG	Dehydrin	CCTAC	Dehydrin		
	pW70	tccACGTCac	bZIP	tccACGTCac	bZIP	tccACGTCac	bZIP
		cCACGTc	bHLH	cCACGTc	bHLH	cCACGTc	bHLH
		gctTTGACca	WRKY	gctTTGACca	WRKY	gctTTGACca	WRKY
		ccAACCAatct	MYB	ccAACCAatct	MYB	ccAACCAatct	MYB
		agtatATTCT	HSF	agtatATTCT	HSF	aaaCCTTAat	AP2
		CTGAC	Dehydrin	CTGAC	Dehydrin	agtatATTCT	HSF
						CTGAC	Dehydrin
	pW76	gTGACGtaag	bZIP	gTGACGtaag	bZIP		
		attcgtgACGTGcgctcc	bHLH	attcgtgACGTGcgctcc	bHLH	attcgtgACGTGcgctcc	bHLH
		cTTGACcg	WRKY	cTTGACcg	WRKY	cTTGACcg	WRKY
		tcACCTAgcc	MYB	tcACCTAgcc	MYB	tcACCTAgcc	MYB
		AGAATattat	HSF	AGAATattat	HSF	AGAACatgct	HSF
		CACGCgtgccgaac	AP2	CACGCgtgccgaac	AP2	CACGCgtgccgaac	AP2
		CCGAA	Dehydrin	CCGAA	Dehydrin	CCGAA	Dehydrin
	pW77	gtGACGTact	bZIP	gtGACGTact	bZIP		
		GCGCGcgc	bHLH	GCGCGcgc	bHLH	GCGCGcgc	bHLH
		tCCGTTgagt	MYB	tCCGTTgagt	MYB	tCCGTTgagt	MYB
		CCGTC	Dehydrin	CCGTC	Dehydrin		
		TGACT	WRKY	TGACT	WRKY		
	pW79	gtgtgaCACGTcgtcccg	bHLH	gtgtgaCACGTcgtcccg	bHLH		
		ctaCGTGGa	bZIP	ctaCGTGGa	bZIP	ctaCGTGGa	bZIP
		cgGTCAAagg	WRKY	cgGTCAAagg	WRKY		
		gCCGTTcggt	MYB	gCCGTTcggt	MYB	gCCGTTcggt	MYB
		cgaaaTTTCT	HSF	cgaaaTTTCT	HSF	cgaaaTTTCT	HSF
		GTCTG	Dehydrin	GTCTG	Dehydrin		

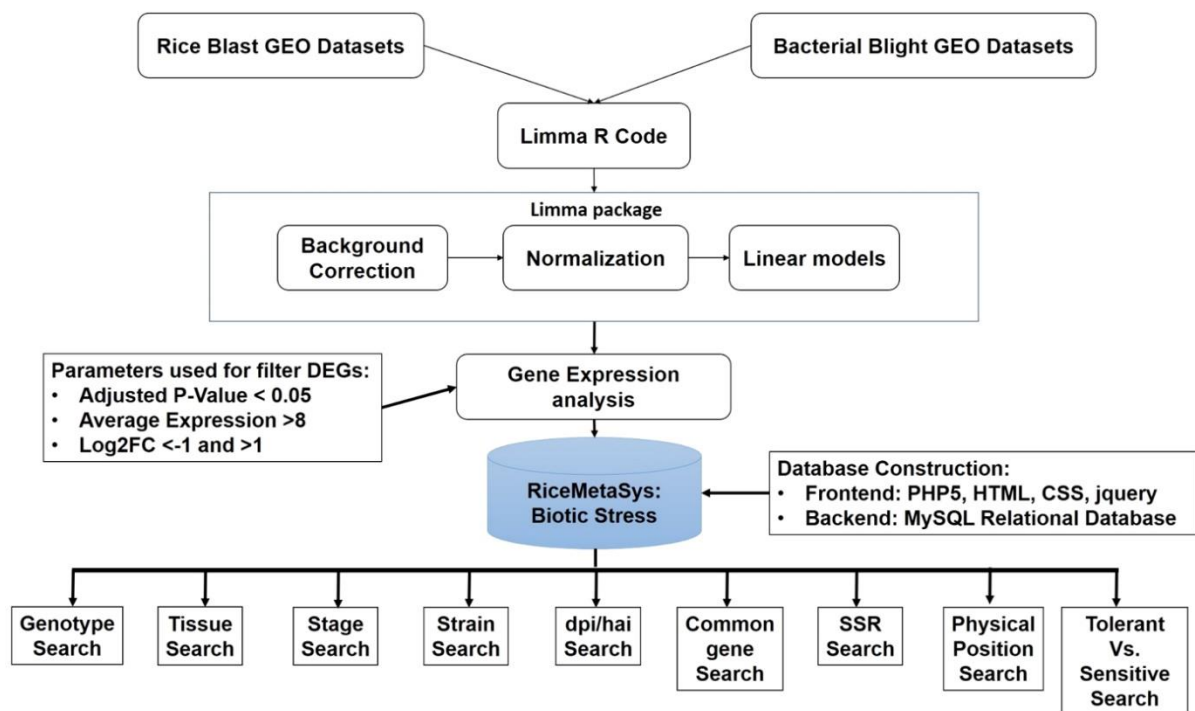


Fig. S1: Metadata Analysis and Database Design: Schematic Diagram of RiceMetaSys (Biotic Stress) Database. Expression datasets were downloaded from the NCBI Gene expression Omnibus (GEO) Database. The datasets were analyzed by using limma package in R platform. Different kinds of search options were enabled for users to retrieve responsive genes from the Database.

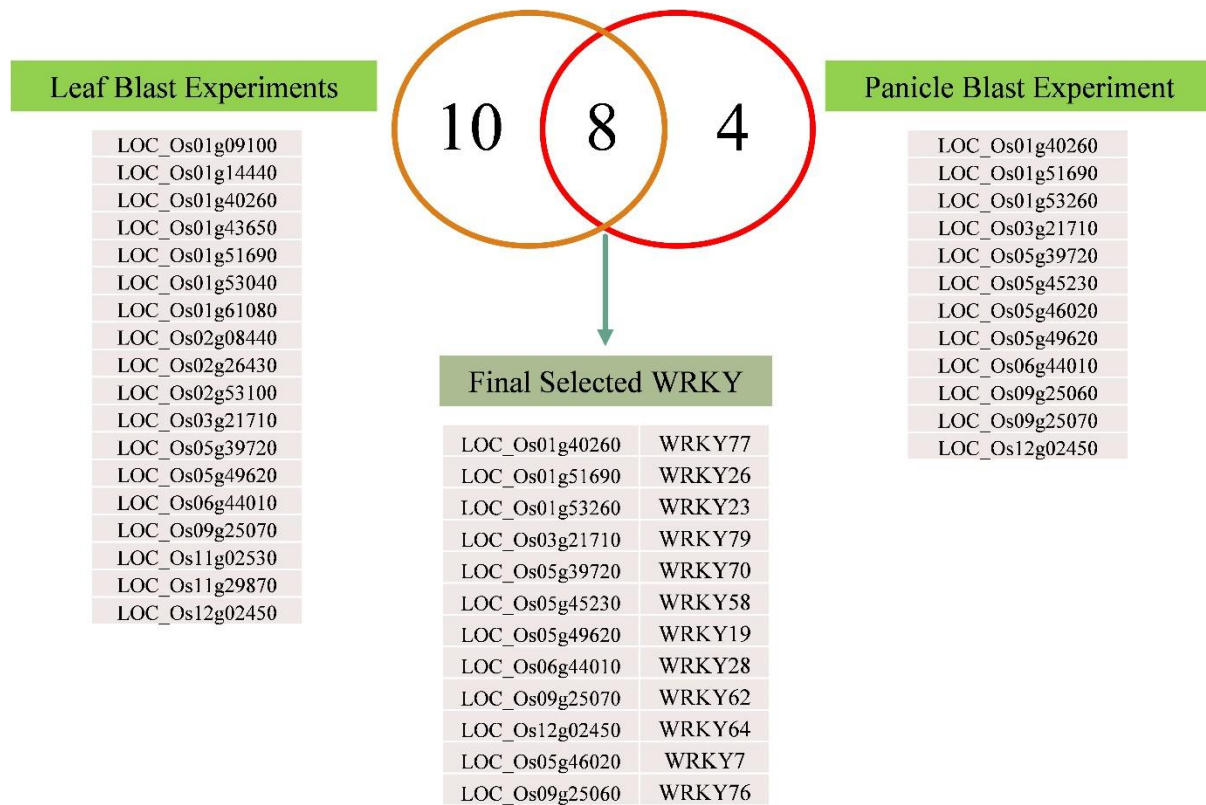


Fig. S2: Differentially expressed WRKY genes selected from RiceMetaSysB database and from panicle blast transcriptome.


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150      160      170      180      190      200      210
LOC_Os12g02450_WRKY64  -----MKNSSNKRPLVADQWHPSS 19
HWRKY64                -----MKNSSNKRSLVADQWHPSS 19
T_WRKY64                -----MKNSSNKRSLVADQWHPSS 19
LOC_Os03g21710_WRKY79  -----MAFSSEGGVPAE 12
H_WRKY79                -----MAFSSEGGVPAE 12
T_WRKY79                -----MAFSSEGGVPAE 12
LOC_Os05g49620_WRKY19  -----MVELCGGEGEGQI 13
H_WRKY19                -----MVELCGGEGEGQI 13
T_WRKY19                -----MVELCGGEGEGQI 13
LOC_Os05g46020_WRKY07  -----MAAVGAHAHV 10
T_WRKY07                -----MAAVGAHAHV 10
H_WRKY07                -----MAAVGAHAHV 10
LOC_Os01g51690_WRKY26  -----MYMAAAAAGASTP 13
H_WRKY26                -----MYMAAAAAGASTP 13
T_WRKY26                -----MYMAAAAAGASTP 13
H_WEKY77                -----MSSLYPSLL 9
T_WRKY77                -----MSSLYPSLL 9
LOC_Os01g40260_WRKY77  -----MSSLYPSLL 9
LOC_Os05g39720_WRKY70  SNSFMQDSMLMAPLGGDPYNGEQQQPWSYQEPMTDADTRPAEFTSSAAAGDVAGNGSYQVAAPAAAGGF 210
H_WRKY70                SNSFMQDSMLMAPLGGDPYNGEQQQPWSYQEPMTDADTRPAEFTSSAAAGDVAGNGSYQVAAPAAAGGF 210
T_WRKY70                SNSFMQDSMLMAPLGGDPYNGEQQQPWSYQEPMTDADTRPAEFTSSAAAGDVAGNGSYQVAAPAAAGGF 210
LOC_Os01g53260_WRKY23  -----MENLQLQGDD--HDDEALPHFFPYFAVPSPP 28
H_WRKY23                -----MENLQLQGDD--HDDEALPHFFPYFAVPSPP 28
T_WRKY23                -----MENLQLQGDD--HDDEALPHFFPYFAVPSPP 28
T_WRKY58                -----MDGLEAAAGDQQHGRLLIPLQPAAYLASSS 30
H_WRKY58                -----MDGLEAAAGDQQHGRLLIPLQPAAYLASSS 30
LOC_Os05g45230_WRKY58  -----MDGLEAAAGDQQHGRLLIPLQPAAYLASSS 30
LOC_Os06g44010_WRKY28  RLSFSSPSSPPFPVLDQYIQFMDSWIEQTSLSLDLNVGLPSTARRSSAPAAPIKVLVEENFLSFKKDE 107
H_WRKY28                RLSFSSPSSPPFPVLDQYIQFMDSWIEQTSLSLDLNVGLPSTARRSSAPAAPIKVLVEENFLSFKKDE 107
T_WRKY28                RLSFSSPSSPPFPVLDQYIQFMDSWIEQTSLSLDLNVGLPSTARRSSAPAAPIKVLVEENFLSFKKDE 107
H_WRKY62                -----MDDGDGSSSPVDDSAAGLLPLFRSFCVQ 31
T_WRKY62                -----MDDGDGSSSPVDDSAAGLLPLFRSFCVQ 31
LOC_Os09g25070_WRKY62  -----MDDGDGSSSPVDDSAAGLLPLFRSFCVQ 28
LOC_Os09g25060_WRKY76  -----MDAANRGGVGCSPVCLDLCVGLSPVREPSAARH 33
H_WRKY76                -----MDAANRGGVGCSPVCLDLCVGLSPVREPSAARH 33
T_WRKY76                -----MDAANRGGVGCSPVCLDLCVGLSPVREPSAARH 33

