

Fig. S1

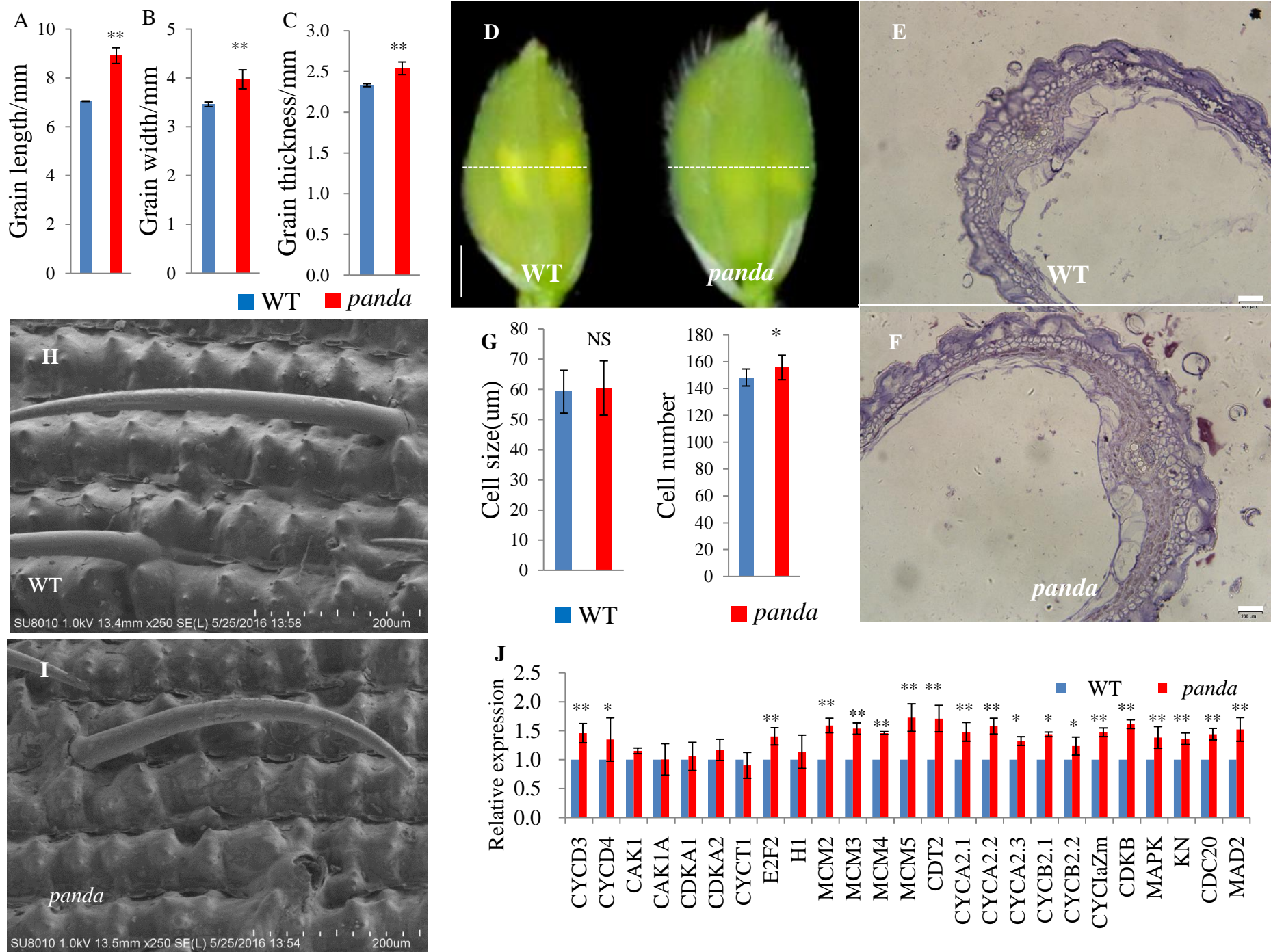


Fig. S2

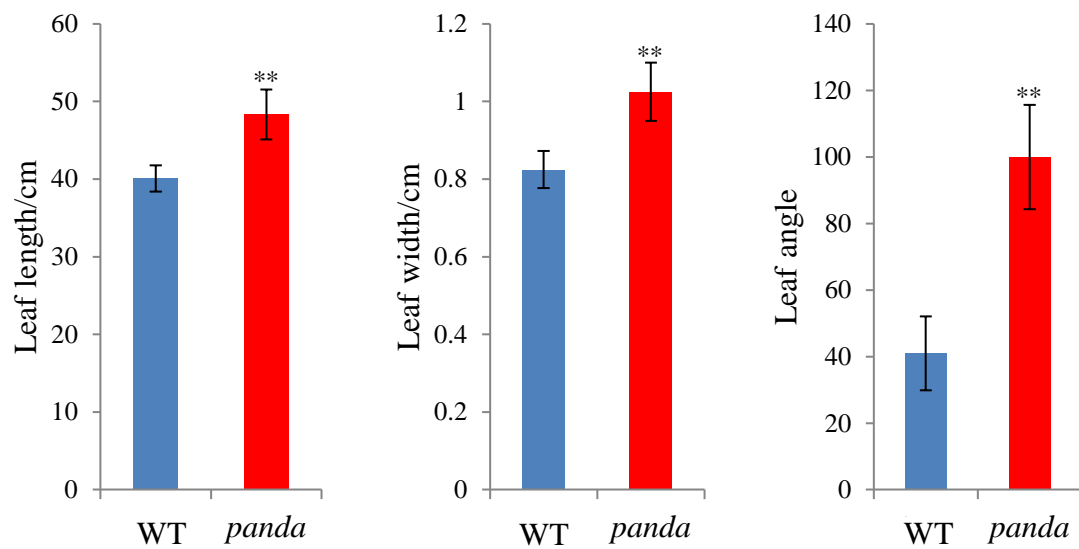


Fig. S3

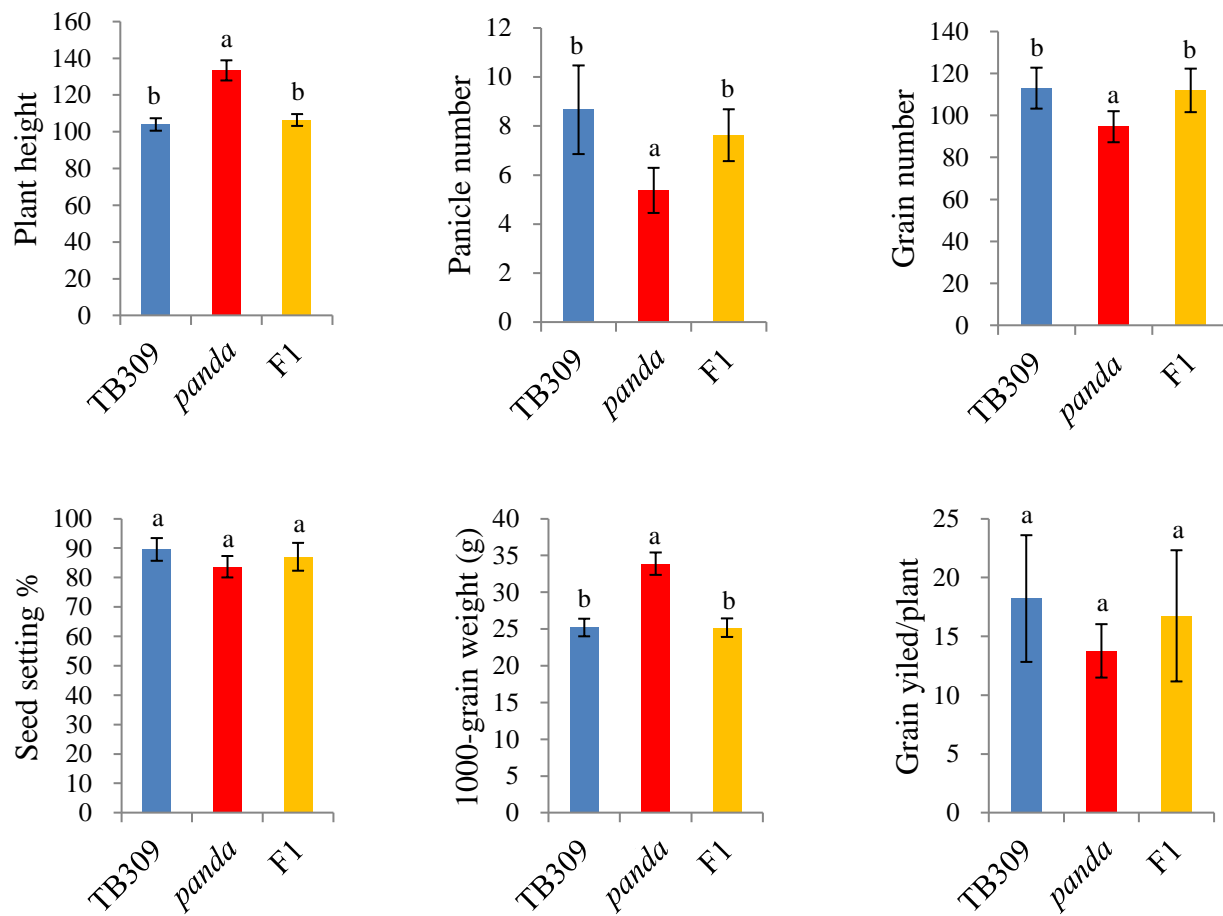


Fig. S4

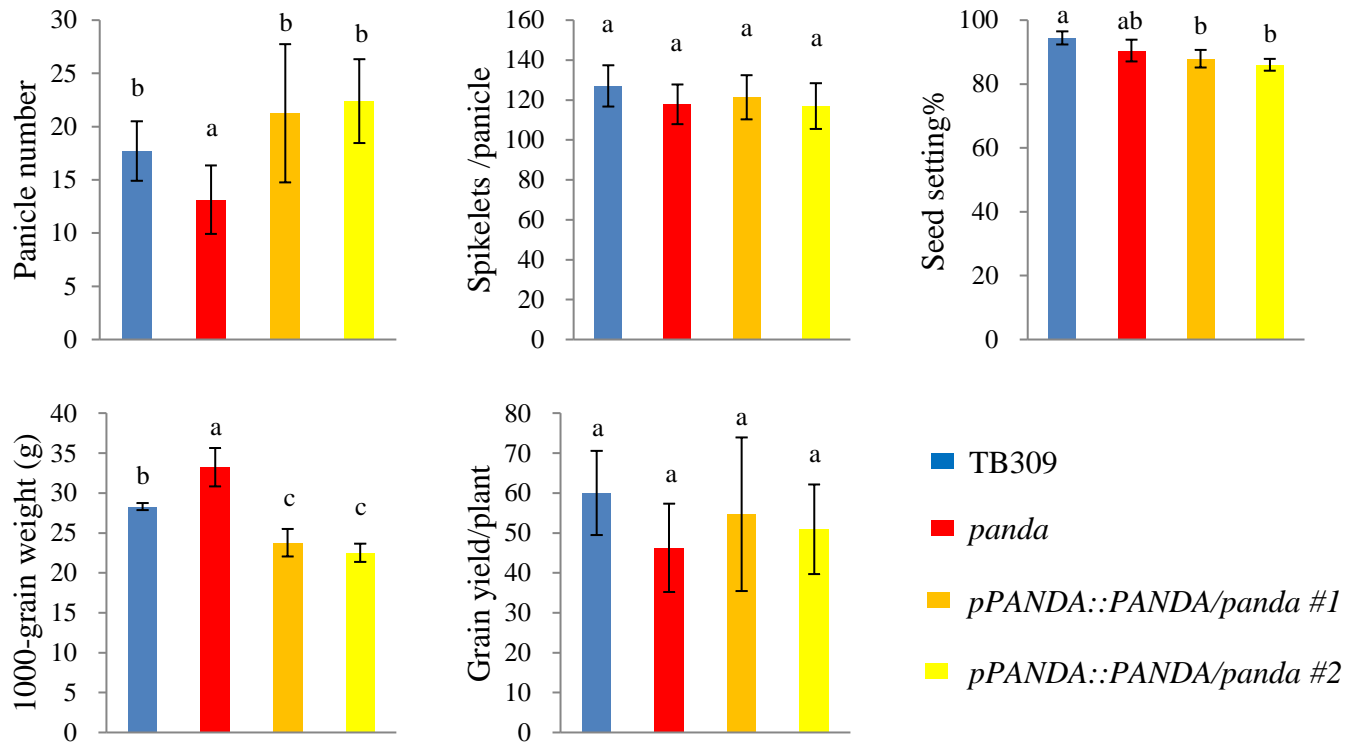


Fig. S5

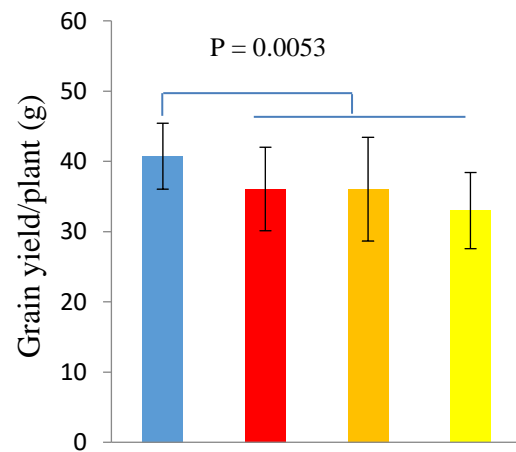
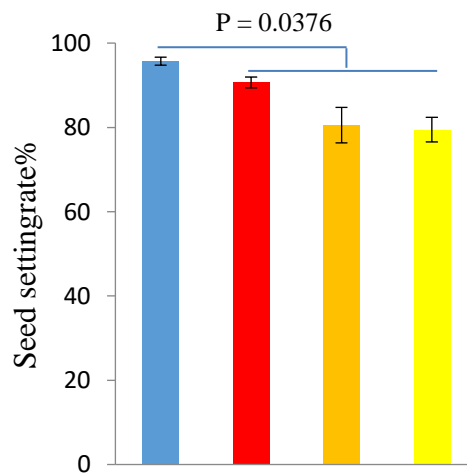
