

Supplementary Material

Stunted growth caused by blast disease in rice seedlings is associated with disturbed phytohormone balance

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Supplementary Tables

Supplementary Table 1: Genes and primer sequences used for qRT-PCR analysis.

Gene name (RAP-DB ID)	Primer sequences (5'→3')	References
<i>Rubq1</i> (Os06g0681400)	GGAGCTGCTGCTGTTCTAGG TTCAGACACCATCAAACCAGA	Plant Sci. (2000) 28: 201-11. doi: 10.1016/S0168-9452(00)00255-7
<i>JAmyb</i> (Os11g0684000)	TAGGGGTTCAAAGAGGACCA TCCTCAGTGCAATTCTGGAG	MPMI (2001) 14: 527-35. doi: 10.1094/MPMI.2001.14.4.527
<i>OMT</i> (Os11g0303600)	TCGAGCGAGAGGAGCATGAA ACCTAGCACTGGTGTGATTTGTAG	Plant J. (2010) 61: 804-15. doi: 10.1111/j.1365-313X.2009.04107.x
<i>SalT</i> (Os01t0348900)	CGAAATAATGTTCCATGGTGT TGACTACGGATCGGTGCAA	Plant Physiol. (2003) 133: 1755-67. doi: 10.1104/pp.103.025742
<i>OsWsi18</i> (Os01g0705200)	TCACTTCAAATTCGGTGCAA CACACCCGTCAGAAATCCTC	Plant Cell Physiol. (1998) 39: 64-72. doi: 10.1093/oxfordjournals.pcp.a029290
<i>OsARF1</i> (Os11g0523800)	GATGGTGCTTGTCTTGGTG CGGCTGACAACCTACCTCAC	Plant Mol. Biol. (2002) 50: 415-25. doi: 10.1023/A:1019818110761
<i>OsIAA9</i> (Os02g0805100)	GAAGGAGATGCATGCGTGAG CATACATCAGTGCACACCCA	Func. Integr. Genomics (2006) 6: 47-59. doi: 10.1007/s10142-005-0005-0
<i>OsGA2ox1</i> (Os03g0856700)	TGGCGATTATTTTCAGTTCCTAGC CGGCCGGGATAGATTAGATAGA	Physiol. Plant (1997) 99: 111-8. doi: 10.1111/j.1399-3054.1997.tb03438.x
<i>OsGA2ox3</i> (Os01g0757200)	CCACGAGAAGATGAAGCTGC AACCTGGCTGTACATTGTGC	J. Plant Res. (2003) 116: 161-4. doi: 10.1007/s10265-003-0080-z
<i>OsCESA5</i> (Os03g0837100)	ATCTGCCGTCTGGAATAGAG ACCCACTCATCTCCAGTGTT	Front. Microbiol. (2014) 5: 1-9. doi: 10.3389/fmicb.2014.00026
<i>OsCESA6</i> (Os07g0252400)	CCATATATGCGGTGATACGA CTTCCTCCTTCTGTCCAAA	Front. Microbiol. (2014) 5: 1-9. doi: 10.3389/fmicb.2014.00026
<i>OsCSLA9</i> (Os06g0625700)	GTGTGCAAGTGCAAAGTTTC GGTGAGCATATTGAGGAACC	Front. Microbiol. (2014) 5: 1-9. doi: 10.3389/fmicb.2014.00026
<i>OsEXP1</i> (Os04t0228400)	GTGTCCTTCTTCGTCTTCGT ACTCCTCCATTACACCCAAA	Front. Microbiol. (2014) 5: 1-9. doi: 10.3389/fmicb.2014.00026
<i>OsEXP15</i> (Os03g0155700)	CGTCGTGGTAGTTGCAGTAG TGCATTAATACTCCCGCATA	Front. Microbiol. (2014) 5: 1-9. doi: 10.3389/fmicb.2014.00026
<i>OsNPR1</i> (Os01t0194300)	TCCTCCTGGAGCTACTCACC TCTGCGTTTCACAATTGACG	Plant Mol. Biol. (2010) 74: 549-62. doi: 10.1007/s11103-010-9695-3
<i>WRKY45</i> (Os05g0322900)	CGGGTAAACGATCGAAAGA GCTGAGACGACACATCAACAA	Plant Cell (2007) 19: 2064-76. doi: 10.1105/tpc.106.046250
<i>OsPR1b</i> (Os01g0382000)	ACGGGCGTACGTACTGGCTA CTCGGTATGGACCGTGAAG	BBRC (2000) 278: 290-8. doi: 10.1006/bbrc.2000.3781
<i>PBZ1</i> (Os12g0555000)	GCGTTTGAGTCCGTGAGAGT TCACCCATTGATGAAGCAAA	Biosci. Biotech. Biochem. (2001) 65: 205-8. doi: 10.1271/bbb.65.205