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220      230      240      250      260      270      280
LOC_Os12g02450_WRKY64  VCCDHRAALREIARQSLVTQLRAIVLPALHSDEKRDGLAAQ-----MLEGILDCSRKAISE 75
HWRKY64                VCCDHRAALREIARQSLVTQLRAIVLPALHSDEKRDGLAAQ-----MLEGILDCSRKAISE 75
T_WRKY64                VCCDHRAALREIARQSLVTQLRAIVLPALHSDEKRDGLAAQ-----MLEGILDCSRKAISE 75
LOC_Os03g21710_WRKY79  RVAAAVNDLVEVRDGL--LVRLRGFLPPPPQAEQSSSRPFC-----AAELMDATMSKILMSA 65
H_WRKY79                RVAAAVNDLVEVRDGL--LVRLRGFLPPPPQAEQSSSRPFC-----AAELMDATMSKILMSA 65
T_WRKY79                RVAAAVNDLVEVRDGL--LARLRGFLPPPPQAEQSSSRPFC-----AAELMDATMSKILMSA 65
LOC_Os05g49620_WRKY19  MLATELAQLRAMARE----LEAKMDFRVAAR--ELCRA-----LASSVDRSIRLAASC 61
H_WRKY19                MLATELAQLRAMARE----LEAKMDFRVAAR--ELCRA-----LASSVDRSIRLAASC 61
T_WRKY19                MLATELAQLRAMARE----LEAKMDFRVAAR--ELCRA-----LASSVDRSIRLAASC 61
LOC_Os05g46020_WRKY07  YHHPVSGLSAPAGDAAYS--MS--SYFSHGGSTSSS-----ASSFSAALAAATTPPLPDP 63
T_WRKY07                YHHPVSGLSAPAGDAAYS--MS--SYFSHGGSTSSS-----ASSFSAALAAATTPPLPDP 63
H_WRKY07                YHHPVSGLSAPAGDAAYS--MS--SYFSHGGSTSSS-----ASSFSAALAAATTPPLPDP 63
LOC_Os01g51690_WRKY26  FNFCRHGSHAEYD-AVFSGSMARRPSAAPHGGGASGSGSGYGAASYVAPTFGAARFQQHLDLDDYLS 82
H_WRKY26                FNFCRHGSHAEYD-AVFSGSMARRPSAAPHGGGASGSGSGYGAASYVAPTFGAARFQQHLDLDDYLS 82
T_WRKY26                FNFCRHGSHAEYD-AVFSGSMARRPSAAPHGGGASGSGSGYGAASYVAPTFGAARFQQHLDLDDYLS 69
H_WEKY77                SLSESPAERYRQVGGGRYAGEDVDDDDMAAVADVSSY-----LSFDMDDVEYITPEVGFHS 67
T_WRKY77                SLSESPAERYRQVGGGRYAGEDVDDDDMAAVADVSSY-----LSFDMDDVEYITPEVGFHS 67
LOC_Os01g40260_WRKY77  SLSESPAERYRQVGGGRYAGEDVDDDDMAAVADVSSY-----LSFDMDDVEYITPEVGFHS 67
LOC_Os05g39720_WRKY70  RQQSRRSSDDGYNWRKYQKQMKGSENRPSYKCTFFPGCPTKKKVEQSPDGQVTEIVYKGAHSHKPPQN 280
H_WRKY70                RQQSRRSSDDGYNWRKYQKQMKGSENRPSYKCTFFPGCPTKKKVEQSPDGQVTEIVYKGAHSHKPPQN 280
T_WRKY70                RQQSRRSSDDGYNWRKYQKQMKGSENRPSYKCTFFPGCPTKKKVEQSPDGQVTEIVYKGAHSHKPPQN 280
LOC_Os01g53260_WRKY23  FLAVAPAAASATSDGHQHGPLEVLEQPPCSNNLHPDGLVDGPQLAAT---TAVPMMLPAMTSLDWQSLQ 95
H_WRKY23                FLAVAPAAASATSDGHQHGPLEVLEQPPCSNNLHPDGLVDGPQLAAT---TAVPMMLPAMTSLDWQSLQ 95
T_WRKY23                FLAVAPAAASATSDGHQHGPLEVLEQPPCSNNLHPDGLVDGPQLAAT---TAVPMMLPAMTSLDWQSLQ 95
T_WRKY58                MAALSPAGDDWAAS----LILPDGGSAAAGVGEDDLGGG-----VMAAAAEESSCG 77
H_WRKY58                MAALSPAGDDWAAS----LILPDGGSAAAGVGEDDLGGG-----VMAAAAEESSCG 77
LOC_Os05g45230_WRKY58  MAALSPAGDDWAAS----LILPDGGSAAAGVGEDDLGGG-----VMAAAAEESSCG 77
LOC_Os06g44010_WRKY28  VELEAEELRRASEENKLTLEMLRAVVAKYTELQGGVNDMMSAAAAAVNAGNHQSSSTSEGGSVSPSRKRI 177
H_WRKY28                VELEAEELRRASEENKLTLEMLRAVVAKYTELQGGVNDMMSAAAAAVNAGNHQSSSTSEGGSVSPSRKRI 177
T_WRKY28                VELEAEELRRASEENKLTLEMLRAVVAKYTELQGGVNDMMSAAAAAVNAGNHQSSSTSEGGSVSPSRKRI 177
T_WRKY62                AEDLEELRRAMEENARLTRALDAILAGHHAHQ-----ALLAPSLSPPPPSAT 80
H_WRKY62                AEDLEELRRAMEENARLTRALDAILAGHHAHQ-----ALLAPSLSPPPPSAT 1
LOC_Os09g25070_WRKY62  AEDLEELRRAMEENARLTRALDAILAGHHAHQ-----ALLAPSLSPPPPSAT 77
LOC_Os09g25060_WRKY76  ELDRPAGCRGGGDSKSMTNDEAKIVEAKVTFQMS EENRRLTEVIARLYGG--QIPRLGDLGDSASPPRFV 100
H_WRKY76                ELDRPAGCRGGGDSKSMTNDEAKIVEAKVTFQMS EENRRLTEVIARLYGG--QIPRLGDLGDSASPPRFV 7
T_WRKY76                ELDRPAGCRGGGDSKSMTNDEAKIVEAKVTFQMS EENRRLTEVIARLYGG--QIPRLGDLGDSASPPRFV 73

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                290          300          310          320          330          340          350
LOC_Os12g02450_WRKY64 LQLQLSSDSPHDDDDHLDKRRVRKIVSSSSDDDDHSSSKAAEDHNAKPLRQHKKRRRFGD----- 135
HWRKY64 LQLQLSSDSPHDDDDHLDKRRVRKIVSSSSDDDDHSSSKAAEDHNAKPLRQHKKRRRFGD----- 135
T_WRKY64 LQLLLSSSPHDDDDHHVDDKRRVRKIISSS-DDDDHCSSKAAEDHNAKPLRQHKKRRRFGD----- 134
LOC_Os03g21710_WRKY79 MATLGGSG--DIAGEVD AAGRWT SVAESADPMVVRREGESSAGRTRRRRGGGSRSGRGR----- 122
H_WRKY79 MATLGGSG--DIAGEVD AAGRWT SVAESADPMVVRREGESSAGRTRRRRGGGSRSGRGR----- 122
T_WRKY79 MATLGGSG--DIAGEVD AAGRWT SVAESADPMVVRREGESSAGRTRRRRGGGSRSGRGR----- 122
LOC_Os05g49620_WRKY19 FPPP-----EHFPPAAGNAGRDAAFKKR-----KGMKAVRRQVR----- 95
H_WRKY19 FPPP-----EHFPPAAGNAGRDAAFKKRQVMVPGHGGLISGKGMKAVRRQVR----- 108
T_WRKY19 FPPP-----EHFPPAAGNAGRDAAFKKRQVMVPGHGGLISGKGMKAVRRQVR----- 108
LOC_Os05g46020_WRKY07 GSQFDISEFFFDDAPFAAVFNGAPATAA----LPDGAANAT--RSAAEAVPAPAPAAV----- 115
T_WRKY07 GSQFDISEFFFDDAPFAAVFNGAPATAA----LPDGAANAT--RSAAEAVPAPAPAAV----- 115
H_WRKY07 GSQFDISEFFFDDAPP----AGAPATAA----LPDGAANAT--RSAAEAVPAPAPAAV----- 111
LOC_Os01g51690_WRKY26 DDQGVPAPPP-AAVPSASVYTPAPAMAPAEFVVPDAVAAAGG-YPRSVAAAAAAVAGEGR----- 140
H_WRKY26 DDQGVPAPPP-AAVPSASVYTPAPAMAPAEFVVPDAVAAAGG-YPRSVAAAAAAVAGEGR----- 140
T_WRKY26 DDQGVPAPPPAAVPSASVYTPAPAMAPAEFVVPDAVAAAGGYPYPRSVAAAAAAVAGEGR----- 129
H_WEKY77 KQH--NPPFVAAAPLEAGGGREQSRR-----EAAVNLGKMDRGPAPVSGGAATGGV----- 116
T_WRKY77 KQH--NPPFVAAAPLEAGGGREQSRR-----EAAVNLGKMDRGPAPVSGGAATGGV----- 116
LOC_Os01g40260_WRKY77 KQH--NPPFVAAAPLEAGGGREQSRR-----EAAVNLGKMDRGPAPVSGGAATGGV----- 116
LOC_Os05g39720_WRKY70 GRGRGSGYALHGGGAASDAYSSADALSGTFVATPENSSASFDDDEAVNGVSSSLRVASSVGGGEDLDDDE 350
H_WRKY70 GRGRGSGYALHGGGAASDAYSSADALSGTFVATPENSSASFDDDEAVNGVSSSLRVASSVGGGEDLDDDE 350
T_WRKY70 GRGRGSGYALHGGGAASDAYSSADALSGTFVATPENSSASFDDDEAVNGVSSSLRVASSVGGGEDLDDDE 350
LOC_Os01g53260_WRKY23 TCLQVPPFVLEQQQPAAAAQADQYSGENDHGDLOAAESSGAGNKEKQVMAKGGAGRPSGT----- 155
H_WRKY23 TCLQVPPFVLEQQQPAAAAQADQYSGENDHGDLOAAESSGAGNKEKQVMAKGGAGRPSGT----- 155
T_WRKY23 TCLQVPPFVLEQQQPAAAAQADQYSGENDHGDLOAAESSGAGNKEKQVMAKGGAGRPSGK----- 155
T_WRKY58 GSSTVTSSTGGVTEAAAAAATTTTR-----RGRGNGKK--AGGGGR----- 113
H_WRKY58 GSSTVTSSTGGVTEAAAAAATTTTR-----RGRGNGKK--AGGGGR----- 113
LOC_Os05g45230_WRKY58 GSSTVTSSTGGVTEAAAAAATTTTR-----RGRGNGKK--AGGGGR----- 113
LOC_Os06g44010_WRKY28 RSVDSLDDAAHHRKPSPPFVAAAAAAAYASFDQMECTSAAAAAAAKRVVREDCKPKVSKR----- 237
H_WRKY28 RSVDSLDDAAHHRKPSPPFVAAAAAAAYASFDQMECTSAAAAAAAKRVVREDCKPKVSKR----- 237
T_WRKY28 RSVDSLDDAAHHRKPSPPFVAAAAAAAYASFDQMECTSAAAAAAAKRVVREDCKPKVSKR----- 237
T_WRKY62 ARAPSVSTSCAAREDAAPAVAAAAASTACPSRQQPPTAEPRPKVRTVVRADADAT----- 137
H_WRKY62 -----VRTVVRADADAT----- 14
LOC_Os09g25070_WRKY62 ARAPSVSTSCAAREDAAPAVAAAAASTACPSRQQPPTAEPRPKVRTVVRADADAT----- 134
LOC_Os09g25060_WRKY76 SPLSGKKRSRESMETANS CDANSNRHQGGADHAE SFAADDGTCRRIKVSR-VCRI----- 156
H_WRKY76 SPLSGKKRSRESMETANS CDANSNRHQGGADHAE SFAADDGTCRRIKVSR-VCRI----- 63
T_WRKY76 T-----EKRSRESMETANS CDANSNRHQGGADHAE SFAADDGTCRRIKVSR-VCRI----- 125