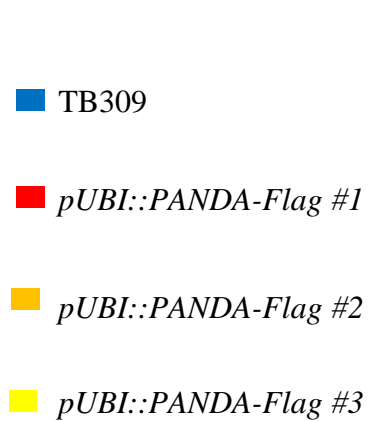
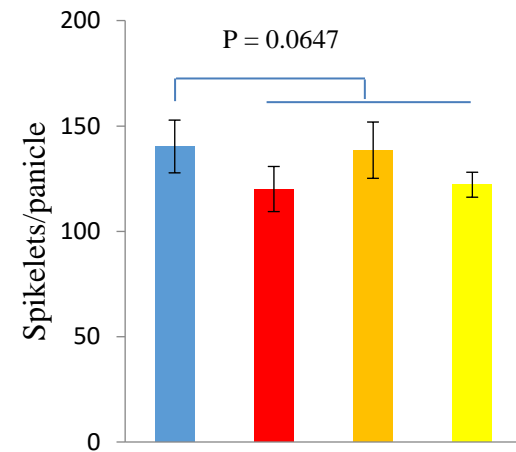
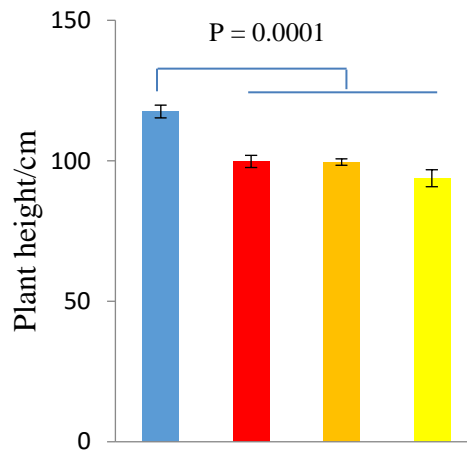
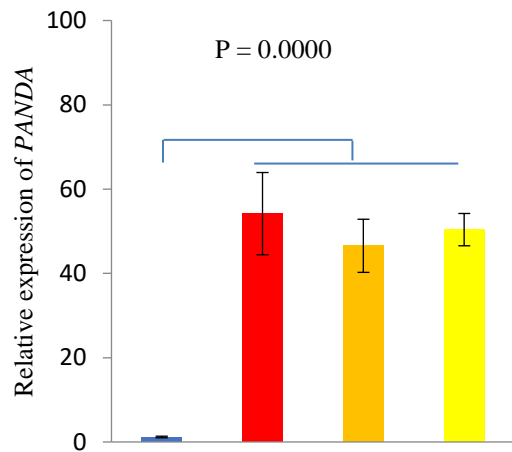


Fig. S6



- Genit (*indica*)
- *pPANDA::PANDA*/Genit #1
- *pPANDA::PANDA*/Genit #2
- *pPANDA::PANDA*/Genit #3

