Table S1 Primers used in this study.

Primer Name	Primers(5'->3')	Source
For CRISPR/Cas9		
FLR3-Cas9-T1-F	CAGTGGTCTCAGGCATATGGCATAGATCCTGTGA	This paper
FLR3-Cas9-T1-R	CAGTGGTCTCAAAACTCACAGGATCTATGCCATA	This paper
FLR3-Cas9-T2-F	CAGTGGTCTCAGGCAGCCCTCCTATCGATTGCCA	This paper
FLR3-Cas9-T2-R	CAGTGGTCTCAAAACTGGCAATCGATAGGAGGGC	This paper
FLR5-Cas9-T1-F	CAGTGGTCTCAGGCAGACAGTGCGACCCATTGGA	This paper
FLR5-Cas9-T1-R	CAGTGGTCTCAAAACTCCAATGGGTCGCACTGTC	This paper
FLR5-Cas9-T2-F	CAGTGGTCTCAGGCATTCCTTCCCAATTAGCCCA	This paper
FLR5-Cas9-T2-R	CAGTGGTCTCAAAACTGGGCTAATTGGGAAGGAA	This paper
FLR7-Cas9-T1-F	CAGTGGTCTCAGGCAGGAGGATCCTGGCTTGTGG	This paper
FLR7-Cas9-T1-R	CAGTGGTCTCAAAACCCACAAGCCAGGATCCTCC	This paper
FLR7-Cas9-T2-F	CAGTGGTCTCAGGCATAGAGCCTCAAAGGCGCCG	This paper
FLR7-Cas9-T2-R	CAGTGGTCTCAAAACCGGCGCCTTTGAGGCTCTA	This paper
FLR8-Cas9-T1-F	CAGTGGTCTCAGGCATAACTTCAGCGTGCTGCCG	This paper
FLR8-Cas9-T1-R	CAGTGGTCTCAAAACCGGCAGCACGCTGAAGTTA	This paper
FLR8-Cas9-T2-F	CAGTGGTCTCAGGCACACATTCGGGAATTTCAGT	This paper
FLR8-Cas9-T2-R	CAGTGGTCTCAAAACACTGAAATTCCCGAATGTG	This paper
FLR9-Cas9-T1-F	CAGTGGTCTCAGGCACGCGGCGGAGCCCTTGAGC	This paper
FLR9-Cas9-T1-R	CAGTGGTCTCAAAACGCTCAAGGGCTCCGCCGCG	This paper
FLR9-Cas9-T2-F	CAGTGGTCTCAGGCATGTCTGTGATGAGCTCGTC	This paper
FLR9-Cas9-T2-R	CAGTGGTCTCAAAACGACGAGCTCATCACAGACA	This paper
FLR10-Cas9-T1-F	CAGTGGTCTCAGGCATGAGGAGGATGGAGAACAA	This paper
FLR10-Cas9-T1-R	CAGTGGTCTCAAAACTTGTTCTCCATCCTCCTCA	This paper
FLR10-Cas9-T2-F	CAGTGGTCTCAGGCAGACGAATCCAATGGTGACC	This paper
FLR10-Cas9-T2-R	CAGTGGTCTCAAAACGGTCACCATTGGATTCGTC	This paper
FLR11-Cas9-T1-F	CAGTGGTCTCAGGCAACTTCCACAGAAGCTCCTG	This paper
FLR11-Cas9-T1-R	CAGTGGTCTCAAAACCAGGAGCTTCTGTGGAAGT	This paper
FLR11-Cas9-T2-F	CAGTGGTCTCAGGCAGACGCTGAACCGCGCCGAG	This paper
FLR11-Cas9-T2-R	CAGTGGTCTCAAAACCTCGGCGCGGTTCAGCGTC	This paper
FLR12-Cas9-T1-F	CAGTGGTCTCAGGCAAGATGGGACAACGACCGGA	This paper
FLR12-Cas9-T1-R	CAGTGGTCTCAAAACTCCGGTCGTTGTCCCATCT	This paper
FLR12-Cas9-T2-F	CAGTGGTCTCAGGCAGGGAAGGACGAGTGCGATG	This paper
FLR12-Cas9-T2-R	CAGTGGTCTCAAAACCCATCGCACTCGTCCTTCCC	This paper
FLR13-Cas9-T1-F	CAGTGGTCTCAGGCAGGAAGAGGTAGCTGTCCGC	This paper
FLR13-Cas9-T1-R	CAGTGGTCTCAAAACGCGGACAGCTACCTCTTCC	This paper
FLR13-Cas9-T2-F	CAGTGGTCTCAGGCACCGGAAGGGGAAGAAGCGG	This paper
FLR13-Cas9-T2-R	CAGTGGTCTCAAAACCCGCTTCTTCCCCTTCCGG	This paper
FLR14-Cas9-T1-F	CAGTGGTCTCAGGCATCCGGAACGAGTAGGACGA	This paper
FLR14-Cas9-T1-R	CAGTGGTCTCAAAACTCGTCCTACTCGTTCCGGA	This paper
FLR14-Cas9-T2-F	CAGTGGTCTCAGGCACGAGTCAGCAGCGCCGATG	This paper