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                360          370          380          390          400          410          420
LOC_Os12g02450_WRKY64 -----SVSLETPVPHYDGHQWRKYGQKHINNSKHPRSYRCTYR----- 174
HWRKY64 -----SVSLETPVPHYDGHQWRKYGQKHINNSKHPRSYRCTYR----- 174
T_WRKY64 -----SVSLETPVPHYDGHQWRKYGQKHINNSKHPRSYRCTYR----- 173
LOC_Os03g21710_WRKY79 -----SSNKRVAATLEDGHVWRKYGQKDIQNSFYPRSYRCTHK----- 161
H_WRKY79 -----SSNKRVAATLEDGHVWRKYGQKDIQNSFYPRSYRCTHK----- 161
T_WRKY79 -----SSNKRVAATLEDGHVWRKYGQKDIQNSFYPRSYRCTHK----- 161
LOC_Os05g49620_WRKY19 -----VTSVQDTASLDDGLSWRKYGQKDI LGAKYPRAYFRCTHR----- 134
H_WRKY19 -----VTSVQDTASLDDGLSWRKYGQKDI LGAKYPRAYFRCTHR----- 147
T_WRKY19 -----VTSVQDTASLDDGLSWRKYGQKDI LGAKYPRAYFRCTHR----- 147
LOC_Os05g46020_WRKY07 -----ERPR-TERIAFRTKSEIEILDGGYKRWKYGKKS VKNSFNPNRYRCSTE----- 163
H_WRKY07 -----ERPR-TERIAFRTKSEIEILDGGYKRWKYGKKS VKNSFNPNRYRCSTE----- 163
T_WRKY07 -----ERPR-TERIAFRTKSEIEILDGGYKRWKYGKKS VKNSFNPNRYRCSTE----- 159
LOC_Os01g51690_WRKY26 -----DRTT-TDKIAFRTRSDDEILDGGYKRWKYGKKS VKNSFNPNRYRCSTE----- 188
H_WRKY26 -----DRTT-TDKIAFRTRSDDEILDGGYKRWKYGKKS VKNSFNPNRYRCSTE----- 185
T_WRKY26 -----DRTT-TDKIAFRTRSDDEILDGGYKRWKYGKKS VKNSFNPNRYRCSTE----- 177
H_WEKY77 -----PRSKNGSKIAFKTRSEVDVLDGGYRWRKYGKGMVKNSFNPNRYRCSTE----- 165
T_WRKY77 -----PRSKNGSKIAFKTRSEVDVLDGGYRWRKYGKGMVKNSFNPNRYRCSTE----- 165
LOC_Os01g40260_WRKY77 -----PRSKNGSKIAFKTRSEVDVLDGGYRWRKYGKGMVKNSFNPNRYRCSTE----- 165
LOC_Os05g39720_WRKY70 PDSKRWRRDGGDGEVSLVAGNRTVREPRVVQTMSDIDILDGGYRWRKYGQKVVKGNPNPRSYKCTTA 420
H_WRKY70 PDSKRWRRDGGDGEVSLVAGNRTVREPRVVQTMSDIDILDGGYRWRKYGQKVVKGNPNPRSYKCTTA 420
T_WRKY70 PDSKRWRRDGGDGEVSLVAGNRTVREPRVVQTMSDIDILDGGYRWRKYGQKVVKGNPNPRSYKCTTA 420
LOC_Os01g53260_WRKY23 -----KKKASRPRFAFQTRSDNDILDGGYRWRKYGQKAVKNSKHPRSYRCTHH----- 204
H_WRKY23 -----KKKASRPRFAFQTRSDNDILDGGYRWRKYGQKAVKNSKHPRSYRCTHH----- 204
T_WRKY23 -----KKKASRPRFAFQTRSDNDILDGGYRWRKYGQKAVKNSKHPRSYRCTHH----- 204
T_WRKY58 -----TFRFAFHTRSENDILDGGYRWRKYGQKAVKNSDFP----- 148
H_WRKY58 -----TFRFAFHTRSENDILDGGYRWRKYGQKAVKNSDFP----- 148
LOC_Os05g45230_WRKY58 -----TFRFAFHTRSENDILDGGYRWRKYGQKAVKNSDFP----- 148
LOC_Os06g44010_WRKY28 -----FVHADPSDLSLVVKDGYQWRKYGQKVTKDNFCPRAYFRCSFA----- 279
H_WRKY28 -----FVHADPSDLSLVVKDGYQWRKYGQK----- 262
T_WRKY28 -----FVHADPSDLSLVVKDGYQWRKYGQKVTKDNFCPRAYFRCSFA----- 279
T_WRKY62 -----DANSMAETVKDGYQWRKYGQKVTTRDNPYPRAYFRCAFA----- 175
H_WRKY62 -----DANSMAETVKDGYQWRKYGQKVTTRDNPYPRAYFRCAFA----- 52
LOC_Os09g25070_WRKY62 -----DANSMAETVKDGYQWRKYGQKVTTRDNPYPRAYFRCAFA----- 172
LOC_Os09g25060_WRKY76 -----DPSDTSLVVKDGYQWRKYGQKVTTRDNPSPRAYFRCAFA----- 194
H_WRKY76 -----DPSDTSLVVKDGYQWRKYGQKV----- 85
T_WRKY76 -----DPSDTSLVVKDGYQWRKYGQKVTTRDNPSPRAYFRCAFA----- 163

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	430	440	450	460	470	480	490
LOC_Os12g02450_WRKY64	QEEKCKATKTVQQR	ED--LHHANSYNGDHP	-----	VMYTVVYQGHTCCK	GP-----	AASADHVVVVEA	231
HWRKY64	QEEKCKATKTVQQR	ED--LHHANSYNGDHP	-----	IMYTVVYQGHTCCK	GP-----	AALADHVVVVEA	231
T_WRKY64	QEEKCKATKTVQQR	ED--LQHANSYNGDHP	-----	VMYTVVYQGHTCCK	GP-----	VASADHVVVVEA	230
LOC_Os03g21710_WRKY79	LDQGGARRQTQRCE	ADPSNYDITYYGEHT	CRDPSTIIPTAIANA	AAGAASDGPNNNIIS	FATGGVVVANS		231
H_WRKY79	LDQGGARRQTQRCE	ADPSNYDITYYGEHT	CRDPSTIIPTAIANA	AAGAASDGPNNNIIS	FATGGVVVANS		231
T_WRKY79	LDQGGARRQTQRCE	ADPSNYDITYYGEHT	CRDPSTIIPTAIANA	AAGAASDGPNNNIIS	FATGGVVVANS		231
LOC_Os05g49620_WRKY19	HTQGCNATKQVQRAD	GDPLLEFDVVYLG	DHTCG---QAAVAAA	QSAPPEHAGQ---	EQQRQSSLLAAG		196
H_WRKY19	HTQGCNATKQVQRAD	GDPLLEFDVVYLG	DHTCG---QAAVAAA	QSAPPEHAGQ---	EQQRQSSLLAAG		209
T_WRKY19	HTQGCNATKQVQRAD	GDPLLEFDVVYLG	DHTCG---QAAVAAA	QSAPPEHAGQ---	EQQRQSSLLAAG		209
LOC_Os05g46020_WRKY07	---GCNVKKRVERDK	KDDPSYVVTYEGTH	NHVSPSTVYYASQ	DAA-----	SGRFFVAGTQPPG	SLN	221
T_WRKY07	---GCNVKKRVERDK	KDDPSYVVTYEGTH	NHVSPSTVYYASQ	DAA-----	SGRFFVAGTQPPG	SLN	221
H_WRKY07	---GCNVKKRVERDK	KDDPSYVVTYEGTH	NHVSPSTVYYASQ	DAA-----	SGRFFVAGTQPPG	SLN	217
LOC_Os01g51690_WRKY26	---GCNVKKRVERDK	NDRYVVTYEGTH	NHVCPGTVYYAQ	DAA-----	SGRFFVAGISHP-	DLN	245
H_WRKY26	-----	FVYELVFKGCF	-----	-----	-----	-----	197
T_WRKY26	---GCNVKKRVERDK	NDRYVVTYEGTH	NHVCPGTVYYAQ	DAA-----	SGRFFVAGISHP-	DLN	234
H_WEKY77	---GCRVKKRVERARD	DARFVVTYDGVH	N-PAPLHLR--PQL	PP-----	PGGYSIAGAPAVV	APH	220
T_WRKY77	---GCRVKKRVERARD	DARFVVTYDGVH	N-PAPLHLR--PQL	PP-----	PGGYSIAGAPAVV	APH	221
LOC_Os01g40260_WRKY77	---GCRVKKRVERARD	DARFVVTYDGVH	N-PAPLHLR--PQL	PP-----	PGGYSIAGAPAVV	APH	221
LOC_Os05g39720_WRKY70	---GCPVRKHVERAS	NDLRAVITTYEGK	HNHDVPAARGSA	AAALYRATPPPQAS	NAGMMPPTTAQPS	SYLQ	487
H_WRKY70	---GCPVRKHVERAS	NDLRAVITTYEGK	HNHDVPAARGSA	AAALYRATPPPQAS	NAGMMPPTTAQPS	SYLQ	487
T_WRKY70	---GCPVRKHVERAS	NDLRAVITTYEGK	HNHDVPAARGSA	AAALYRATPPPQAS	NAGMMPPTTAQPS	SYLQ	487
LOC_Os01g53260_WRKY23	---TCNVKKQVQRLA	KDTSIVVVTYEGV	HNHPCEKLMEAL	TPILK-----	QLQFLSQF-----		254
H_WRKY23	---TCNVKKQVQRLA	KDTSIVVVTYEGV	HNHPCEKLMEAL	TPILK-----	QLQFLSQF-----		254
T_WRKY23	---TCNVKKQVQRLA	KDTSIVVVTYEGV	HNHPCEKLMEAL	TPILK-----	QLQFLSQF-----		254
T_WRKY58	-----	SDDE-LLFSDVDNT	QTATENLRFIPLGR	VYITG-----	-----	-----	180
H_WRKY58	-----	SDDELLLFSDDVD	NTQTATENLRFIPL	GRVYITG-----	-----	-----	181
LOC_Os05g45230_WRKY58	-----	SDDELLLFSDDVD	NTQTATENLRFIPL	GRVYITG-----	-----	-----	181
LOC_Os06g44010_WRKY28	P--ACPVKKKVQRS	ADDNTVLVATYEG	EHNAQPP-----	-----	-----	-----	319
H_WRKY28	-----	-----	-----	-----	-----	-----	262
T_WRKY28	P--ACPVKKKVQRS	ADDNTVLVATYEG	EHNAQPP-----	-----	-----	-----	319
T_WRKY62	P--SCPVKKKLQRC	AEDRSMLVATYEG	EHNALSTQTTEFV	ASGCTTSQHAGG	SSSSPLFCSISIN	SSGR	243
H_WRKY62	P--SCPVKKKLQRC	AEDRSMLVATYEG	EHNALSTQTTEFV	ASGCTTSQHAGG	SSSSPLFCSISIN	SSGR	120
LOC_Os09g25070_WRKY62	P--SCPVKKKLQRC	AEDRSMLVATYEG	EHNALSTQTTEFV	ASGCTTSQHAGG	SSSSPLFCSISIN	SSGR	240
LOC_Os09g25060_WRKY76	P--SCPVKKKVQRS	AEDSSLLVATYEG	EHNHPPSPRAGEL	PA-----	AAGGAGGSLFCS	SISINSSGP	255
H_WRKY76	-----	-----	-----	-----	-----	-----	85
T_WRKY76	P--SCPVKKKVQRS	AEDSSLLVATYEG	EHNHPPSPRAGEL	PA-----	AVGGAGGSLFCS	SISINSSGP	224