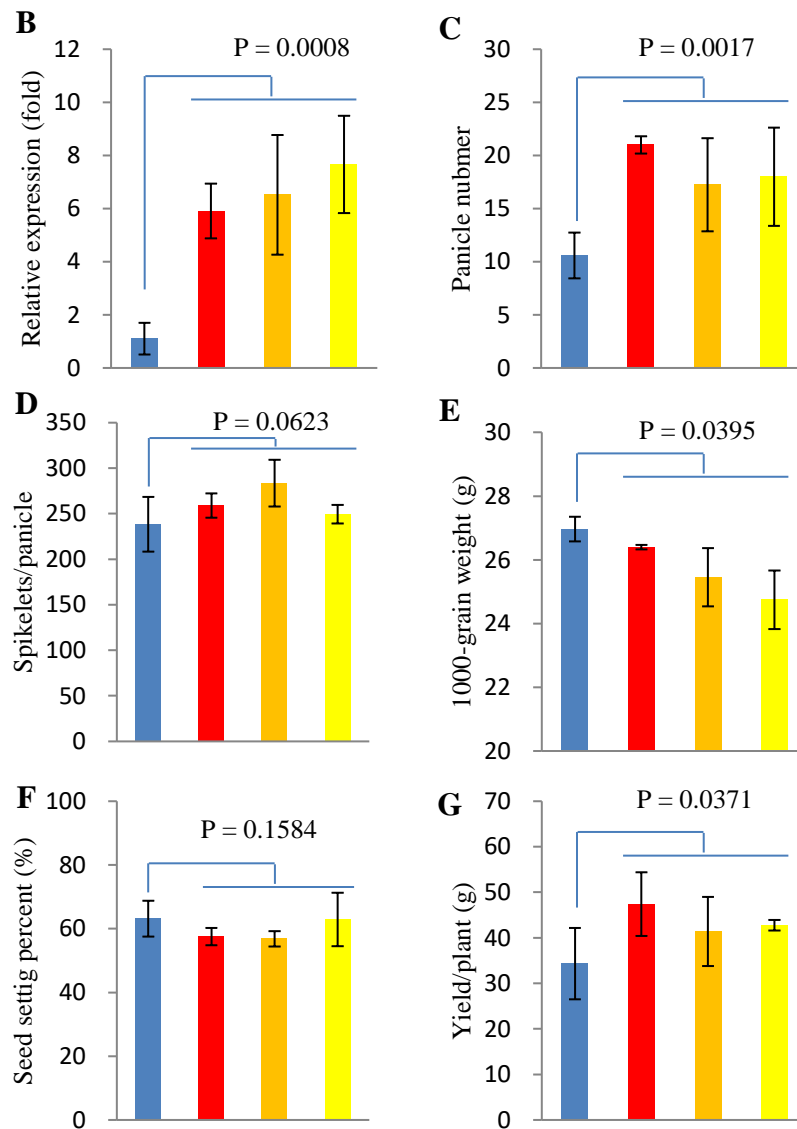


Fig. S7

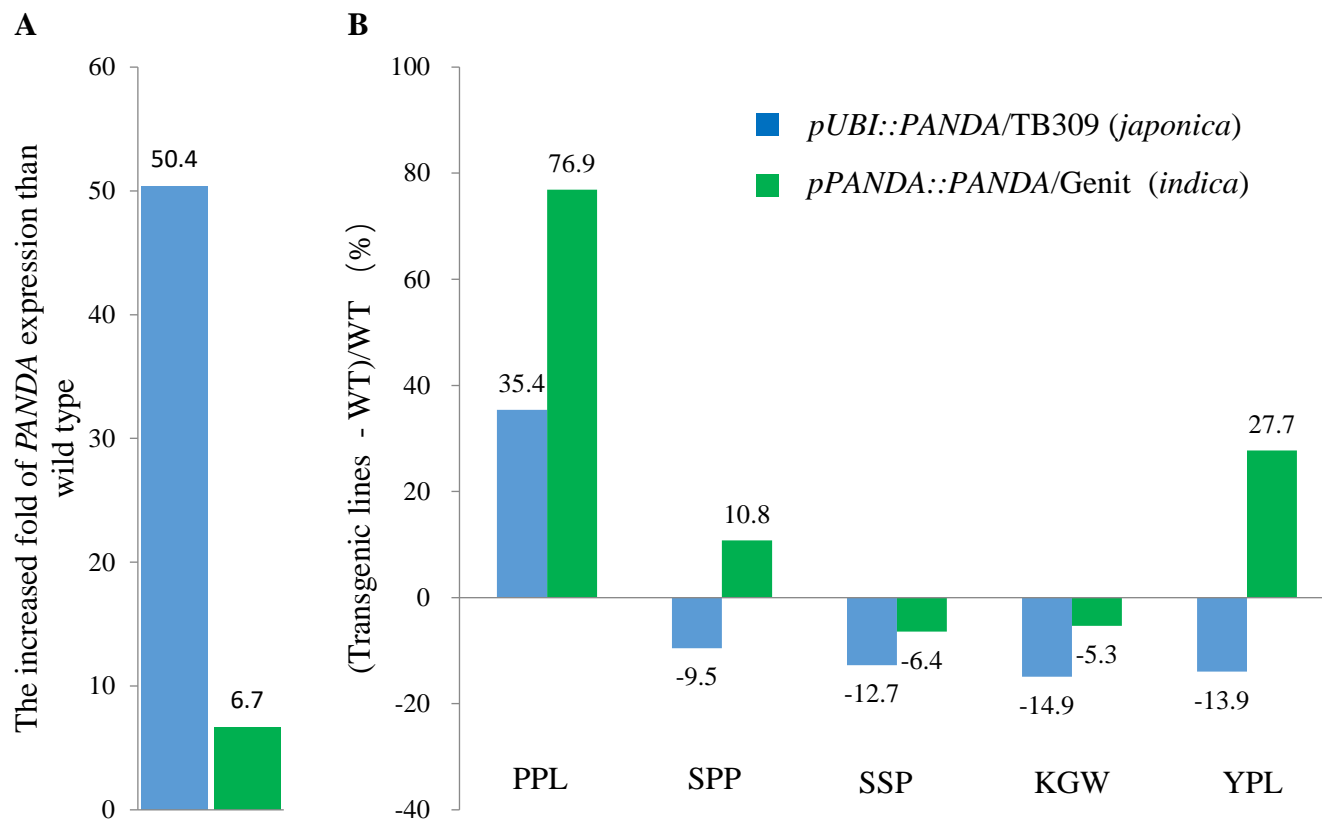


Fig. S8

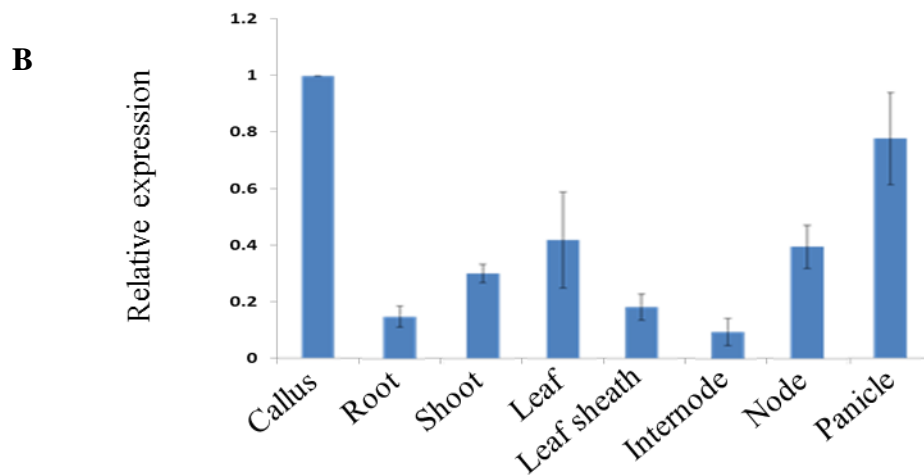
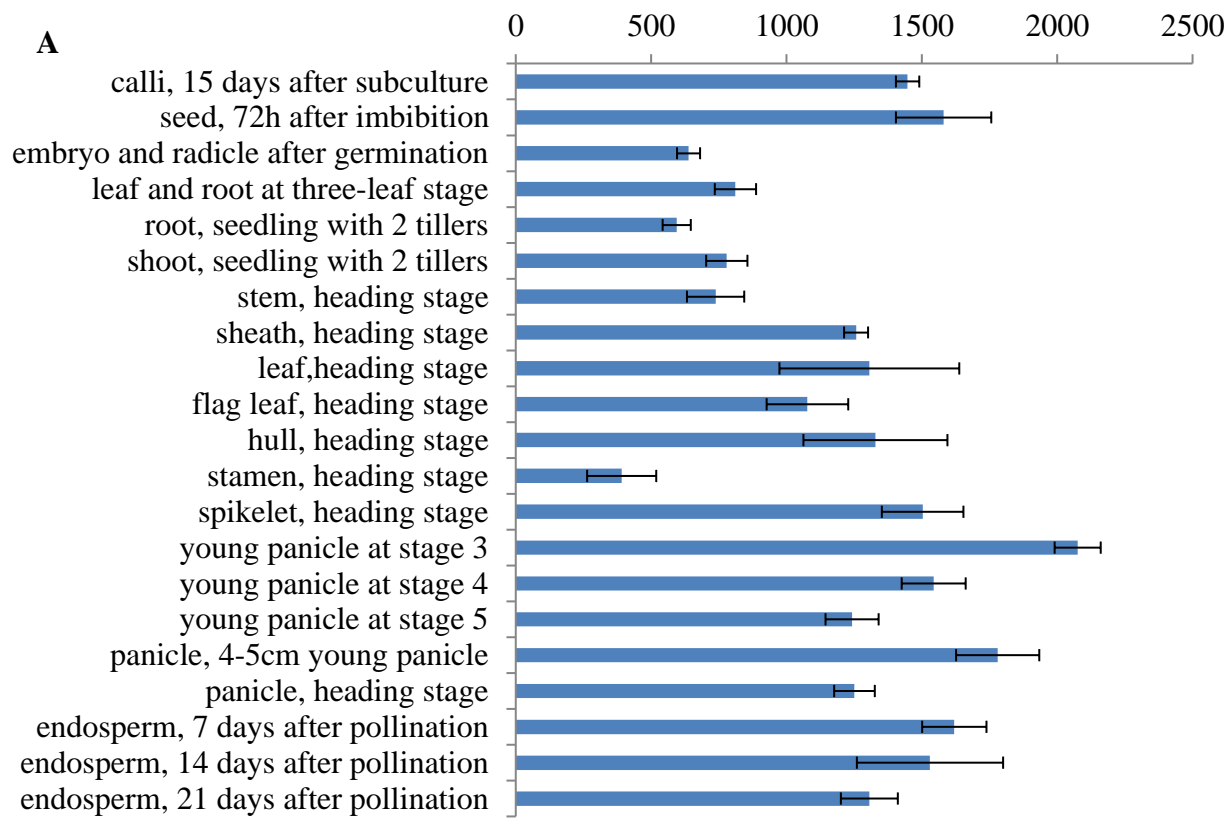