FLR14-Cas9-T2-R	CAGTGGTCTCAAAACCATCGGCGCTGCTGACTCG	This paper
FLR15-Cas9-T1-F	CAGTGGTCTCAGGCAACCCTATGCAGCAGTACAG	This paper
FLR15-Cas9-T1-R	CAGTGGTCTCAAAACCTGTACTGCTGCATAGGGT	This paper
FLR15-Cas9-T2-F	CAGTGGTCTCAGGCATCATAGCTCTGGTAGGCAA	This paper
FLR15-Cas9-T2-R	CAGTGGTCTCAAAACTTGCCTACCAGAGCTATGA	This paper
FLR16-Cas9-T1-F	CAGTGGTCTCAGGCAGATGGAATTGCTTGGCTGA	This paper
FLR16-Cas9-T1-R	CAGTGGTCTCAAAACTCAGCCAAGCAATTCCATC	This paper
FLR16-Cas9-T2-F	CAGTGGTCTCAGGCAACATTCCACAGGATCAATG	This paper
FLR16-Cas9-T2-R	CAGTGGTCTCAAAACCATTGATCCTGTGGAATGT	This paper
Identification of homozygous		
FLR3-Cas9-CK-F	TGCAAGTGTTCCCAACTCTTATAG	This paper
FLR3-Cas9-CK-R	ACATTACCATCTTTGGAGAAGGT	This paper
FLR5-Cas9-CK-F	TCGTTCCCACCTATCTTATAGCA	This paper
FLR5-Cas9-CK-R	GAATTCTCGAAGGATGTAGGC	This paper
FLR7-Cas9-CK-F	CTCCAGTAACTTGGAGATTGAG	This paper
FLR7-Cas9-CK-R	ACGTCATAGTTCTCAGCAGC	This paper
FLR8-Cas9-CK-F	CTTAAGCAGCCCTGGAATAGC	This paper
FLR8-Cas9-CK-R	GTGAGCATCACCTCAATTGCAT	This paper
FLR9-Cas9-CK-F	GCACCGACACGTCCTTCAC	This paper
FLR9-Cas9-CK-R	AGAACTCCGACTTCGACCTCAC	This paper
FLR10-Cas9-CK-F	GTTCGTCCCTGCATCTTCTGCTC	This paper
FLR10-Cas9-CK-R	TAAGGCTTGGAGGGGCTGAAAC	This paper
FLR11-Cas9-CK-F	GAGCTGTCCGGGAAGTCCG	This paper
FLR11-Cas9-CK-R	CATGTCACGTTCGACGTGGTC	This paper
FLR12-Cas9-CK-F	GCAAAGGGATAGCAAAGCT	This paper
FLR12-Cas9-CK-R	GTAACGGGAGGAGGAGGAG	This paper
FLR13-Cas9-CK-F	TGGGGCAACCTACTCTGATCAGC	This paper
FLR13-Cas9-CK-R	CACCTCGATGGCGTTGACGAAC	This paper
FLR14-Cas9-CK-F	ACAACTACCTCATCAGCTGC	This paper
FLR14-Cas9-CK-R	CTGGTCACTAGTCCATTCTCG	This paper
FLR15-Cas9-CK-F	GACAACTACCTGGTGGACTG	This paper
FLR15-Cas9-CK-R	GCGGTGTTGATCCTCCAC	This paper
FLR16-Cas9-CK-F	CAAACCGCAAGGATATTCACT	This paper
FLR16-Cas9-CK-R	CGCAGTATTGTAGACACTGTCTG	This paper
FLR4-LP	TCTTGAGGCGTTGCTTCCAT	This paper
FLR4-RP	TGGGGTCACCTTCAGCAAAG	This paper
T-DNA-BP	CCACAGTTTTCGCGATCCAGACTG	This paper
Overexpression		
FLR2-1300GFP-F	CGGTACCCGGGGATCCATGGGAAGCTCCAGATTCGTGCTCT	This paper
FLR2-1300GFP-R	CCATGTCGACTCTAGACCGTCCCTTGGGGTTCATGATCTGT	This paper
qRT-PCR for gene expression		
FLR1-RT-F	GGAAGATGACACGCCATACATACC	This paper
FLR1-RT-R	GGAGCCTCACGAGATACTGATAACC	This paper