	500	510	520	530	540	550	560
LOC_Os12g02450_WRKY64	SQISTD	SHCQSPGSSSELQA	-----	AAHAGDSSQCSN	ISVTCSSSV		273
HWRKY64	SQISTD	SHCQSPGSSSELQA	-----	AAHAGDSSQCSN	ISVTCSSSV		273
T_WRKY64	SQISTD	SHCQSPGSSSELQA	-----	AAHAGDSSQCSN	ISVTCSSSV		272
LOC_Os03g21710_WRKY79	SRLAREGTTATTT	SAAATQLSSSWG	TSGGGGGDDVFSS	SGEREMQWDELA	AAVGHVSSVGV	TSSVGSAP	301
H_WRKY79	SRLAREGTTATTT	SAAATQLSSSWG	TSGGGGGDDVFSS	SGEREMQWDELA	AAVGHVSSVGV	TSSVGSAP	301
T_WRKY79	SRLAREGTTATTT	SAAATQLSSSWG	TSGGGGGDDVFSS	SGEREMQWDELA	AAVGHVSSVGV	TSSVGSAP	301
LOC_Os05g49620_WRKY19	TEGIHQQVVAE	FMAAFFLFTS	-----	TAAGGVDDGYFS	FISPANSDC		238
H_WRKY19	TEGIHQQVVAE	FMAAFFLFTS	-----	TAAGGVDDGYFS	FISPANSDC		251
T_WRKY19	TEGIHQQVVAE	FMAAFFLFTS	-----	TAAGGVDDGYFS	FISPANSDC		251
LOC_Os05g46020_WRKY07	-----	-----	-----	-----	-----	-----	221
T_WRKY07	-----	-----	-----	-----	-----	-----	221
H_WRKY07	-----	-----	-----	-----	-----	-----	217
LOC_Os01g51690_WRKY26	-----	-----	-----	-----	-----	-----	245
H_WRKY26	-----	-----	-----	-----	-----	-----	197
T_WRKY26	-----	-----	-----	-----	-----	-----	234
H_WEKY77	GRLGLEEA	EVIALFRGTTATS	-----	-----	-----	-----	245
T_WRKY77	GRLGLEEA	EVIALFRGTTATS	-----	-----	-----	-----	246
LOC_Os01g40260_WRKY77	GRLGLEEA	EVIALFRGTTATS	-----	-----	-----	-----	246
LOC_Os05g39720_WRKY70	GGGGVLPAGGY	GASYGGAPT	-----	TQPANGGG	FAALSGR	FRDDAT	529
H_WRKY70	GGGGVLPAGGY	GASYGGAPT	-----	TQPANGGG	FAALSGR	FRDDAT	529
T_WRKY70	GGGGVLPAGGY	GASYGGAPT	-----	TQPANGGG	FAALSGR	FRDDAT	529
LOC_Os01g53260_WRKY23	-----	-----	-----	-----	-----	-----	254
H_WRKY23	-----	-----	-----	-----	-----	-----	254
T_WRKY23	-----	-----	-----	-----	-----	-----	254
T_WRKY58	-----	-----	-----	-----	-----	-----	180
H_WRKY58	-----	-----	-----	-----	-----	-----	181
LOC_Os05g45230_WRKY58	-----	-----	-----	-----	-----	-----	181
LOC_Os06g44010_WRKY28	TAAAAKH	SQHQPAAA	AAAVV-----	-----	RQQQE	QAAAAGPSTEVAARKN	361
H_WRKY28	-----	-----	-----	-----	-----	-----	262
T_WRKY28	TAAAAKH	SQHQPAAA	AAAVV-----	-----	RQQQE	QAAAAGPSTEVAARKN	361
T_WRKY62	TTTLDLT	NQAGSGSIASC	GE-----	AAAVSGELVT--	VLSPELRRH		283
H_WRKY62	TTTLDLT	NQAGSGSIASC	GE-----	AAAVSGELVT--	VLSPELRRH		160
LOC_Os09g25070_WRKY62	TTTLDLT	NQAGSGSIASC	GE-----	AAAVSGELVT--	VLSPELRRH		280
LOC_Os09g25060_WRKY76	TTTLDLT	KNGGAVQVVEA	AHP-----	-----	PPPPDLKEVCRE	VASPEFRTA	297
H_WRKY76	-----	VEAHP	-----	-----	PPPPDLKEVCRE	VASPEFRTA	112
T_WRKY76	TTTLDLT	KNGGAVQVVEA	AHP-----	-----	PPPPDLKEVCRE	VASPEFRTA	266

	570	580	590	600	610	
LOC_Os12g02450_WRKY64	VVEDCNKLLDMLPAADELTTDVLLEFDMTAYAP---	LDLDINWEMDTNALWA---				321
HWRKY64	VVEDCNKLLDMLPAADELTTDVLLEFDMTAYAP---	LDLDINWEMDTNALWV---				321
T_WRKY64	VVEDCNKLLDMLPAADELTTDVLLEFDMTAYAP---	LDLDINWEMDTNSLWA---				320
LOC_Os03g21710_WRKY79	AAENDGGNGDTAAGGGGDDGGGAGSFPSSPSAGSLGFVVGPLGSIEDVDDFFPFDP					356
H_WRKY79	AAENDGGNGDTAAGGGGDDGGGAGSFPSSPSAGSLGFVVGPLGSIEDVDDFFPFDP					356
T_WRKY79	AAENDGGNGDTAAGGGGDDGGGAGSFPSSPSAGSLGFVVGPLGSIEDVDDFFPFDP					356
LOC_Os05g49620_WRKY19	QFSSDFSAGSVGVDMDEARFEDLFSST-----	LEFFQSEIQNL-----				277
H_WRKY19	QFSSDFSAGSVGVDMDEARFEDLFSST-----	LEFFQSEIQNL-----				290
T_WRKY19	QFSSDFSAGSVGVDMDEARFEDLFSST-----	LEFFQSEIQNL-----				290
LOC_Os05g46020_WRKY07	-----	-----				221
T_WRKY07	-----	-----				221
H_WRKY07	-----	-----				217
LOC_Os01g51690_WRKY26	-----	-----				245
H_WRKY26	-----	-----				197
T_WRKY26	-----	-----				234
H_WKXY77	-----	-----				245
T_WRKY77	-----	-----				246
LOC_Os01g40260_WRKY77	-----	-----				246
LOC_Os05g39720_WRKY70	GASYSYTSQQQQQPNDAVYYASRAKDEPRDDGIMSFFEQPLLF-----					572
H_WRKY70	GASYSYTSQQQQQPNDAVYYASRAKDEPRDDGIMSFFEQPLLF-----					572
T_WRKY70	GASYSYTSQQQQQPNDAVYYASRAKDEPRDDGIMSFFEQPLLF-----					572
LOC_Os01g53260_WRKY23	-----	-----				254
H_WRKY23	-----	-----				254
T_WRKY23	-----	-----				254
T_WRKY58	-----	-----				180
H_WRKY58	-----	-----				181
LOC_Os05g45230_WRKY58	-----	-----				181
LOC_Os06g44010_WRKY28	LAEQMAATLTRDPGFKAALVTALSGRILELSPTKN-----					396
H_WRKY28	-----	-----				262
T_WRKY28	LAEQMAATLTRDPGFKAALVTALSGRILELSPTKN-----					396
T_WRKY62	LVEEVVQVLKNDAEFVEAVTNAVAARVVDQIPHIPVHL-----					321
H_WRKY62	LVEEVVQVLKNDAEFVEAVTNAVAARVVDQIPHIPVHL-----					198
LOC_Os09g25070_WRKY62	LVEEVVQVLKNDAEFVEAVTNAVAARVVDQIPHIPVHL-----					318
LOC_Os09g25060_WRKY76	LVEQMASALTSDPKFTGALAAAILQKLEPF-----					327
H_WRKY76	LVEQMASALTSDPKFTGALAAAILQKLEPF-----					142
T_WRKY76	LVEQMASALTSDPKFTGALAAAILQKLEPF-----					296

Fig. S3: Structural variations at amino acid level in the three genotypes.


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      10      20      30      40      50      60      70
LOC_os01g51690_pW26  --TTATA TTCTGAGATGAATATAGTATAGCTTATTTTCGTATACAACATTAATGGCCCATCTTCAAATA 67
H289702_pW26          1
T3056296_pW26        --TTATA AAAACATAAACCCAACGAGACAATAAATTTAAAAACTAAAAGTTTAA -- AATTTCTGAGGA 64
LOC_os01g53260_pW23  CTTCACTGAAATATAAAAAATCACGATTAAATTAATGTAGAGACCAGATAAATTTCTACTTTTTCCGTTT 70
H1961965_pW23        CTTCACTGAAATATAAAAAATCACGATTAAATTAATGTAGAGACCAGATAAATTTCTACTTTTTCCGTTT 70
T3027906_pW23        CTTCACTGAAATATAAAAAATCACGATTAAATTAATGTAGAGACAAGATAAATTTCTACTTTTTCCGTTT 70
LOC_os06g44010_pW28  -----
H1976995_pW28        -----AAAATGATTTTGAACATGTAAGTTCTGTTCATTAGTGCTAAACTGGTCC 49
T3063501_pW28        -----AAAATGATTTTGAACATGTAAGTTCTGTTCATTAGTGCTAAACTGGTCC 48
LOC_os05g46020_pW07  -----TAACTTTCTGTCAATAGGTTTGATTAGACTCGGGCAA 39
H2000561_pW07        -----TAACTTTCTGTCAATAGGTTTGATTAGACTCGGGCAA 39
T3066720_pW07        -----TAACTTTCTGTCAATAGGTTTGATTAGGCTCGGGCAA 39
H2023318_pW64        -----
T3095730_pW64        -----
LOC_os12g02450_pW64  -----AATTAGTGGTCTAAACTGAACCGCTAAAAAGCTC 36
LOC_os01g40260_pW77  -----CTATGTCATTAATAATAGTTATAAAAGAA 28
T3097007_pW77        -----CTATGTCATTAATAATAGTTATAAAAGAA 28
H1950043_pW77        -----TATGTCATTAATAATAGTTATAAAAGAA 27
LOC_os09g25070_pW62  -----AACACATAGCACCACACTCATATATCCGCAAAATTCCTC-TAAAAGGC 46
H1972014_pW62p       -----AACACATAGCACCACACTCATATATCCGCAAAATTCCTC-TAAAAGGC 46
T3091546_pW62        -----AACACATAGCACCACACTCATATATCCGCAAAATTCCTC-TAAAAGGC 46
LOC_os05g39720_pW70  -----TACAACGTGCTCACTGACATACA-GTCCGAGCAGAC-ACCTGAA 40
H334389_pW70         -----TACAACGTGCTCACTGACATACA-GTCCGAGCAGAC-ACCTGAA 40
T3094952_pW70        -----TACAACGTGCTCACTGACATACA-GTCCGAGCAGAC-ACCTGAA 40
LOC_os05g45230_pW58  -----GAAACGGTCCCGAGGCAGTCCCTGCGTCCGCGTTGCGCAT-CACCGAG 46
H1850565_pW58p       -----GAAACGGTCCCGAGGCAGTCCCTGCGTCCGCGTTGCGCAT-CACCGAG 46
T3075919_pW58        -----GAAACGGTCCCGAGGCAGTCCCTGCGTCCGCGTTGCGCAT-CACCGAG 46
LOC_os03g21710_pW79  -----TCTCTGTCTGGTACTTTAATAACCCCTCGT-TGATATA 41
H1952278_pW79        -----TCTCTGTCTGGTACTTTAATAACCCCTCGT-TGATATA 41
T3070072_pW79        -----TCTCTGTCTGGTACTTTAATAACCCCTCGT-TGATATA 41
LOC_os05g49620_pW19  -----CAATCAGGCTGGCAAGAAAGAACACTGT-GCCAAG 34
H2014700_pW19        -----AATCAGGCTGGCAAGAAAGAACACTGT-GCCAAG 33
T3058779_pW19        -----CGTCCAAAATGTAACAACCTTAGTGGT-CCTGTT 34
LOC_os09g25060_pW76  -----GTCTTAGAATAATTAATTTGTTTTAAAAGTTTCACTCATC 41
T3076120_pW76        -----TTTTAAAAGTTTCACTCATC 20
H1974322_pW76p       -----GTCTTAGAATAATTAATTTGTTTTAAAAGTTTCACTCATC 41