Fig. S9

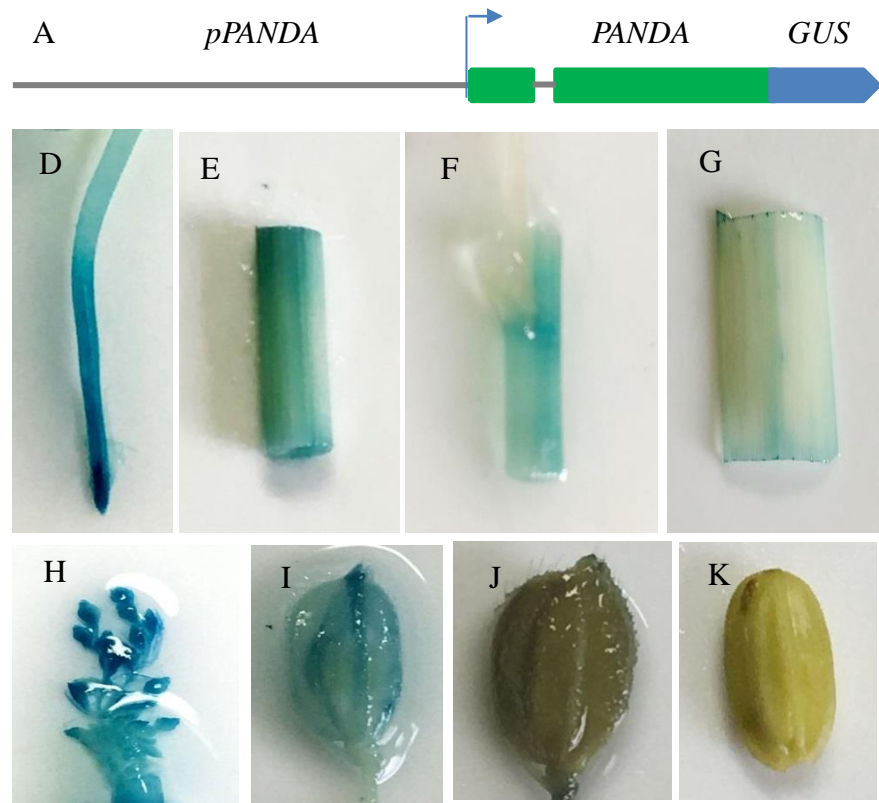


Fig. S10

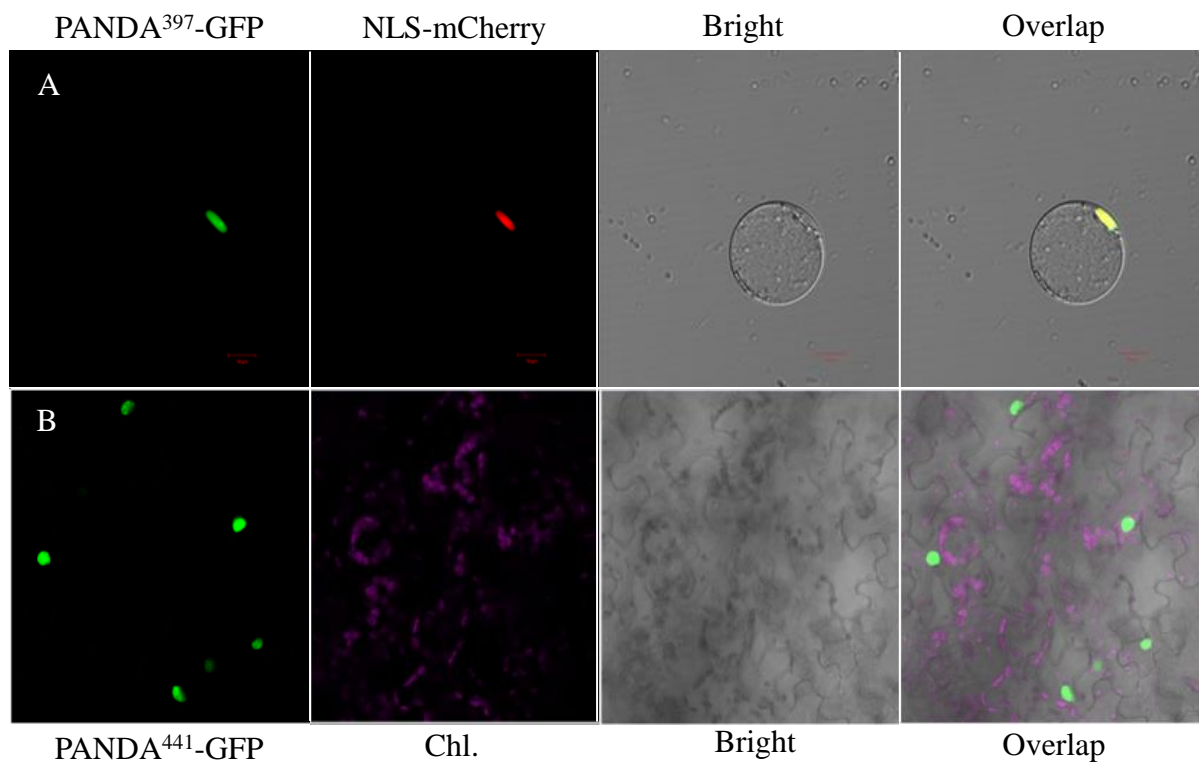


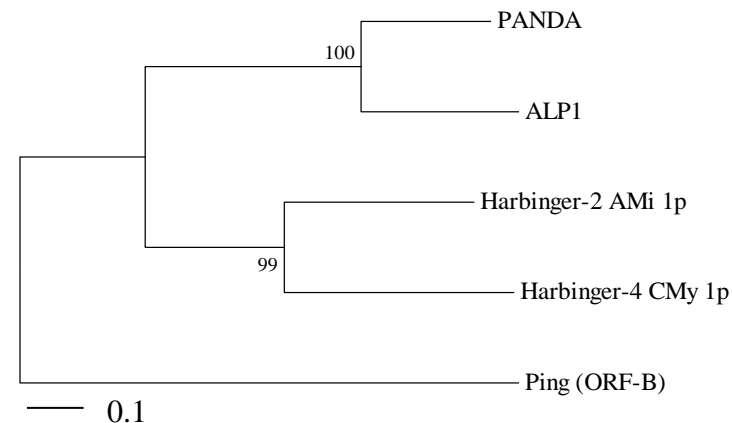
Fig. S11

A

Query ID	Subject ID	Cover %	Identify %	E value
PANDA	ALP1_Arabidopsis	83.0%	64.4%	2.00E-180
PANDA	Harbinger-4_CMy_1p	55.0%	36.1%	3.00E-47
PANDA	Harbinger-2_AMi_1p	62.0%	31.1%	3.00E-34
PANDA	Ping (ORF-B)	57.0%	23.4%	4.00E-09

B

PING	IFRRRFRMYRPLFLRIVDALGQWSD-YFTQRVDAAGRQGLSPLQKCTAAIRQLATGSGAD	144
PANDA	AFRYFFRTSRRTFDYICIVREDLISRPSSGLINIEGRLLSVEKQVAIAMRRLASGDSQV	168
Harbinger-2_AMi_1p	RWTQTFRMSRGTFMHLVAQVAPNIERQ----DTVMRPALTPEKRVAIAIMRLATPASLR	187
	: ** * * : : * : : * : * : *	
PING	ELDEYLKIGETTAMDAMKNFVKGIREVFGERYLRRPTVEDTERLLELGERRGFPGMFGSI	204
PANDA	SVGAAPGVGGSTVSVQVTRWFIESMEERARHHLVWPQERMEQIKARFEAESGLPNCAGAI	228
Harbinger-2_AMi_1p	YVAHSFGVGKSTAGQAVLDVCGAIQDTLADRVRILAD—PGEVVAGF—GALGFPNCVAGL	244
	: : * : * : : : : : : : : : * : * : *	
PING	DCMHQWERCPTAWKQFTRGDQKVPPTLILEAVASHDLWIWHAFVGVAGSNNDINVLSRS	264
PANDA	DATHIIMTLPAVESSEDWC—DPAKNYSMFLQGIVDDEMRFIDIVTGWFGSMMFSLRLKCS	287
Harbinger-2_AMi_1p	DGTHIPIILRPPG—GGRQYI—NRRGSNSVLEAVVDHRGRFTHIYTGWAGSARDAHVLRS	302
	* * : : : * : : * * : * *	
PING	TVFINEL—KGQAPRVQYMVNGNQYNEGYFLADGIYPEWKVFAKSYRLPIT—EKEKLYAQH	322
PANDA	GFFKHCDAQTRLDGVPVWSAENGEIREYIVGNVCYPLLPWMTPEYGESLSAPWASFNAR	347
Harbinger-2_AMi_1p	PLPLGLMQARTFAPGIQDLTIGDVSIPPVIVADAAYPLLPWLMRPFPGPLD—ARQQRVNEA	361
	: : : * : : :	
PING	QEGARKDIERAFVGLQRRFCILKRPARLYDRGVLRDVLVGCIIILHNMIVEDEKEARL---	379
PANDA	QKAARTLGPRLSRLKGSWRILNKVWWRPDKNKLPSIILVCGLLHNIIIDCEDELLPDVQ	407
Harbinger-2_AMi_1p	LARCRCITVEQAFGHKGRWRSLATRLE—AAPQHIPCIIITAACVILHNVCESRGEVFEPQ---	418
	. * : * : * : * : : : * : * : *	

D

E Ping ← ORF-A ORF-B →

C

PANDA	#1	GGAGAAGCAG GTGGCGATTG CCATGAGGAG GCTGG:C:GT
Harbinger-2_AMi	#1	GGAGAAGCGT GTGGCCATAG CCATCATGAG GCTGCCACA
		** * * * * *
PANDA	#41	CGGGCGATTG GCAGGTGTGCG GTGGGGGGCG CTTTGGTGT
Harbinger-2_AMi	#41	CCTGCCAGCC TCAGGTAT:: GTGGCCACT CTTTGGGGT
		** * * * * * * * * * * *
PANDA	#81	CGGGCAGTCC ACCGCTCG: CAGG:TGACT TGGAGTTCA
Harbinger-2_AMi	#81	GGGAAGTCC ACCG:CTGGC CAGGCTGTCT TGGATG:T:A
		* * * * * * * * * *
PANDA	#121	T:CGAGTCGA TGAAGAGCG GCCTCGGCAT CATCTGGTGT
Harbinger-2_AMi	#121	TGTGGGGCCA TCCAGGA:CA CCCT:AGC:: CGAC:CGAGT
		** * * * * * * * * * * *
PANDA	#161	GGCCCCGGCA GG:AGAGGAT GGAGCAGATC AAGCGGAGGT
Harbinger-2_AMi	#161	CATCC:GGCT GGCCGACCCA GG:GGAGGTG GTGCCAGGGT
		** * * * * * * * * * * *
PANDA	#201	TCGAGGCCGA GTCCGGTCTG CCGAA:T:TG TTGGCGGCC
Harbinger-2_AMi	#201	TTGGGGCC:: CTTGGGT:TC CCCAACTGTG TAGGGGCG:C
		* * * * * * * * * * * *
PANDA	#241	ATCGATGCCA CCCACAT
Harbinger-2_AMi	#241	:TCGATGGGA CCCACAT
		* *