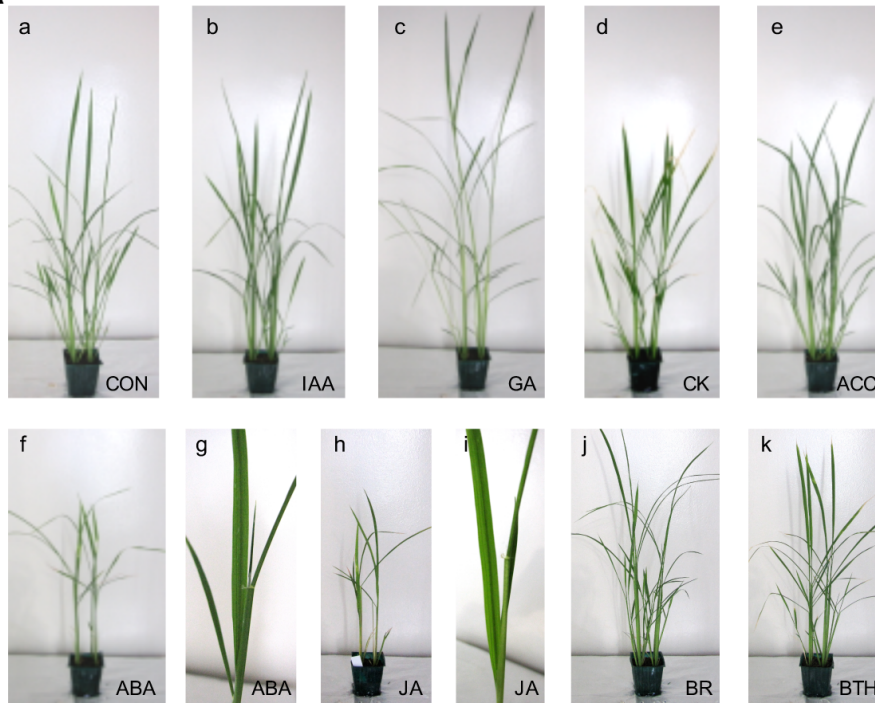
Supplementary Table 2: Contents of JA and ABA in the 6th leaf of rice seedlings after inoculation with blast fungus *M. oryzae* (race 007.0)^a

	Con	Blast	Blast-c
JA	131 ± 27	182 ± 66	155 ± 73
ABA	37 ± 2	40 ± 21	32 ± 6

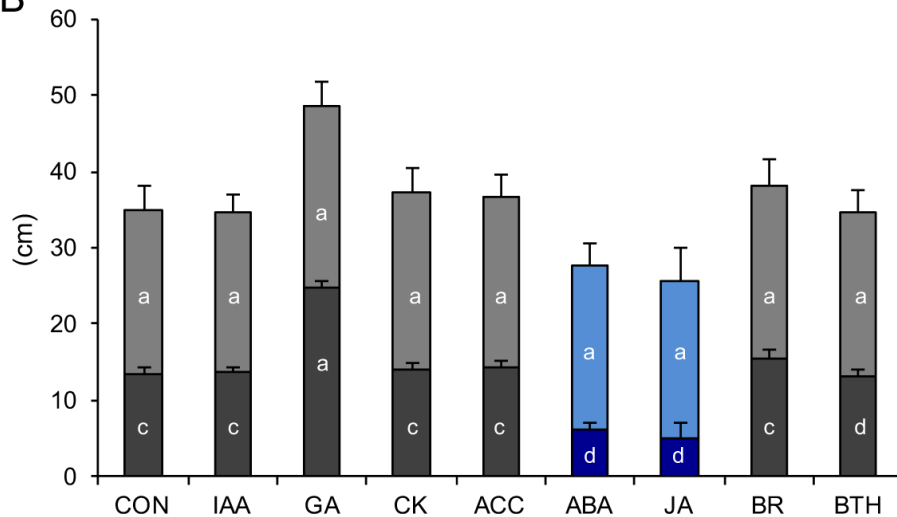
^aRice seedlings at four-leaf stage were blast-inoculated (Blast), and half of them was subjected to cutting of the inoculated 4th leaf blades at 2-dpi (Blast-c). Whole 6th leaf from the seedlings was collected at 3-dpi. Con: mock control. Values are represented as mean ± standard deviation in picomoles per gram of fresh weight (n = 4 biological replicates).

Supplementary Figures

A



B



Supplementary Figure 1. Effect of exogenous phytohormones on rice seedling growth. Rice seedlings at four-leaf stage were treated with each indicated phytohormone by root drenching, and leaf lengths of the 5th leaf from each treatment were measured 4 weeks after the onset of treatments. (A) Image of rice seedlings treated with exogenous phytohormones. (B) Lengths of leaf blades (upper columns) and leaf sheaths (bottom columns) of the 5th leaf. Values are the means \pm standard errors; different letters above bars indicate a significant difference ($P < 0.05$) based on Duncan's test.