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      80      90      100     110     120     130     140
LOC_os01g51690_pW26  ACAAATAATGGAAAT-TTTCAAAAAGAAAGGTTTCATCTAAAATATAT-CGATGATAAATGACAAATTAAG 135
H289702_pW26          1
T3056296_pW26        CAATGAATAAAAGCG-GTGACAAAATGATAGATCGAACAAATAAATAA-AGAAGGGGATAACAAAAAAA 132
LOC_os01g53260_pW23  CAGGTTATAAGACTT-TCTAACAAATTTGATCTAGATTCAATTAATAATATATAAATATGGATAATGTTA 139
H1961965_pW23        CAGGTTATAAGACTT-TCTAACAAATTTGATCTAGATTCAATTAATAATATATAAATATGGATAATGTTA 139
T3027906_pW23        CAAGTTATAAGACTT-TCTAACAAATTTATCTAGATTCAATTAATAATATATAAATATGAATAATGTTA 139
LOC_os06g44010_pW28  -----TAACTTTCTATAAAAAAAA-GA 23
H1976995_pW28        TAGAATACAGTGTTT-TCTTAATAATAAAAACTTATTACACTGTACTAACATTTCTATAAAAAAAA-GA 116
T3063501_pW28        TAGAATACAGTGTTT-TCTTAATAATAAAAACTTATTACACTGTACTAACATTTCTATAAAAAAAA-GA 116
LOC_os05g46020_pW07  GCAGGAACACACCTGATCCAAGACCCGATACCTCTTGGACAATCGGAGCAGGATAGTATATAGCAGGCAA 109
H2000561_pW07        GCAGGAACACACCTGATCCAAGACCCGATACCTCTTGGACAATCGGAGCAGGATAGTATATAGCAGGCAA 109
T3066720_pW07        GCAGGAACACACCTGATCCAAGACCCGATACCTCTTGGACAATCGGAGCAGGATAGTATATAGCAGGCAA 109
H2023318_pW64        -----
T3095730_pW64        -----
LOC_os12g02450_pW64  AGGTGATTAATAGAACTTGGTGTGTAACGTACTACCTGATGATCTATCAAGCTAGCACATAAGAACTGA 106
LOC_os01g40260_pW77  CTGAAAAAATGAAAGAT-GAATTAATATGTGATATATCATCCACAAGTATGCAACTTAAATTC-A 94
T3097007_pW77        CTGAAAAAATGAAAGAT-GAATTAATATGTGATATATCATCCACAAGTATGCAACTTAAATTC-A 94
H1950043_pW77        CTGAAAAAATGAAAGAT-GAATTAATATGTGATATATCATCCACAAGTATGCAACTTAAATTC-A 93
LOC_os09g25070_pW62  TAAAAACACACTAGAAAGGACGAAACCAACGACACATTTCTAATCTCATTAATAATCTATGAAAGCCCCCT 116
H1972014_pW62p       TAAAAACACACTAGAAAGGACGAAACCAACGACACATTTCTAATCTCATTAATAATCTATGAAAGCCCCCT 116
T3091546_pW62        TAAAAACACACTAGAAAGGACGAAACCAACGACACATTTCTAATCTCATTAATAATCTATGAAAGCCCCCT 116
LOC_os05g39720_pW70  ATG--CAAATTTCAACAGTAGAATCAGTCAGCTGATTTAA-ATATAAACAGGGGTAAAGATTTAAGCA-- 105
H334389_pW70         ATG--CAAATTTCAACAGTAGAATCAGTCAGCTGATTTAA-ATATAAACAGGGGTAAAGATTTAAGCA-- 105
T3094952_pW70        ATG--CAAATTTCAACAGTAGAATCAGTCAGCTGATTTAA-ATATAAACAGGGGTAAAGATTTAAGCA-- 105
LOC_os05g45230_pW58  GCGGCCCGACGTCACCGTTGCAGCCATTGACGCGTTCCCT-GGTAGCCGTTGTGGCCACCCGACCT-- 113
H1850565_pW58p       GCGGCCCGACGTCACCGTTGCAGCCATTGACGCGTTCCCT-GGTAGCCGTTGTGGCCACCCGACCT-- 113
T3075919_pW58        GCGGCCCGACGTCACCGTTGCAGCCATTGACGCGTTCCCT-GGTAGCCGTTGTGGCCACCCGACCT-- 113
LOC_os03g21710_pW79  CTTGTTCTTATATCGATTTCTAATAATTTCTGTCCCTACCTGGAGGAAAAG-AGACACCTGTGTGACACGTCG 109
H1952278_pW79        CTTGTTCTTATATCGATTTCTAATAATTTCTGTCCCTACCTGGAGGAAAAG-AGACACCTGTGTGACACGTCG 109
T3070072_pW79        CTTGTTCTTATATCGATTTCTAATAATTTCTGTCCCTACCTGGAGGAAAAG-AGACACCTGTGTGACACGTCG 109
LOC_os05g49620_pW19  CTAATTCAC-TGTCCAAGCTGATAATACCTTATCATTTTAAAAAACAAGTCTTTAAAAAATAATTTTG 103
H2014700_pW19        CTAATTCAC-TGTCCAAGCTGATAATACCTTATCATTTTAAAAAACAAGTCTTTAAAAAATAATTTTG 102
T3058779_pW19        CGAATCTAC-CGCAAGGATGAAGATTAAGTGTGCGGCAAAACGAGATAAGTCAATAGCATATGATTAAT 103
LOC_os09g25060_pW76  TTCCCTTATCGATCTAAACAAGAACATGCTTTTTTTTTTTTACCTTTGGTAAGTATTTGTATAATCATGG 111
T3076120_pW76        TTCCCTTATCGATCTAAACAAGAACATGCTTTTTTTTTTTTACCTTTGGTAAGTATTTGTATAATCATGG 111
H1974322_pW76p       TTCCCTTATCGATCTAAACAAGAACATGCTTTTTTTTTTTTACCTTTGGTAAGTATTTGTATAATCATGG 111

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      150       160       170       180       190       200       210
LOC_os01g51690_pW26 AGGGGAGAAGCAACATGCTTATAATGGAGTAAAGCGTAGGCCTATAAACCCCATGATAATCATATTTGA- 204
H289702_pW26      1
T3056296_pW26      TAAGGGTTAGCAACTGGTGCCGACTTTTAAAAACTATAAAAATTAGAAATATGTGGATGATAAGGTTTGGT- 201
LOC_os01g53260_pW23 AAAAGTCTTATAACCTGAAACAGAGGTAATAGTAAATATCGACGATGCACGTATAATCTCTAGCTCGTA- 208
H1961965_pW23     AAAAGTCTTATAACCTGAAACAGAGGTAATAGTAAATATCGACGATGCACGTATAATCTCTAGCTCGTA- 208
T3027906_pW23     AAAAATCTTATAACCTGAAACGAGGTAAGTAAATATCGACGATGCACGTATAATCTCTAGCTCGTA- 208
LOC_os06g44010_pW28 GAAGAACTTTTCTCAGAGACAGCATCAATAAGACAAAAAAAAGTTACATGGGAAAAAGAGAAAAACACA- 92
H1976995_pW28     GAAGAACTTTTCTCAGAGACAGCATCAATAAGACAAAAAAAAGTTACATGGGAAAAAGAGAAAAACACA- 185
T3063501_pW28     GAAGAACTTTTCTCAGAGACAGCATCAATAAGACAAAAAAAAGTTACATGGGAAAAAGAGAAAAACACA- 185
LOC_os05g46020_pW07 AATCAACGCCACGTCGGGTGCGGTGCGTATTAAAAAATCGATA -- ATATATGCATGGCTAGATA- 175
H2000561_pW07     AATCAACGCCACGTCGGGTGCGGTGCGTATTAAAAAATCGATA -- ATATATGCATGGCTAGATA- 175
T3066720_pW07     AATCAACGCCACGTCGGGTGCGGTGCGTATTAAAAAATCGATA -- ATATATGCATGGCTAGATA- 175
H2023318_pW64     TACTCCCATCCTACATAGACAACATGTAGTACAATGTGG 42
T3095730_pW64     ----- 1
LOC_os12g02450_pW64 GGCCCTGTTTAGAGTGGGACTAAAACCTTTTAAAGTCCCTATCACATCGGATGTTTAAAAATTAATATAAAAT 176
LOC_os01g40260_pW77 -ACTTAAAAATTTGTTTTTCTGTGACATATAGAAAGTTGAATTTTCAGTTGCATAAATATGCAGTGATAT 163
T3097007_pW77     -ACTTAAAAATTTGTTTTTCTGTGACATATAGAAAGTTGAATTTTCAGTTGCATAAATATGCAGTGATAT 163
H1950043_pW77     -ACTTAAAAATTTGTTTTTCTGTGACATATAGAAAGTTGAATTTTCAGTTGCATAAATATGCAGTGATAT 162
LOC_os09g25070_pW62 TGCTTGTGACCAATATTCAGGTACAGAAATCAATGATGTACATCCACA -TCACCTTAACCTTCTTAGATTT 185
H1972014_pW62p    TGCTTGTGACCAATATTCAGGTACAGAAATCAATGATGTACATCCACA -TCACCTTAACCTTCTTAGATTT 185
T3091546_pW62     TGCTTGTGACCAATATTCAGGTACAGAAATCAATGATGTACATCCACA -TCACCTTAACCTTCTTAGATTT 185
LOC_os05g39720_pW70 -GCTAAAAAGCGATACAAACCCCTAATTAACATACTACTACTAAATAAGCTACCCCAACCAT -CTGACATGG 173
H334389_pW70     -GCTAAAAAGCGATACAAACCCCTAATTAACATACTACTACTAAATAAGCTACCCCAACCAT -CTGACATGG 173
T3094952_pW70     -GCTAAAAAGCGATACAAACCCCTAATTAACATACTACTACTAAATAAGCTACCCCAACCAT -CTGACATGG 173
LOC_os05g45230_pW58 -GCCCCAC -GTGTTCCGTCCTCCATCA -CGTTGCCGCAC -ACCCGGGTCATGGCGCCGCACTTCCATGC 179
H1850565_pW58p    -GCCCCAC -GTGTTCCGTCCTCCATCA -CGTTGCCGCAC -ACCCGGGTCATGGCGCCGCACTTCCATGC 179
T3075919_pW58     -GCCCCAC -GTGTTCCGTCCTCCATCA -CGTTGCCGCAC -ACCCGGGTCATGGCGCCGCACTTCCATGC 179
LOC_os03g21710_pW79 TCCCGTGTAGCCA -AAACCACTGGCCGTTCCGGTCTCGGTGTTTCCAGTTTCCATCAACCGTAAGCGTGT 177
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T3070072_pW79     TCCCGTGTAGCCA -AAACCACTGGCCGTTCCGGTCTCGGTGTTTCCAGTTTCCATCAACCGTAAGCGTGT 177
LOC_os05g49620_pW19 ACCATTTTT -TTATTAATAAT -AAAAATCAATAAATATCCTATTCCAGTGAAGCATTTTTTAACACTT 171
H2014700_pW19     ACCATTTTT -TTATTAATAAT -ANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN 170
T3058779_pW19     TAAATTTTAAATTAATAAATCTTAAAAATGGAATTTATAGAAATTTTTATAGTAACTTTTATAGAAAGT 173
LOC_os09g25060_pW76 CGATGATGTGAACACGCGTGGCGAACGTAACACTATCATTTTTTTTTACTTAGTAAAGACAACAAAACCAT 181
T3076120_pW76     CGATGATGTGAACACGCGTGGCGAACGTAACACTATCATTTTTTTTTACTTAGTAAAGACAACAAAACCAT 158
H1974322_pW76p    CGATGATGTGAACACGCGTGGCGAACGTAACACTATCATTTTTTTTTACTTAGTAAAGACAACAAAACCAT 181