Fig. S12

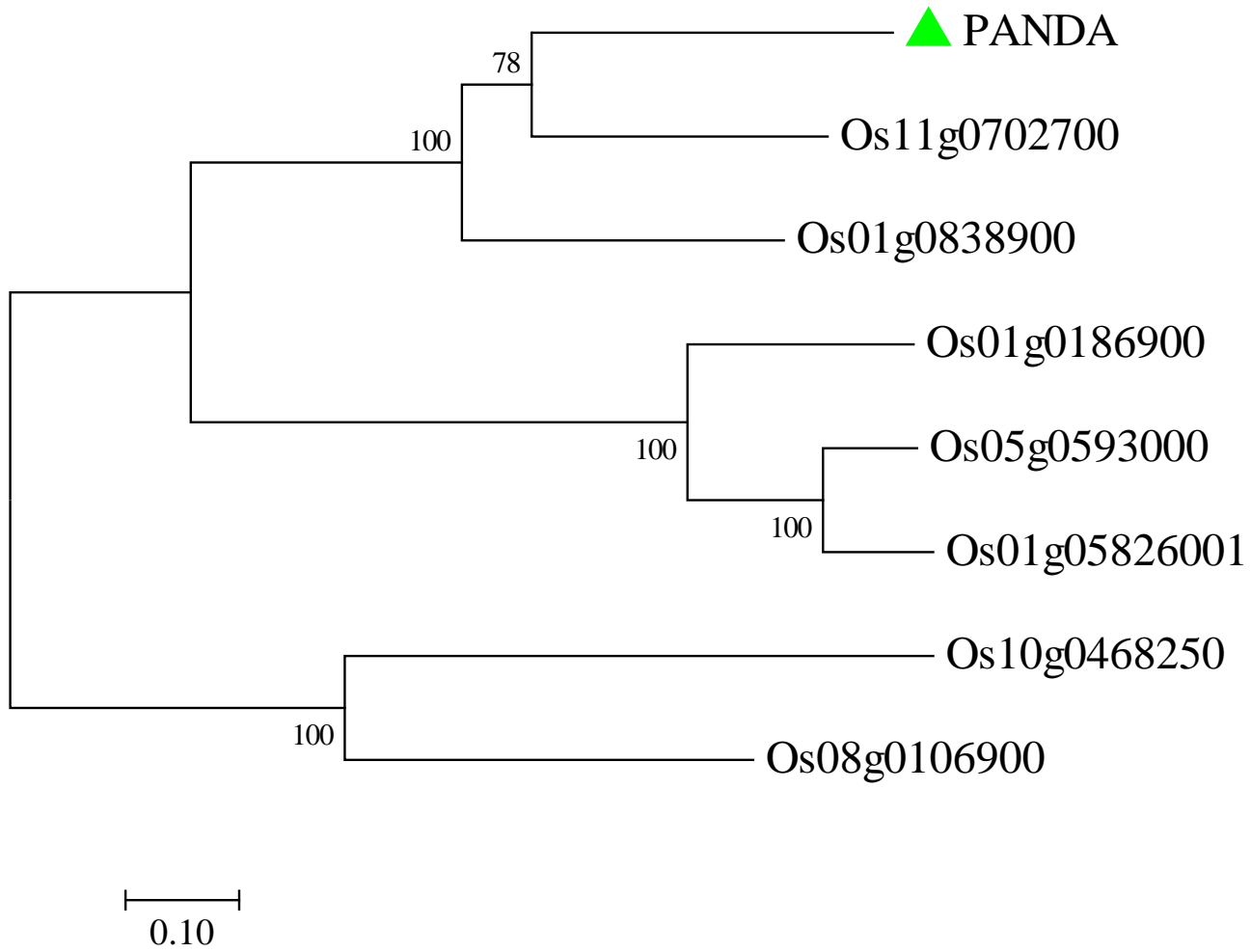


Fig. S13

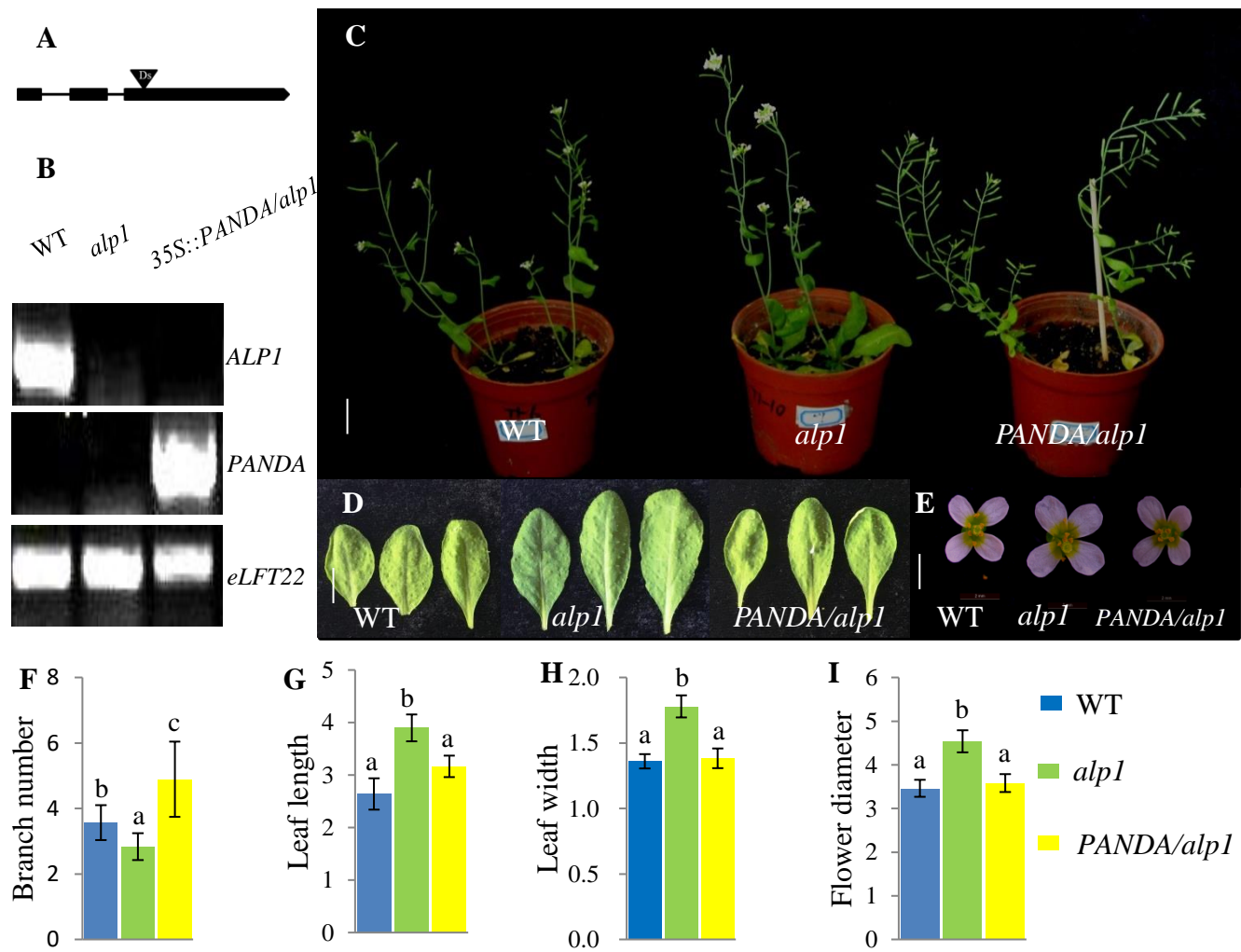


Fig. S14

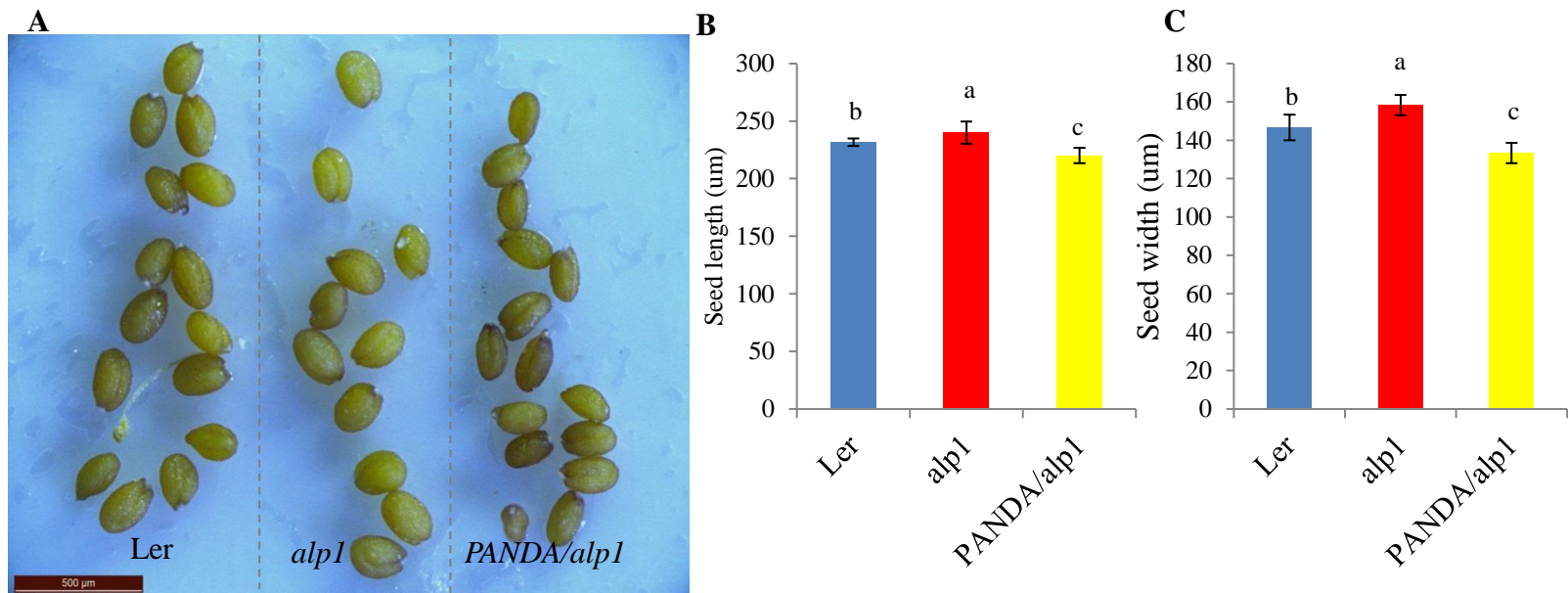


Fig. S15

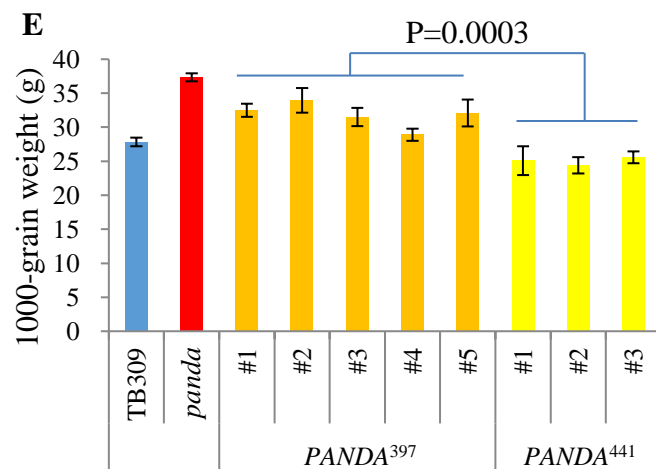
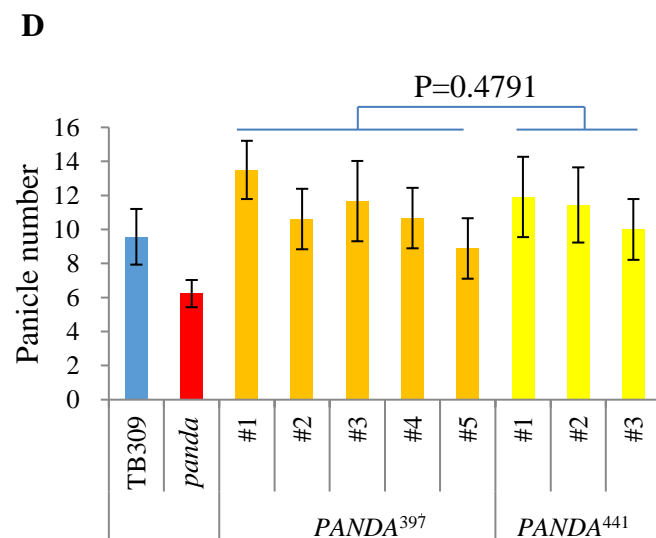
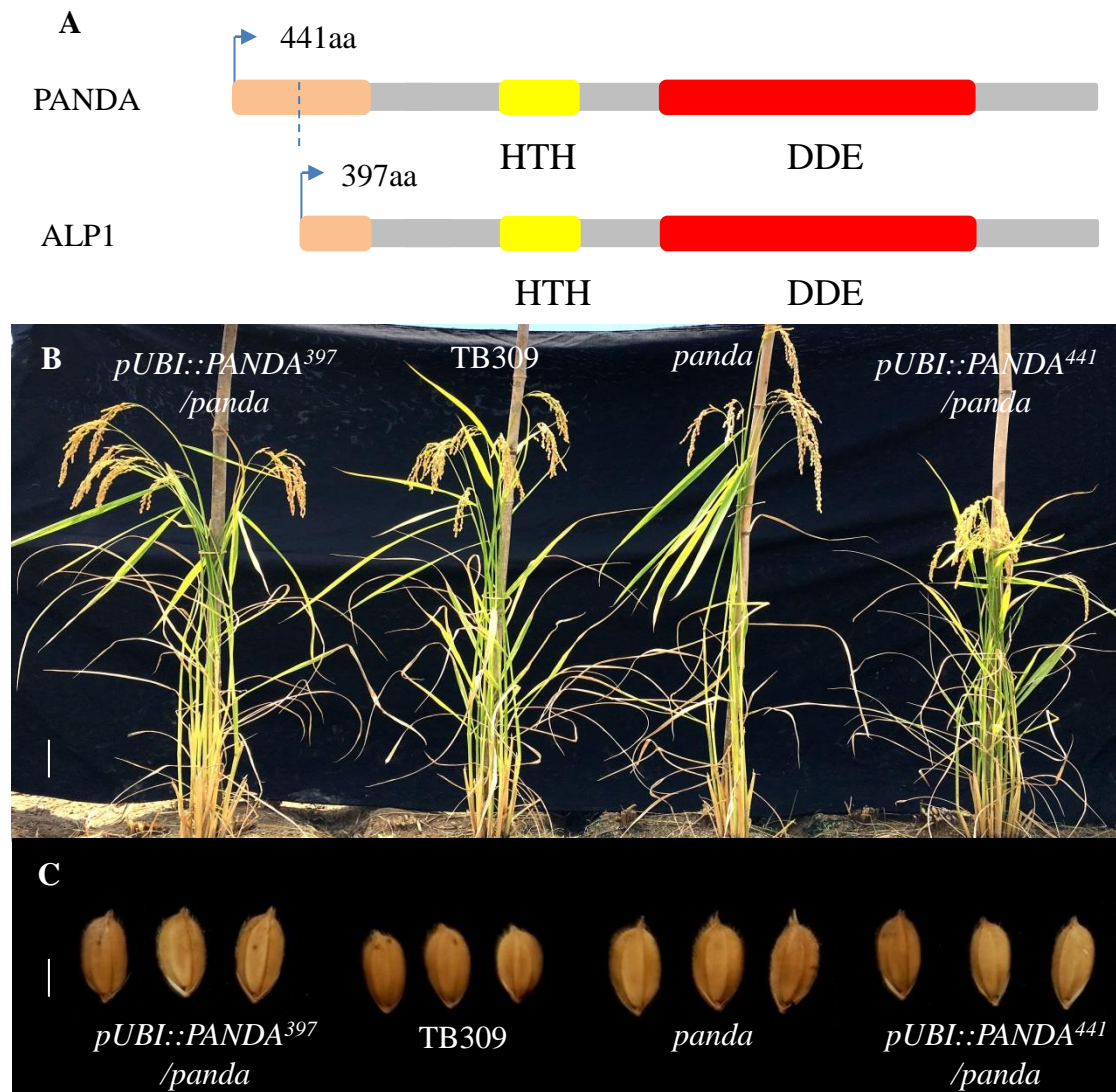