FLR2-RT-F	TATCCAGATGTCCAGGCTAAAC	This paper
FLR2-RT-R	CAAGAACCACCAGACCTCCAAT	This paper
FLR3-RT-F	CTGAATTGTGGAGCCTCTGGTG	This paper
FLR3-RT-R	GGAGCGAAGGGTCTTGGTATGA	This paper
FLR4-RT-F	TATGCTTATCGCTTGTTTTTCT	This paper
FLR4-RT-R	TTTCGCCATTATTGTCTATTTC	This paper
FLR5-RT-F	AAAGCATTCTGGCAAGACTGAC	This paper
FLR5-RT-R	CCACCGTTGTACCATTATCTATCTC	This paper
FLR6-RT-F	AGATCGCACCTGACTGCCTGAA	This paper
FLR6-RT-R	CGCCGTTCTCAAATGTCTCCTG	This paper
FLR7-RT-F	ACTTGGTCCGGTTGCATTTC	This paper
FLR7-RT-R	ACTTGGTCCGGTTGCATTTC	This paper
FLR8-RT-F	TGAGGGTACTACAGTGGCAATC	This paper
FLR8-RT-R	TGGGAGGTCACTTCCATAAAG	This paper
FLR9-RT-F	GACAAGCTGAGCATCCAGGT	This paper
FLR9-RT-R	CTTGTACCACTTGACGGCCA	This paper
FLR10-RT-F	CTACTCAACCGCACAACAGAT	This paper
FLR10-RT-R	GACAAGTCGAGGTTAAGGACAC	This paper
FLR11-RT-F	AGCCGTACAGGTGGCTCCTCAGGGT	This paper
FLR11-RT-R	GGGGACTTCGACGACGCAAACATC	This paper
FLR12-RT-F	GCCTCCATTTCTTCCCTTTCAC	This paper
FLR12-RT-R	GGGCGTCTCCACAGCAGCTCCG	This paper
FLR13-RT-F	AGCAGAGGCTGGAGGCGTGCAT	This paper
FLR13-RT-R	GGTGCTGACGTGCGTCTTGTCC	This paper
FLR14-RT-F	CAGCTCAACCCTGCCGTGATG	This paper
FLR14-RT-R	CGGTGTTCGATTGTAAGAAAC	This paper
FLR15-RT-F	ATGGATACCGATTTGCCTTTAGC	This paper
FLR15-RT-R	TGTACGGAACTCATTGAGACCTTG	This paper
FLR16-RT-F	TGATAATTTCCCTCAGCCAAGC	This paper
FLR16-RT-R	CCAAGATACTGCCCAACACCCA	This paper
OsActin-RT-F	TGTATGCCAGTGGTCGTACCA	Yin *et al.*, 2018
OsActin-RT-R	CCAGCAAGGTCGAGACGAA	Yin *et al.*, 2018
OsPR1a-RT-F	GGAAGTACGGCGAGAACATC	Yin *et al.*, 2018
OsPR1a-RT-R	TGGTCGTACCACTGCTTCTC	Yin *et al.*, 2018
OsPR4-RT-F	AGTATGGATGGACCGCCTTCTGT	Yin *et al.*, 2018
OsPR4-RT-R	CTCGCAATTATTGTCGCACCTGTTC	Yin *et al.*, 2018
Os04g10010-RT-F	AAATGATTTGGGACCAGTCG	Li *et al.*, 2018
Os04g10010-RT-R	GATGGAATGTCCTCGCAAAC	Li *et al.*, 2018
OsNAC4-RT-F	TCCTGCCACCATTCTGAGATG	Li *et al.*, 2018
OsNAC4-RT-R	TTGCAGAATCATGCTTGCCAG	Li *et al.*, 2018
OsKS4-RT-F	TCGCATTGCGTGTGCAA	Li *et al.*, 2018
OsKS4-RT-R	TTGGAACTTCCGACATCGAAA	Li *et al.*, 2018
OsWRKY45-RT-F	CGGGTAAAACGATCGAAAGA	Jiang *et al.*, 2010