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H289702_pW26      1
T3056296_pW26     TTTTCAAA -GTATTAAGA --TAAFAAGATAGCTATTTAACAATAATTTAAATAAAATCATATTA -AAAA 266
LOC_os01g53260_pW23 AATAAAATTTGCATGAACA --GTTGGATATATTAATAAACCCTGCTGCTGAGTGCTGGCATTTTTGCACGAA 275
H1961965_pW23     AATAAAATTTGCATGAACA --GTTGGATATATTAATAAACCCTGCTGCTGAGTGCTGGCATTTTTGCACGAA 275
T3027906_pW23     AATAAAATTTGCATGAACA --GTTGGATATATTAATAAACCCTGCTGCTGAGTGCTGGCATTTTTGCACGAA 275
LOC_os06g44010_pW28 ACTAAAAAGAGAAAAACACATATTAACCAATTAACATTTCTCTCTGTCCCTGAAGACATACTTCATTTT 162
H1976995_pW28     ACTAAAAAGAGAAAAACACATATTAACCAATTAACATTTCTCTCTGTCCCTGAAGACATACTTCATTTT 255
T3063501_pW28     ACTAAAAAGAGAAAAACACATATTAACCAATTAACATTTCTCTCTGTCCCTGAAGACATACTTCATTTT 255
LOC_os05g46020_pW07 ACTAAACAGAGATTTATGA --ATCAGCACATATGATTTGGGAGCATCATGTGAGACATGTCGAACACATG 242
H2000561_pW07     ACTAAACAGAGATTTATGA --ATCAGCACATATGATTTGGGAGCATCATGTGAGACATGTCGAACACATG 242
T3066720_pW07     ACTAAACAGAGATTTATGA --ATCAGCACATATGATTTGGGAGCATCATGTGAGACATGTCGAACACATG 242
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LOC_os12g02450_pW64 ATTAACGTAGACTATTAATAAAAACCCATCCATAACTCTGGACTAATTTACGAGACGAATCTAATGAGCC 246
LOC_os01g40260_pW77 ATCA -TAT ---- ACTATATCTTAATACATTTTTCTCTTTTTTT -TAATTTTTTCAATCATTTTGT 225
T3097007_pW77     ATCA -TAT ---- ACTATATCTTAATACATTTTTCTCTTTTTTT -TAATTTTTTCAATCATTTTGT 225
H1950043_pW77     ATCA -TAT ---- ACTATATCTTAATACATTTTTCTCTTTTTTT -TAATTTTTTCAATCATTTTGT 224
LOC_os09g25070_pW62 ACCGCTCT ---- AACATCCCACATACCCGATTAAGTCATCATTT -AAAAGTGTATTGCGGGGATTGA 248
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T3091546_pW62     ACCGCTCT ---- AACATCCCACATACCCGATTAAGTCATCATTT -AAAAGTGTATTGCGGGGATTGA 248
LOC_os05g39720_pW70 TTTACTACTTCAGAAGGCAGCTCCCAAATTCATTAAAAAAAACCACTAGTAATTTAATTAAGCAAAATTTT 243
H334389_pW70     TTTACTACTTCAGAAGGCAGCTCCCAAATTCATTAAAAAAAACCACTAGTAATTTAATTAAGCAAAATTTT 243
T3094952_pW70     TTTACTACTTCAGAAGGCAGCTCCCAAATTCATTAAAAAAAACCACTAGTAATTTAATTAAGCAAAATTTT 243
LOC_os05g45230_pW58 CGCAGGAC -CAAAGCGGTGCGCGACGGCGCTCCTGCGCAACCACCTAGTCCACGGTATGGAAAGAGCGGC 247
H1850565_pW58p    CGCAGGAC -CAAAGCGGTGCGCGACGGCGCTCCTGCGCAACCACCTAGTCCACGGTATGGAAAGAGCGGC 247
T3075919_pW58     CGCGGGAC -CAAAGCGGTGCGCGACGGCGCTCCTGCGCAACCACCTAGTCCACGGTATGGAAAGAGCGGC 235
LOC_os03g21710_pW79 CATTCACGCGCCAATGTATACTAATGAATCTTTATTTTGTCTGTCATCATGCATTCATGCTTGTGTAC 247
H1952278_pW79     CATTCACGCGCCAATGTATACTAATGAATCTTTATTTTGTCTGTCATCATGCATTCATGCTTGTGTAC 247
T3070072_pW79     CATTCACGCGCCAATGTATACTAATGAATCTTTATTTTGTCTGTCATCATGCATTCATGCTTGTGTAC 247
LOC_os05g49620_pW19 GTTCAAA -ACAACAAC -TAGTATTAATCAACCCGATGAAGTAGC -AAGAATCCTATG -ATCAATAC ---T 234
H2014700_pW19     GTTCAAA -ACAACAAC -TAGTATTAATCAACCCGATGAAGTAGC -AAGAATCCTATG -ATCAATAC ---T 233
T3058779_pW19     TTTCAAAACACCAATT -TAGTTTGA AAAACGCTAACGGAAACCAAGAAAAAATGATCTTTAAT ---T 239
LOC_os09g25060_pW76 CCGTGGGTATTAAGAGCAAGTACAAATTTGAAAGATATAGCTTAGCTACAAGCACATATGAAAAAGGAGA 251
T3076120_pW76     CCGTGGGTATTAAGAGCAAGTACAAATTTGAAAGATATAGCTTAGCTACAAGCACATATGAAAAAGGAGA 228
H1974322_pW76p    CCGTGGGTATTAAGAGCAAGTACAAATTTGAAAGATATAGCTTAGCTACAAGCACATATGAAAAAGGAGA 251

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H289702_pW26 1
T3056296_pW26 TAGATAAATTCGTATGGGT--ACTAGCCG-CAATATTCGCGTGGCTAC-CAGCTAGTTTTTTAGATAAT 332
LOC_os01g53260_pW23 CGTGTGCATGCACCTGACCCCAACAAACG-CAAAGCTACCATTGCATC-GACC-GCCTCCATCGGCCAT 341
H1961965_pW23 CGTGTGCATGCACCTGACCCCAACAAACG-CAAAGCTACCATTGCATC-GACC-GCCTCCATCGGCCAT 341
T3027906_pW23 CGTGTGCATGCACCTGACCCCAACAAACG-CAAAGCTACCATTGCATC-GACC-GCCTCCATCGGCCAT 341
LOC_os06g44010_pW28 TTTCATATTTTAAAGTCGTTTTAGTTTTT-CTAATTAACCTTTTTTAA-GTTTGATGAATTTTGAAGAAA 230
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H2023318_pW64 TAAAT-AGTTTAGTGCATCTATATA--TATACCACCGTTG-GAGTATAACTCGCGTAGTATTC 175
T3095730_pW64 ---TATATA--TATACCACCGTTG-GAGTATAACTCGCGTAGTATTC 44
LOC_os12g02450_pW64 TAAATTAATCCATGATTAGCTATGTGATGCTACAGTAAACATTCCTCTAATTAAGATAATAGGCTTAA 316
LOC_os01g40260_pW77 GTGACGTACTCCCTCCGTC-C---AAAAAAGACAAACCCCTGAGTTTT-CGTGTCCAACGTTTGAATTG 288
T3097007_pW77 GTGACGTACTCCCTCCGTC-C---AAAAAAGACAAACCCCTGAGTTTT-CGTGTCCAACGTTTGAATTG 288
H1950043_pW77 GTGACGTACTCCCTCCGTC-C---AAAAAAGACAAACCCCTGAGTTTT-CGTGTCCAACGTTTGAATTG 287
LOC_os09g25070_pW62 ACTAAATCCGTATTTGGTA-T--TGACACAAACATATACGAAAAAGAACATATTGGACATCACGTTG 312
H1972014_pW62p ACTAAATCCGTATTTGGTA-T--TGACACAAACATATACGAAAAAGAACATATTGGACATCACGTTG 312
T3091546_pW62 ACTAAATCCGTATTTGGTA-T--TGACACAAACATATACGAAAAAGAACATATTGGACATCACGTTG 312
LOC_os05g39720_pW70 GCTACGCTACTTCGTGGTT-C---TATATGTAAGACACCACGAAAGTAAATTTTAAAGAAAAAATA 307
H334389_pW70 GCTACGCTACTTCGTGGTT-C---TATATGTAAGACACCACGAAAGTAAATTTTAAAGAAAAAATA 307
T3094952_pW70 GCTACGCTACTTCGTGGTT-C---TATATGTAAGACACCACGAAAGTAAATTTTAAAGAAAAAATA 307
LOC_os05g45230_pW58 ACCACCTTAATTCGCGTC--CCTGTTATACAGTAGAGGTATATTTATGCAAAATTTTTTTCATGCAGTA 315
H1850565_pW58p ACCACCTTAATTCGCGTC--CCTGTTATACAGTAGAGGTATATTTATGCAAAATTTTTTTCATGCAGTA 315
T3075919_pW58 ACCATCTTAATTCGCGTC--CCTGTTATACAGTAGAGGTATATTTATGCAAAATTTTTTTCATGCAGTA 303
LOC_os03g21710_pW79 AGGAGGAGACCCATCCATTACGTACGTATAAAGAGAAAGTGAAGCTACAAT--ATATGCAGCTCGATCG 314
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T3070072_pW79 AGGAGGAGACCCATCCATTACGTACGTATAAAGAGAAAGTGAAGCTACAAT--ATATGCAGCTCGATCG 314
LOC_os05g49620_pW19 AAAT-AATATTCCTTCGTT-CTAAAATATA-ACAACCTTAGTGGTCTTATTCGAATCTACCGTAAAGATG 301
H2014700_pW19 AAAT-AATATTCCTTCGTT-CTAAAATATA-ACAACCTTAGTGGTCTTATTCGAATCTACCGTAAAGATG 300
T3058779_pW19 AGTTTGAAGCGGGCCATTATAGATTAGATATAAATACTAAGGGTG-TGTTGGGACCTCT---AGGTTTC 304
LOC_os09g25060_pW76 AAAAAACAGACCAATAAAT--TGTAGTGTGAGAGATGAGCCAAGTATTAATGATTCAATGTAT----- 312
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H1974322_pW76p AAAAAACAGACCAATAAAT--TGTAGTGTGAGAGATGAGCCAAGTATTAATGATTCAATGTAT----- 312