Fig. S17



Fig. S18

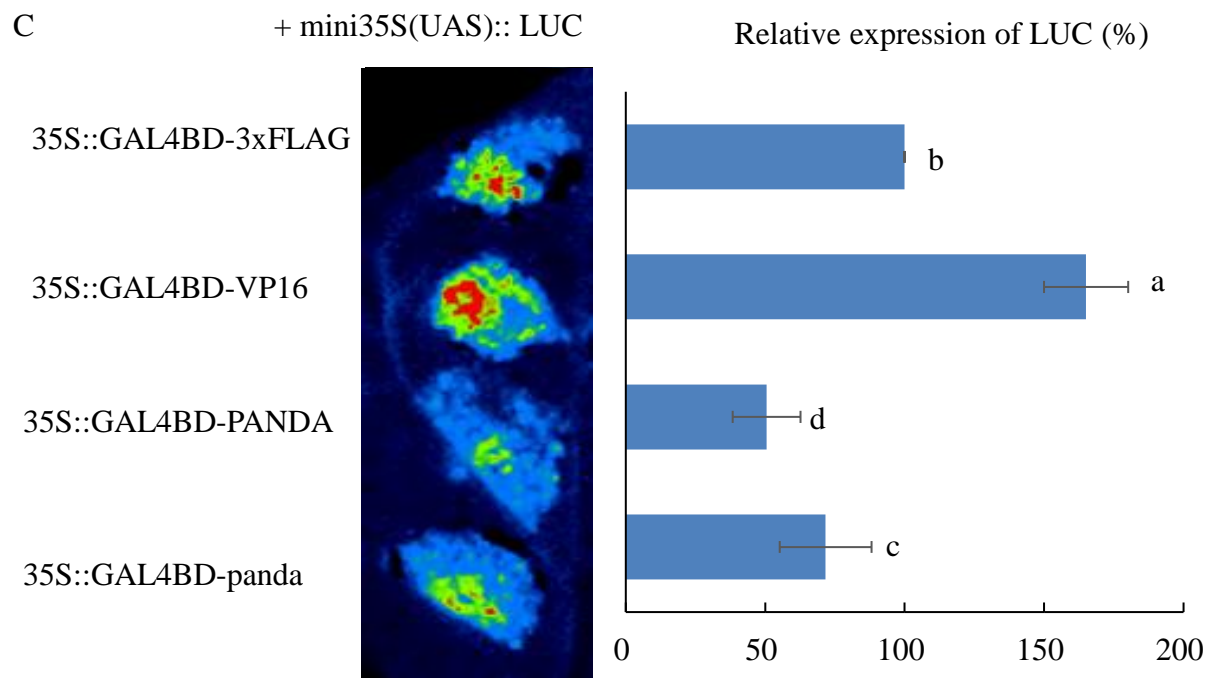
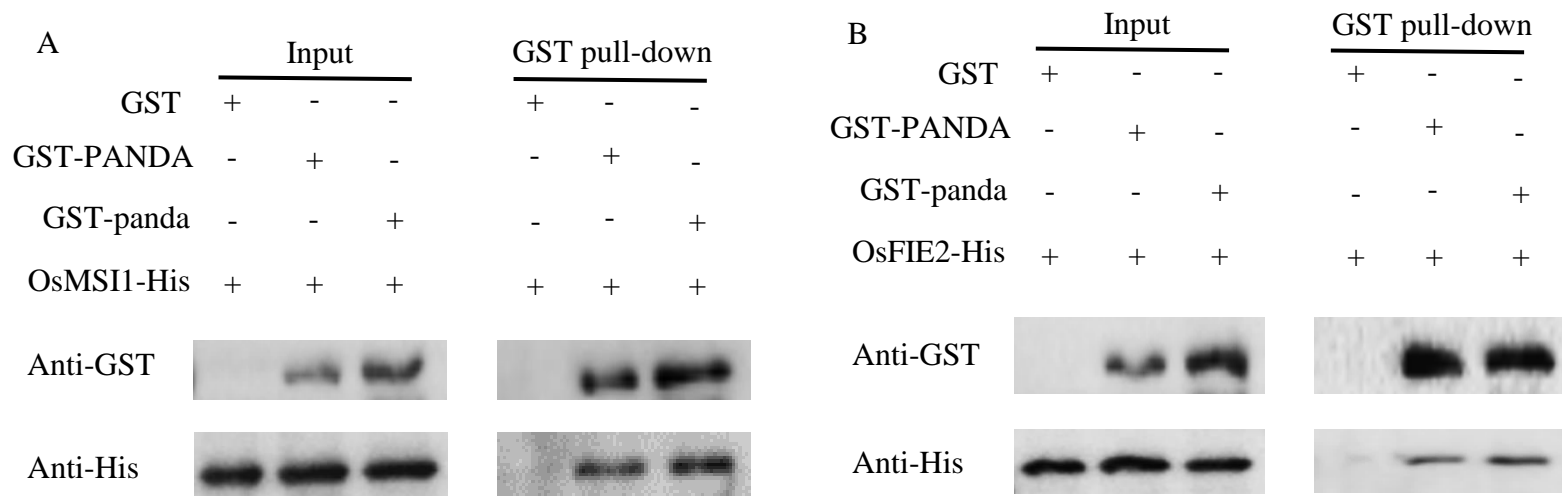