OsWRKY45-RT-R	GCTGAGACGACACATCAACAA	Jiang *et al.*, 2010
qRT-PCR of rice gene for quantifiing *Magnaporthe oryzae*		
MoPot2-RT-F	ACGACCCGTCTTTACTTATTTGG	Li *et al.*, 2017
MoPot2-RT-R	AAGTAGCGTTGGTTTTGTTGGAT	Li *et al.*, 2017
OsUbi-RT-F	TTCTGGTCCTTCCACTTTCAG	Li *et al.*, 2017
OsUbi-RT-R	ACGATTGATTTAACCAGTCCATGA	Li *et al.*, 2017

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Table S2 Members of FLR gene family.

Name	MSU_ID	Indica ortholog	Wild rice ortholog	Arabidopsis ortholog	Cellular function in rice
FLR1	LOC_Os03g21540	BGIOSGA012562	ORUFI03G16840	AT3G51550 FER	FLR1 (DRUS1) and FLR2 (DRUS2) redundantly controlled rice height, tillering, branching, inflorescence, spikelet development, seed setting, floral organs and sugar utilization / conversion varying degrees (Li *et al*., 2016; Pu *et al*., 2017; Yang *et al*., 2015)..
FLR2	LOC_Os01g56330	BGIOSGA004527	ORUFI01G35600	AT3G51550 FER	
FLR3	LOC_Os05g25450	BGIOSGA018309	ORUFI05G12470		
FLR4	LOC_Os05g25370	BGIOSGA019611	ORUFI05G12370		
FLR5	LOC_Os05g25350		ORUFI05G12350		
FLR6	LOC_Os05g20150	BGIOSGA018383	ORUFI05G10720	AT3G04690 ANX1, AT5G28680 ANX2	
FLR7	LOC_Os07g05370	BGIOSGA024825	ORUFI07G02770	AT1G30570 HERK2	
FLR8	LOC_Os04g52860	BGIOSGA014330	ORUFI04G27210	AT1G30570 HERK2	
FLR9	LOC_Os06g03610	BGIOSGA022025	ORUFI06G01500	AT4G39110 BUPS1, AT2G21480 BUPS2, AT5G61350 EUR/CAP1	Pollen tube growth and integrity (Liu *et al*., 2016).
FLR10	LOC_Os03g55210	BGIOSGA009777	ORUFI03G36350	AT4G39110 BUPS1, AT2G21480 BUPS2, AT5G61350 EUR/CAP1	
FLR11	LOC_Os10g39010	BGIOSGA031496	ORUFI10G17890	AT2G23200, AT5G24010	
FLR12	LOC_Os03g03280	BGIOSGA011750	ORUFI03G01640	AT2G23200, AT5G24010	
FLR13	LOC_Os03g17300	BGIOSGA012357	ORUFI03G13450	AT2G39360 CVY1, AT5G59700, AT3G46290 HERK1	
FLR14	LOC_Os01g06280	BGIOSGA002819	ORUFI01G03770	AT2G39360 CVY1, AT5G59700, AT3G46290 HERK1	
FLR15	LOC_Os06g22810	BGIOSGA022831	ORUFI06G14270	AT2G39360 CVY1, AT5G59700, AT3G46290 HERK1	
FLR16	LOC_Os05g06990	BGIOSGA019236	ORUFI05G04540	AT2G39360 CVY1, AT5G59700, AT3G46290 HERK1	

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2 Repress Cell Death and Affect Sugar Utilization during Reproductive Development. The Plant Cell **29**, 70-89.

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