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H289702_pW26 1
T3056296_pW26 GAGAAGTAT--TTTCAATCGGTAGATACATGCCGCTCCCTCTGTTTCAACATATAAACATTTCTAGGAT 399
LOC_os01g53260_pW23 TCAAACCTGC--AAGCGCTCGACCGGTTCATCATTCATCAGCTAAAAAAGTCAAAAAGACGCCAAGAGAA 408
H1961965_pW23 TCAAACCTGC--AAGCGCTCGACCGGTTCATCATTCATCAGCTAAAAAAGTCAAAAAGACGCCAAGAGAA 408
T3027906_pW23 TCAAACCTGC--AAGCGCTCGACCGGTTCATCATTCATCAGCTAAAAAAGTCAAAAAGACGCCAAGAGAA 408
LOC_os06g44010_pW28 AATATAGCA--ATGTTTTCAATAFAAAACAAATATGCTATCAAAA--TATATTTAATAATTTAATGAAC 295
H1976995_pW28 AATATAGCA--ATGTTTTCAATAFAAAACAAATATGCTATCAAAA--TATATTTAATAATTTAATGAAC 388
T3063501_pW28 AATATAGCA--ATGTTTTCAATAFAAAACAAATATGCTATCAAAA--TATATTTAATAATTTAATGAAC 388
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H2000561_pW07 AAAAAFAAAA--TAAAGAGAGATGCCACTCATTAAATTTGTTTTATTTAGATCGAATTTAAACTGATAT 379
T3066720_pW07 AAAAAFAAAA--TAAAGAGAGATGCCACTCATTAAATTTGTTTTATTTAGATCGAATTTAAACTGATAT 379
H2023318_pW64 ATGACAAAAT-TAGTGGTCTAAAACGTAAACCGCTAAAAAGCTCAGGTGATTAATTAGAAGCTGGTGTG- 243
T3095730_pW64 ATGACAAAAT-TAGTGGTCTAAAACGTAAACCGCTAAAAAGCTCAGGTGATTAATTAGAAGCTGGTGTG- 112
LOC_os12g02450_pW64 AAAAAATTTGTCGTGAATAGCTTTCAATGATGATTAATGTTTTG-TAAGTAGCTATATTTAATACTCT 385
LOC_os01g40260_pW77 TTCGTTTTAT-----ATGAAATTTTTTATAAATAGTATTTTCATTGTTGTTAGATAATAAAACATGA 350
T3097007_pW77 TTCGTTTTAT-----ATGAAATTTTTTATAAATAGTATTTTCATTGTTGTTAGATAATAAAACATGA 350
H1950043_pW77 TTCGTTTTAT-----ATGAAATTTTTTATAAATAGTATTTTCATTGTTGTTAGATAATAAAACATGA 349
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H1972014_pW62p TAAGCTCGATGTCAATGAATTAAGTTTTCTGTAACCGTCAGTCT-GTCATCTTAAAGCACACAGCAG 381
T3091546_pW62 TAAGCTCGATGTCAATGAATTAAGTTTTCTGTAACCGTCAGTCT-GTCATCTTAAAGCACACAGCAG 381
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H334389_pW70 CTCTATAAAATAT-GATTATTTACTAGATGTACAATATCGTTTAGTGTACCATAAAAATACCAGGAGCAA 376
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LOC_os05g45230_pW58 ---TATAAATGC-AAAAATTAATGAAATATATATTTTCTTTTTTTTTCTTGTTAAGTACTCGACAGGA 381
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T3075919_pW58 ---TATAAATGC-AAAAATTAATGAAATATATATTTTCTTTTTTTTTCTTGTTAAGTACTCGACAGGG 369
LOC_os03g21710_pW79 ATCGCTAGCTGCTATCGGCTAGCGACAGGGCTCGAGTTCGATGTCAATCAGTGA---TCCAATGTTAGAT 380
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H2014700_pW19 AAGATTAAGTGTGCGCCGAAAACGAG-ATAAGTCATTAGCATATGATTAATTAATTTTAAATTTAAAA 369
T3058779_pW19 CCAATCCAAATCCCTCGTTTTTCGCGCCAGCTTTTTTCAAAAC-TGCTAAACGGTGCCTTTTTTAAAAA 373
LOC_os09g25060_pW76 ---AGTAGACTAATTAAGTGACTGTAGATGATGATTAATTTTGAAGGTTAGCAGTGGGT 369
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H289702_pW26      TAAAATTT ATACATAATACAAG --- TATTTCTATGTC - ACCAA - TTCCAATATACGAAATCTATACA 23
T3056296_pW26      GAAACGAT CTAGAACGAACC - G - TGCCGTCCTGCC - GTGAA - TCAGAACTTTTCCCTAGTTA - ACT 461
H1961965_pW23      GAAACGAT CTAGAACGAACC - G - TGCCGTCCTGCC - GTGAA - TCAGAACTTTTCCCTAGTTA - ACT 468
T3027906_pW23      GAAACGAT CTAGAACGAACC - G - TGCCGTCCTGCC - GTGAA - TCAGAACTTTTCCCTAGTTA - ACT 468
LOC_os06g44010_pW28 TAATTTTA TTTTGTAGATGTTG --- CTAATTTTCTCT - GTAAA - CTTAATTA AAT - CTTAAAAA 353
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T3063501_pW28      TAATTTTA TTTTGTAGATGTTG --- CTAATTTTCTCT - GTAAA - CTTAATTA AAT - CTTAAAAA 446
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H2023318_pW64      AACGTA CTACCTGATGATCTA --- TCAAGCTAGCACAAGGA - AGAAACTGAGTCCATGCATATA 304
T3095730_pW64      AACGTA CTACCTGATGATCTA --- TCAAGCTAGCACAAGGA - AGAAACTGAGTCCATGCATATA 173
LOC_os12g02450_pW64 AAATTAGT GTCTAAAGCAGGGA --- CTA AAGTTAAGTCCCTGGATCTAAACACCACCTGAGTCCATATA 452
LOC_os01g40260_pW77 TTAA - TACTTTAT --- GCGTGACTTGCTT - TTTAATTTT TTTTCTAGTT -- 396
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H1972014_pW62p     TAAAGTAC TCTCCTCTCTTTT GAAAAAAGGCCAAATCCTGACTACGTATCTAAAGATAATACATGCCATA 451
T3091546_pW62      TAAAGTAT TTTCTCCTCTCTTTT AAAAAAAGGCCAAATCCTGACTAAATATATAAACATAATACATGCCATA 451
LOC_os05g39720_pW70 TTTGGTCA CACCATGT --- TATAAAGCAGGTCCTATCTTGATCTTAGAAACACATAAATTAAT -- 436
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LOC_os05g45230_pW58 TCAAAACG GACGCAATT --- GACCACGCATGACACATATAAAACCAACACTACGTGAACAAAA -- 441
H1850565_pW58p     TCAAAACG GACGCAATT --- GACCACGCATGACACATATAAAACCAACACTACGTGAACAAAA -- 441
T3075919_pW58      TCAAAACG GACGCAATT --- GACCACGCATGACACATATAAAACCAACACTACGTGAACAAAA -- 429
LOC_os03g21710_pW79 GCAACGAA AGCAAC -- ATGTGTACACTAAAAGAGACGAAATTTCTATCCAAGTAG - ATGCGGACAAAC 445
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T3070072_pW79      GCAACGAA AGCAAC -- ATGTGTACACTAAAAGAGACGAAATTTCTATCCAAGTAG - ATGCGGACAAAC 445
LOC_os05g49620_pW19 TCTTAAAAA TGGAT - TTATTAGAA TTTTATAGTAAC -- TTTTATATAGAAAGTTTCAAAACACCCGT 436
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T3058779_pW19      GTTTCATAT GAAAGTTGCTTAAAAAATCAAATAA TCTATTTTTTTTAAAAAATTT -- AGCTAATAC 439
LOC_os09g25060_pW76 TACTTGAC TATATTTATCAAACCTGCTTAACACTGCGGTCTTCAATTTATAAGTAATTAAGTACGGCCCT 439
T3076120_pW76      TACTTGAC TATATTTATCAAACCTGCTTAACACTGCGGTCTTCAATTTATAAGTAATTAAGTACGGCCCT 436
H1974322_pW76p     TACTTGAC TATATTTATCAAACCTGCTTAACACTGCGGTCTTCAATTTATAAGTAATTAAGTACGGCCCT 439