Fig. S19

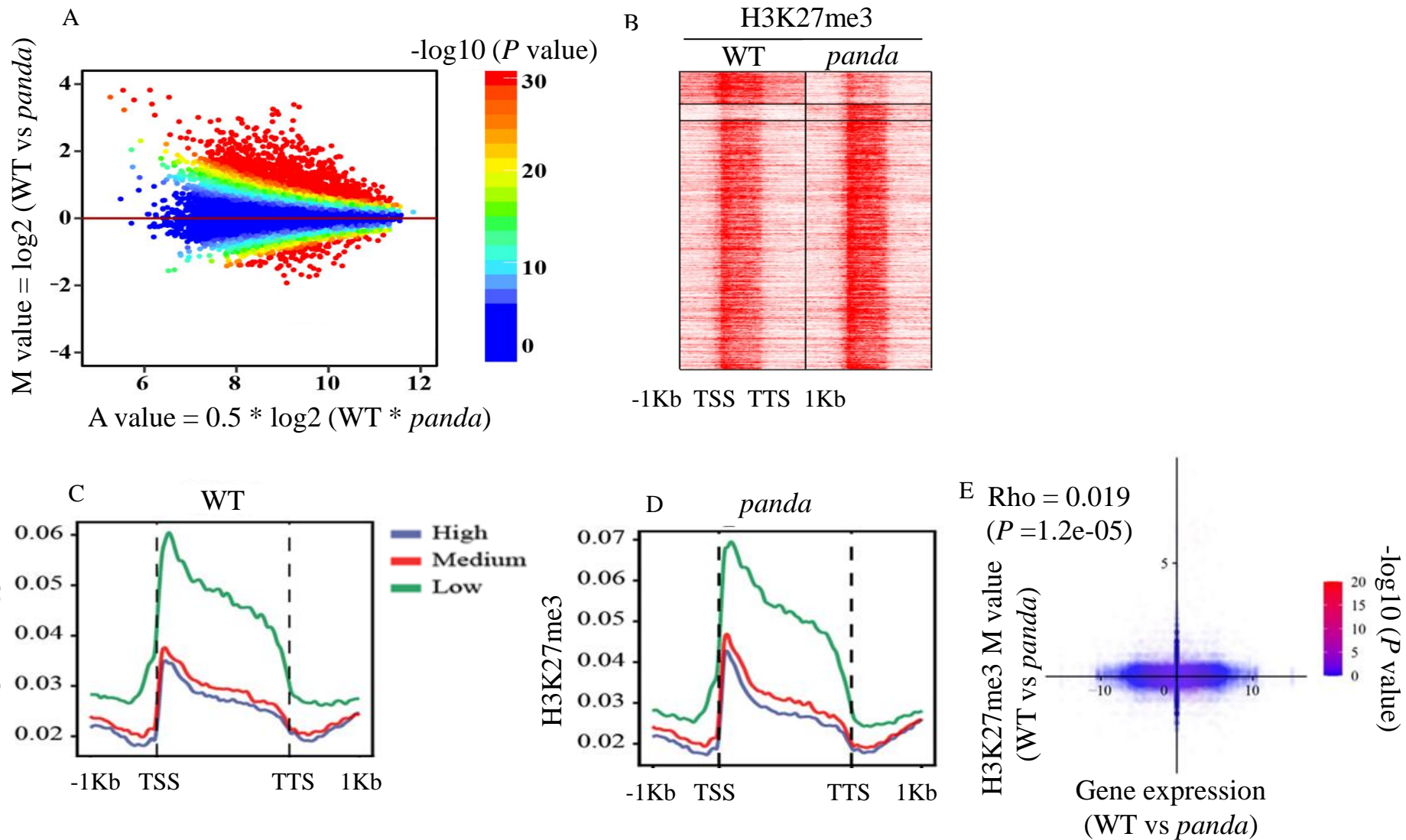


Fig. S20

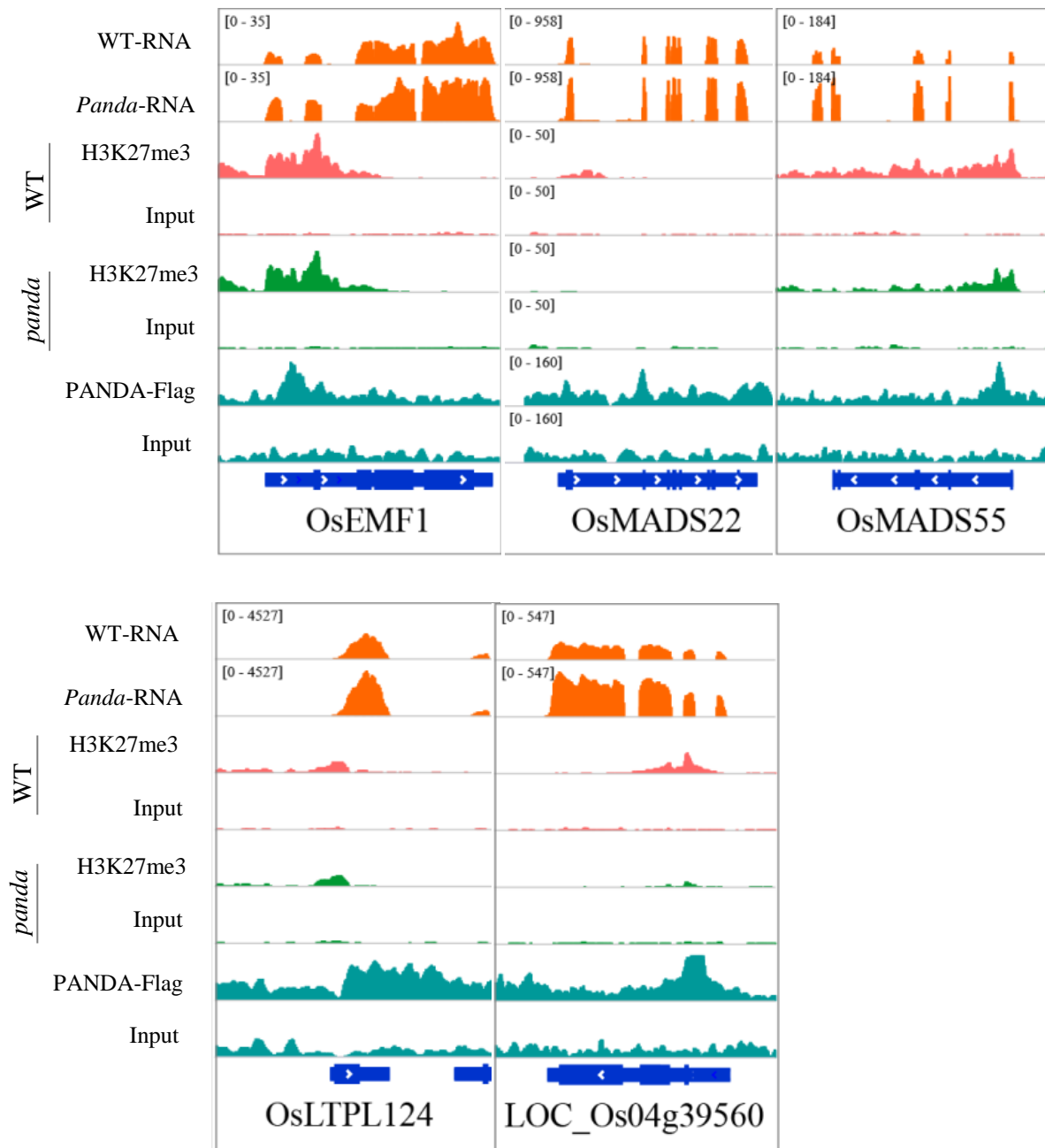


Fig. S21

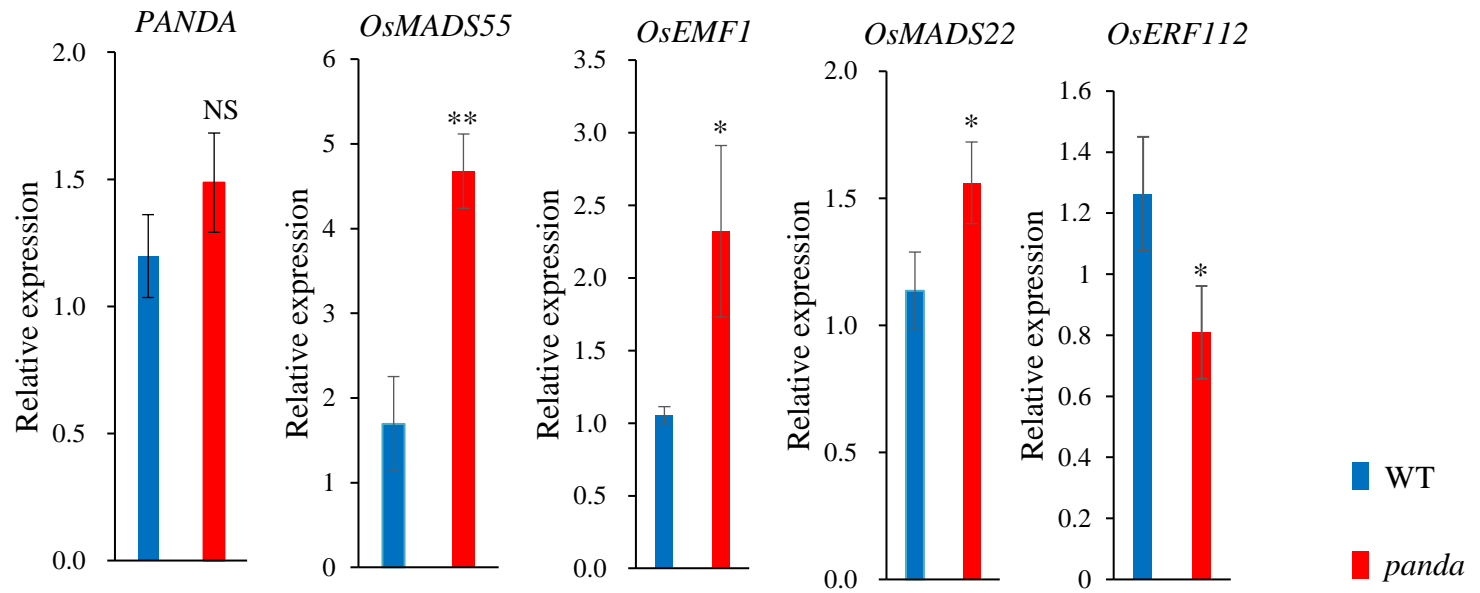


Fig. S22

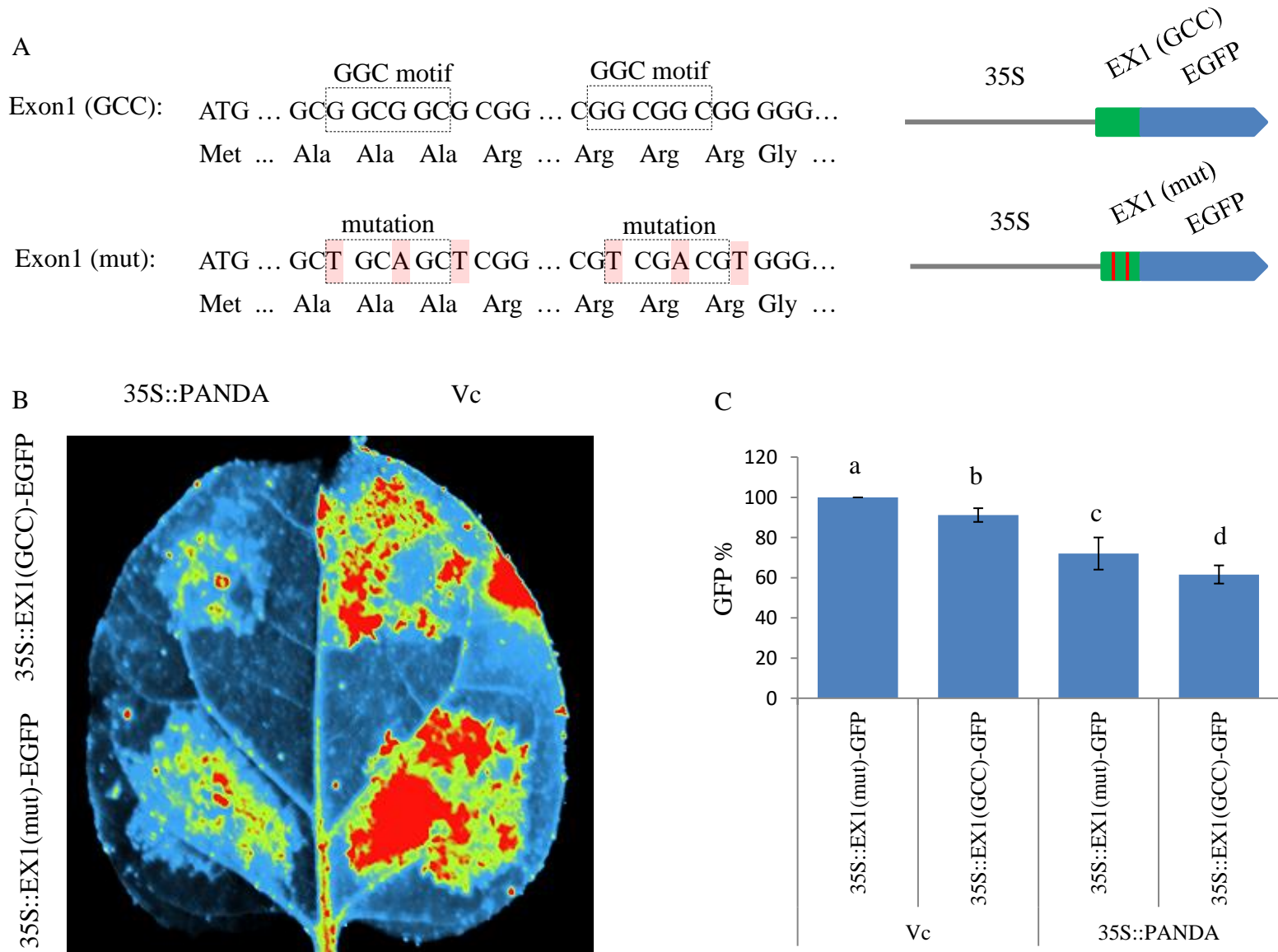


Fig. S23

PANDA	-	+	+	+	-	-	+
GCC motif- FITC	+	+	+	+	-	-	-
GCC motif	-	-	+	-	+	-	-
GCC motif with mutation	-	-	-	+	-	+	-