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H289702_pW26      TAAAC - CTAGTTAAAT - T - TGAAGTAGTTTGACTTTTGACCAAAGTCAAAACATCTTATAACCTGA 85
T3056296_pW26      TTTTCAGCCA ATTAGATGGTT - TAAAGGAATCAAGCAATTTAAAAATTCGAA - TTTTCGACCCGCTGA 525
LOC_os01g53260_pW23 TTACGTACCAGTAGAGTACGTACGTATACGTACTGTAACTTTTACAGACAGGAA - CACCTTTTGACTTCG 537
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T3027906_pW23      TTACGTACCAGTAGAGTACGTACGTATACGTACTGTAACTTTTACAGACAGGAA - CACCTTTTGACTTCG 537
LOC_os06g44010_pW28 TAATG - GCAAA TAAATGACTTGTAAATAGAAACGGGAGAGTATCTTTTTTAA - GCFAAGGATCGAG 418
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T3063501_pW28      TAATG - GCAAA TAAATGACTTGTAAATAGAAACGGGAGAGTATCTTTTTTAA - GCFAAGGATCGAG 510
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T3095730_pW64      FATGAGCTCCATT CAGCATGC --- GTGTGGTATAGGAGTTAAATTTAGT --- TTTTATCGGT CAC 232
LOC_os12g02450_pW64 FATGAGCTCCATT CAGCATGC --- GTGTGGTAA - GGAGTTAAATTTAGT --- TTTTATCGGT CAC 509
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T3097007_pW77      -TTTATAA - AAGAGTTTGTCTTTTTTTTTTTGG - ACGGAGGGAGTAT - AAGCAACTAGGGAACCTTCCGT 462
H1950043_pW77      -TTTATAA - AAGAGTTTGTCTTTTTTTTTTTGGGACGGAGGGAGTAT - AAGCAACTAGGGAACCTTCCGT 462
LOC_os09g25070_pW62 ATATATAGCAAGGATTTGCTTTTTTTTGACCGGAGTTAGTAAAGTCTCGAGAGAAGGAAGAAACCT - CCAA 520
H1972014_pW62p     ATATATAGCAAGGATTTGCTTTTTTTTGACCGGAGTTAGTAAAGTCTCGAGAGAAGGAAGAAACCT - CCAA 520
T3091546_pW62      ATATATAGCAAGGATTTGCTTTTTTTTGACCGGAGTTAGTAAAGTCTCGAGAGAAGGAAGAAACCT - CCAA 520
LOC_os05g39720_pW70 GTATGCAATGTCCATT --- GGFAAA TAACTCAGAGTATATTTCTCCTAAAAATTACTCTATGT - TGTG 499
H334389_pW70      GTATGCAATGTCCATT --- GGFAAA TAACTCAGAGTATATTTCTCCTAAAAATTACTCTATGT - TGTG 499
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LOC_os05g45230_pW58 CTATACTACAACGATTCAGACGGTTTGTATATCTCTCCCTCGTTCCGGCAACAAACCTGCCTGAAC - CCTA 510
H1850565_pW58p     CTATACTACAACGATTCAGACGGTTTGTATATCTCTCCCTCGTTCCGGCAACAAACCTGCCTGAAC - CCTA 510
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LOC_os03g21710_pW79 CTGATTGAAAAC TGCAAGTCTCAGAGCAGTAATCTAACGGTCCCGTGTGTGCCAAGTAAGCGAGTACT 515
H1952278_pW79      CTGATTGAAAAC TGCAAGTCTCAGAGCAGTAATCTAACGGTCCCGTGTGTGCCAAGTAAGCGAGTACT 515
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LOC_os05g49620_pW19 TTAGTTTGA AAAACGTCTAACGGAAACCAGAAAAAATGTATCTTAAATTAATTTAGAACGGGCCATT 506
H2014700_pW19      TTAGTTTGA AAAACGTCTAACGGAAACCAGAAAAAATGTATCTTAAATTAATTTAGAACGGGCCATT 505
T3058779_pW19      TTAATT - AATCATGTGCTAATGGAACGCTCCG --- TTTTYCGTCCGGAGGCATGTGTCCCATC 500
LOC_os09g25060_pW76 GGTAATTC TACAATCTCACCTAGCCAATCTCTCC - ACACACCCCTGAGGCCTTGACGTAGACCCCTG 506
T3076120_pW76      GGTAATTC TACAATCTCACCTAGCCAATCTCTCC - ACACACCCCTGAGGCCTTGACGTAGACCCCTG 506
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LOC_os01g53260_pW23 TCTCCAAAC---CTATCTGAAACGGTCGAGGCGATAGCTCTCTTA TTAATCCAC---GAGTAGTATA 598
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T3027906_pW23 TCTCCAAAC---CTATCTGAAACGGTCGAGGCGATAGCTCTCTTA TTAGTCCAC---GAGTAGTATA 598
LOC_os06g44010_pW28 AGCAGAGTGAAAGTAAAAATAAGGCCGGAGTAATAATTAC-CAG-CTGGTTCATCCCAAAAGGTA-- 483
H1976995_pW28 AGCAGAGTGAAAGTAAAAATAAGGCCGGAGTAATAATTAC-CAG-CTGGTTCATCCCAAAAGGTA-- 576
T3063501_pW28 AGCAGAGTGAAAGTAAAAATAAGGCCGGAGTAATAATTAC-CAG-CTGGTTCATCCCAAAAGGTA-- 575
LOC_os05g46020_pW07 CCACACCAACCAACTCGCAGGGAAACCAAAACAAAGAAAGCGGCTTGAACCGGATGGACCGTGGGTGTGTG 581
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T3066720_pW07 CCACACCAACCAACTCGCAGGGAAACCAAAACAAAGAAAGCGGCTTGAACCGGATGGACCGTGGGTGTGTG 581
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T3095730_pW64 ACTGCAAGATGCATGAAGGTTCTTCTCTCTTATATATGATATAATAA TTAATCTAGCTAGAGAGAGA-- 299
LOC_os12g02450_pW64 ACTGCAAGATGCATGAAGGTTCTTCTCTCTTATATATGATATAATAA TTAATCTAGCTAGAGAGAGA-- 576
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H1950043_pW77 TGAGTTTAAAAATCCATTCTCCTAAGCTAGCATGGATCGATGAGGACCCACAGCTTTTTTAAAAAATATC 532
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LOC_os03g21710_pW79 ACTCCGATCGTTTTCATCCGGATCGTAGATGTGTAGTGGAGGAAGCTGCCTAGGCCATCCCGATGACCGT 585
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LOC_os09g25060_pW76 AATCAACCCCAAGTGAAAAACTATCAACAGTCCATTAGCTGAACTGAACTGAAACTGCTAACCAGTAAT 576
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H289702_pW26 AA-TTCAGGAACAGTGGGAACACTAGGATTTACTGCAACTTTCGTTGCCAC-TGGCCCCGGATCCCA 211
T3056296_pW26 AA-TTCAGGAACAGTGGGAACACTAGGATTTACTGCAACTTTCGTTGCCAC-TGACCCAGATCCCA 659
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T3027906_pW23 TA-TATTAATCATGGAGACATCAGACAAGGCTAATTAACAGAGAGGGGCAATATGCAACAACTGATCCCA 667
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T3095730_pW64 GA-GAGAG-CTAGTGGTTGCAACTTG---CAAATTAGCTAAGTCCAACCTTATTTACTGATAGTCCAAAT 364
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LOC_os01g40260_pW77 TC-TATGGACCTTATTTTTATGTATAAAATAAAATAAAATAAATGACACCCTTAAATACATAGTAGTAAT 602
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710 720 730 740 750 760 770
LOC_os01g51690_pW26 TCATCCCAGCCCCACGC -CGCCCCAAAGTCCAAAAACCTTA -CCACACGAGGGCAAATACCAAAGGC 711
H289702_pW26 TCATCCCAGCCCCACGC -CGCCCCAAAGTCCAAAAACCTTA -CCACACGAGGGCAAATACCAAAGGC 278
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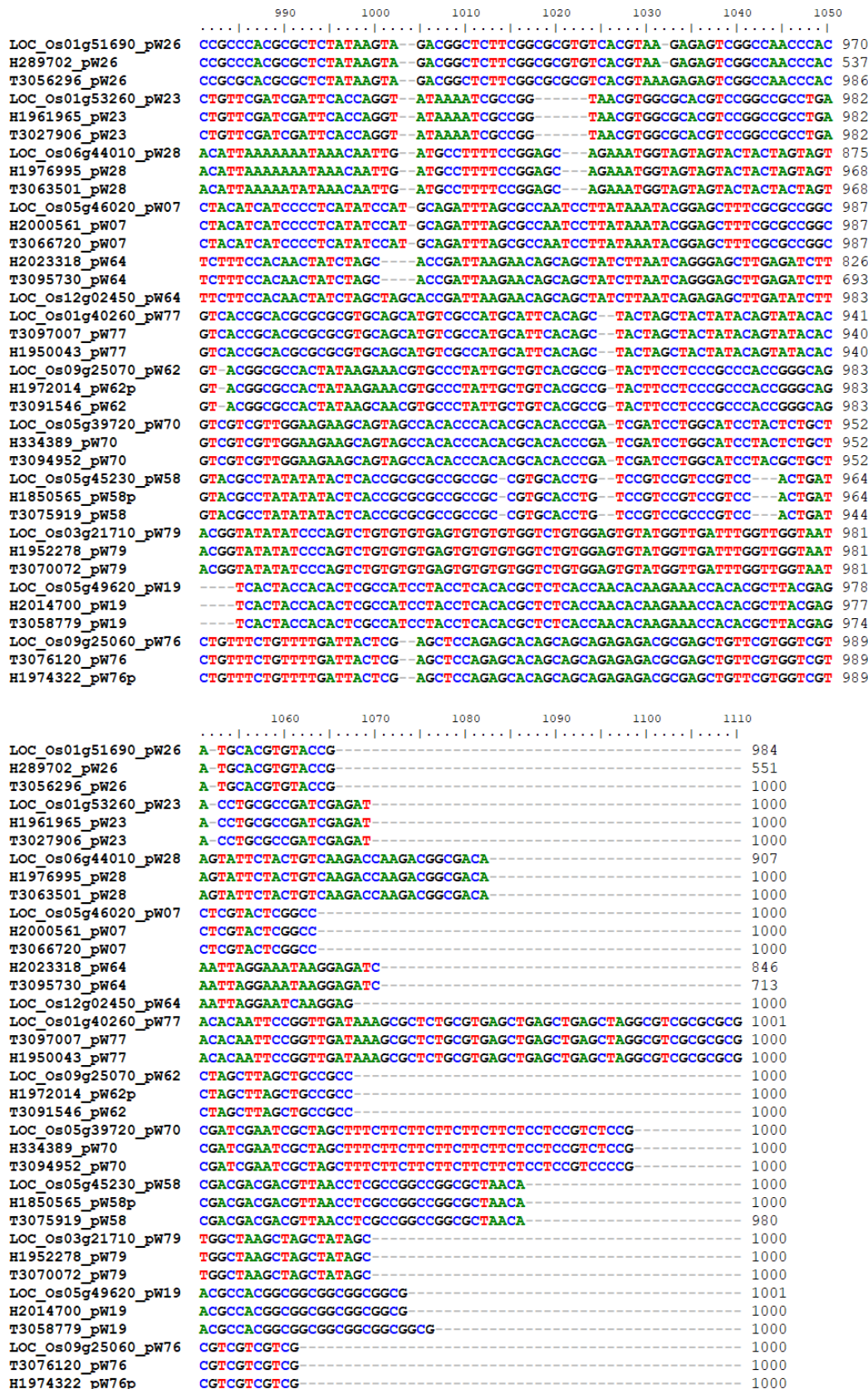



Fig. S4: Structural variation at promoter regions in Tetep and HP2216 in comparison with Nipponbare. The black boxes are showing variations and the brown arrows showing sequence dissimilarity.

MOTIF LOCATIONS

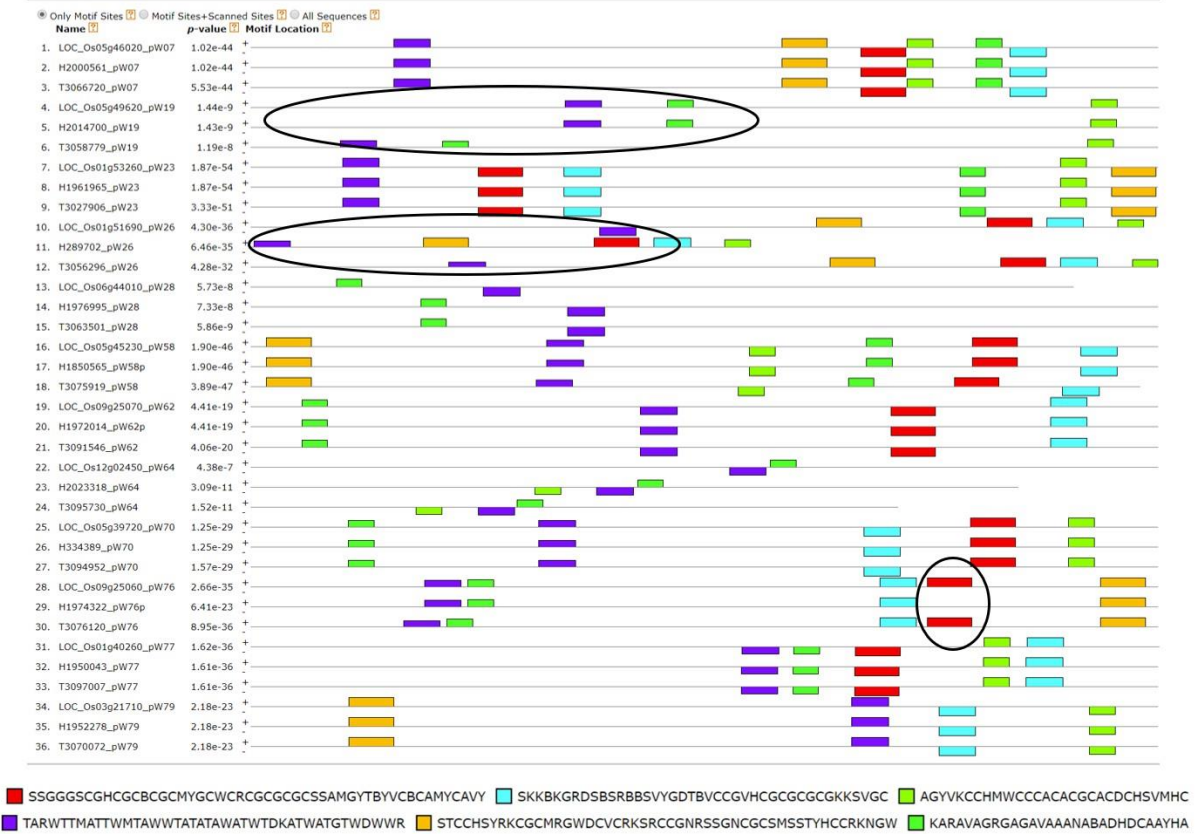


Fig. S5: 1 kb promoter analysis of DEG WRKY for conserved domains search using MEME software. Black circles depict variations in domains.