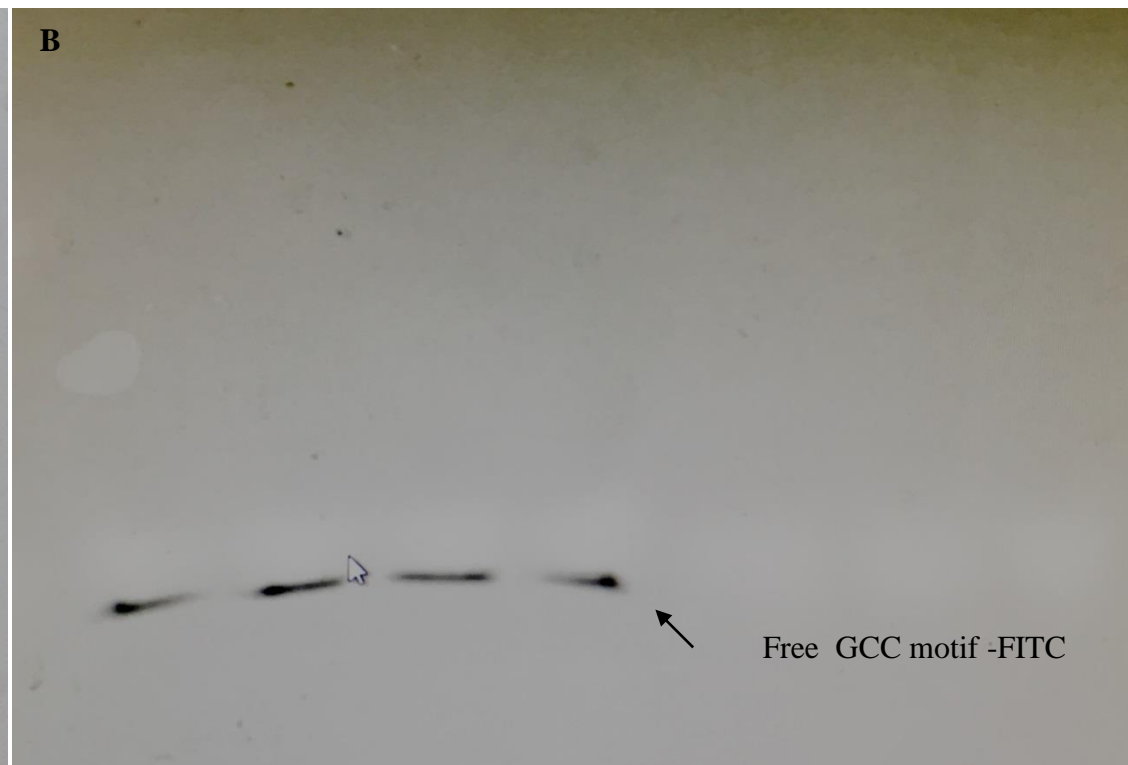
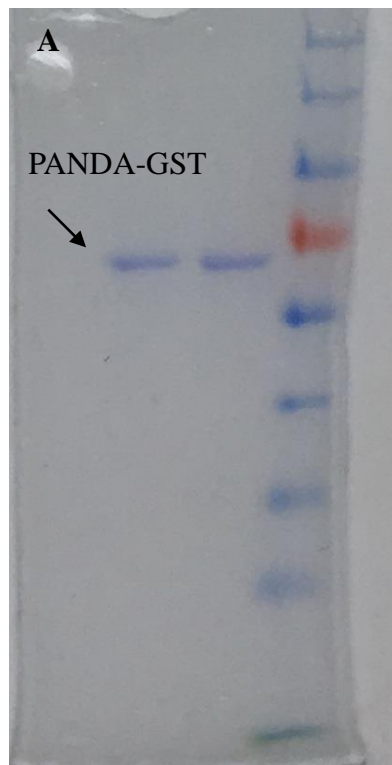


Fig. S24

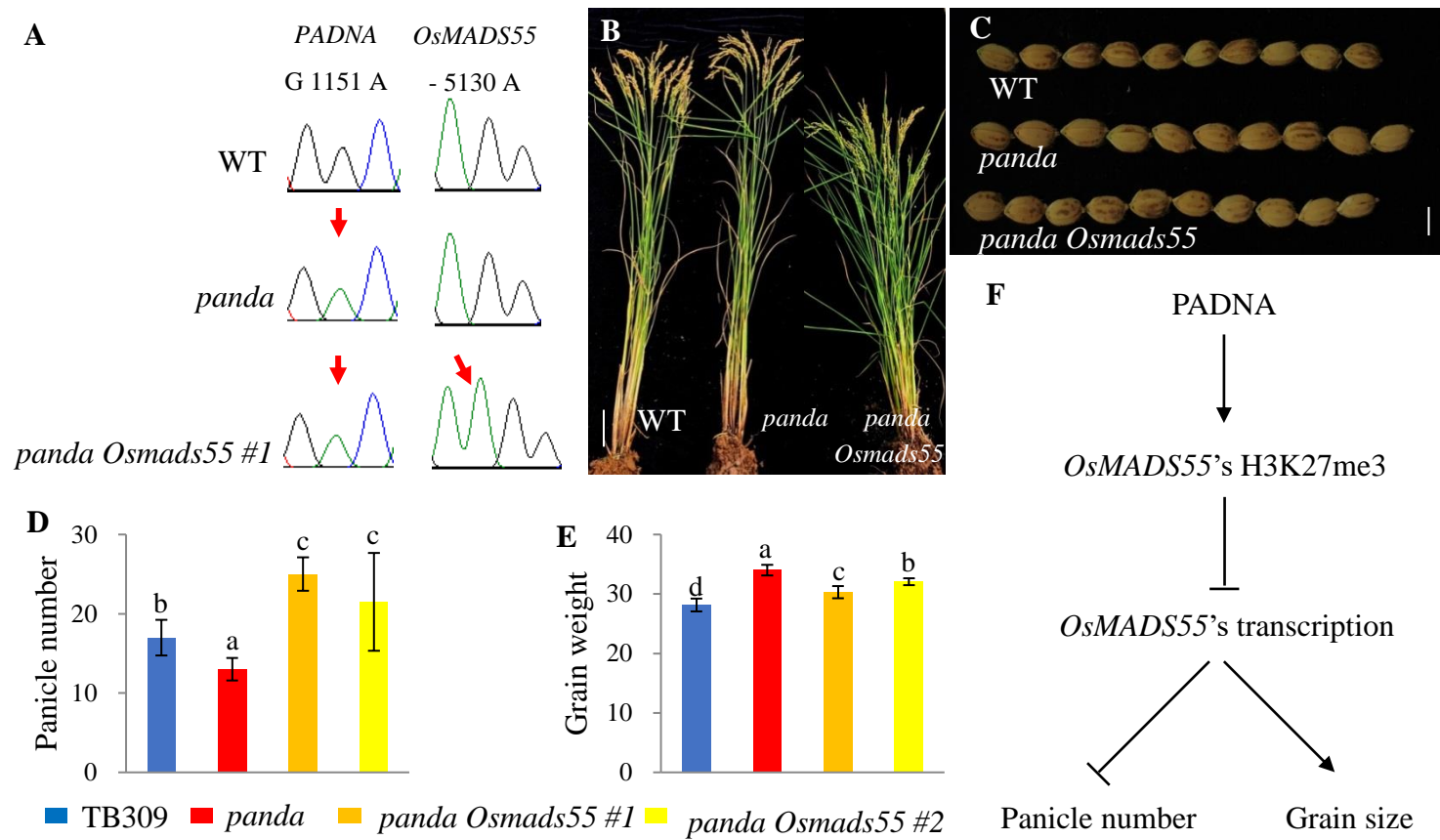


Fig. S25

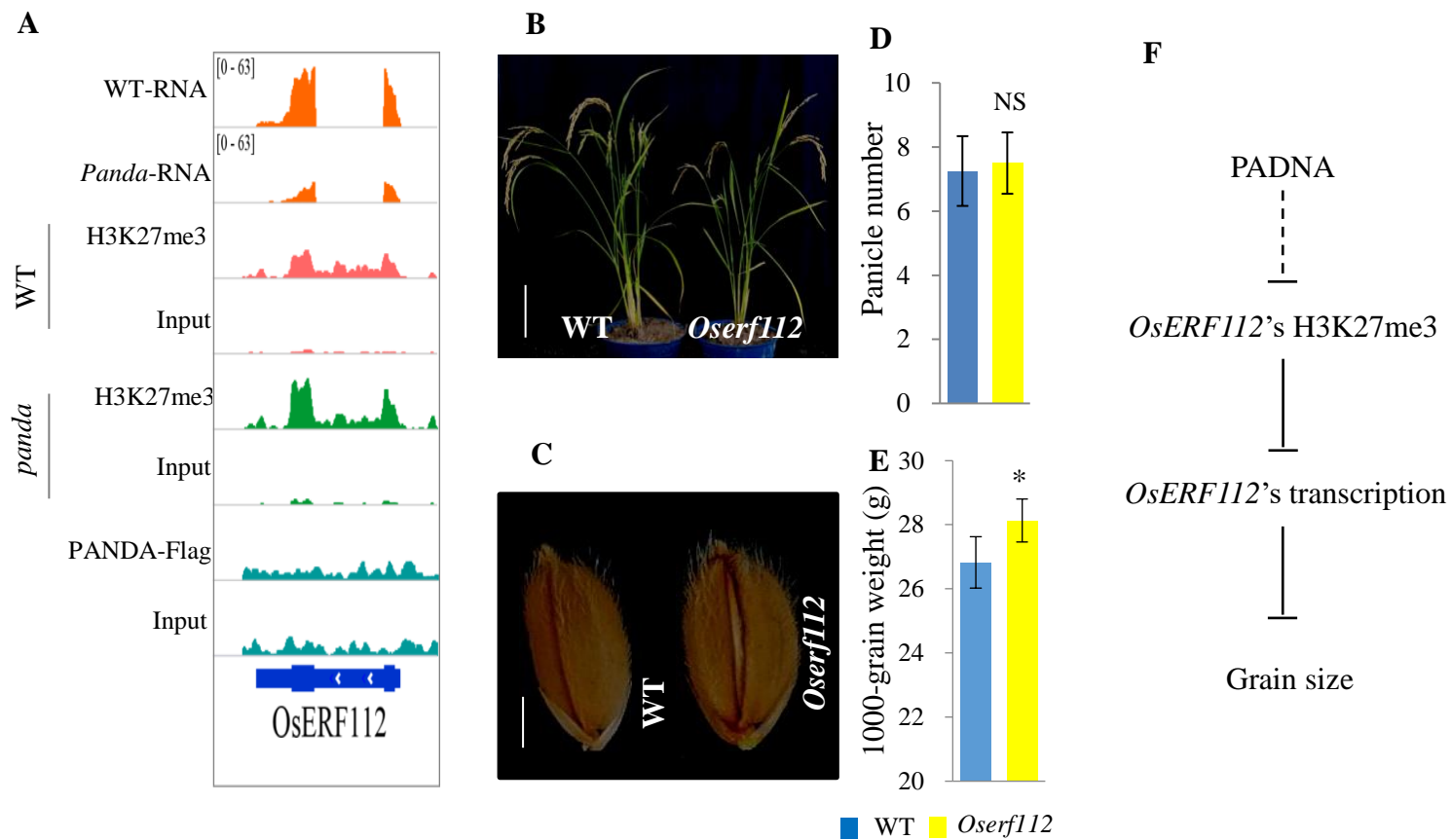


Fig. S26