New Phytologist

***New Phytologist* Supporting Information Tables S1–S7**

Article title: A fungal endophyte helps plants to tolerate root herbivory through changes in gibberellin and jasmonate signaling

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Table S6 ANOVA or GLM results for Exp II on biomass of shoots, untreated root-half and treated root-half

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Table S1 Primers used for Quantitative real-time PCR analyses

Gene	RGAP LOCUS	Description	F-Primers (5'…3')	R-Primers (5'…3')
JAR1	LOC_Os05g50890	JA synthesis	AAGGTTTGTGAACCCATCAAACAGC	AATAATACTTTGCAGCACTTGTTACG
OsKS1	LOC_Os04g52230	GA synthesis	GACAAGGGACCAGCTCCAGACATTGGAG	CAGGAGCAGCAATCTGCTCATCCATGGC
OsACT	LOC_Os03g50885	Housekeeping	TGGACAGGTTATCACCATTGGT	CCGCAGCTTCCATTCCTATG

Table S2 Results of the three-way ANOVA for Exp I of the effects of the root endophyte *Piriformospora indica*, rice water weevil (RWW, *Lissorhoptrus oryzophilus*) adults, RWW larvae, and the interactions between their effects on shoot biomass FW, tiller number, root biomass FW, total root length and average root diameter of 58 d-old rice plants

Factors		Shoot FW		Tiller No		Root FW		Root length		Root diameter	
	df	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*
Endophyte (E)	1	*2,984*	*0,090*	**5,906**	**0,018**	**5,177**	**0,027**	**9,056**	**0,004**	0,005	0,947
Adult (A)	1	0,970	0,329	0,024	0,877	0,238	0,628	1,555	0,218	0,046	0,831
Larva (L)	1	**9,954**	**0,003**	0,287	0,594	**1,966**	**0,167**	**16,060**	**<0,001**	**12,295**	**<0,001**
E x A	1	0,845	0,362	0,179	0,674	2,330	0,133	**7,882**	**0,007**	0,774	0,383
E x L	1	**5,371**	**0,024**	**9,534**	**0,003**	**7,001**	**0,011**	**21,696**	**<0,001**	0,194	0,661
A x L	1	0,097	0,756	0,389	0,535	0,126	0,724	1,128	0,293	0,389	0,535
E x A x L	1	0,017	0,897	0,055	0,816	0,621	0,434	**6,176**	**0,016**	1,315	0,256
Residuals	56										

Significant *P*-values (< 0.050) are given in bold, marginally significant *P*-values (< 0.100) are given in italic.

Table S3 Mean values of macronutrients (mg g^{-1} DW) and micronutrients (µg g^{-1} DW) in shoots of 58-d-old rice plants for Exp I as affected by the root endophyte *Piriformospora indica*, rice water weevil (RWW, *Lissorhoptrus oryzophilus*) adults, RWW larvae and their fully crossed combinations in comparison to the untreated control as well as the respective results of the three-way factorial ANOVA or GLM

Macronutrients	Nitrogen (N)		Phosphorus (P)		Potassium (K)		Calcium (Ca)		Magnesium (Mg)		Sulfur (S)	
mg g^{-1} DW	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Control	29,05	± 1,75	5,447	± 0,082	51,22	± 0,80	4,863	± 0,141	2,543	± 0,082	2,775	± 0,079
Adult (A)	28,92	± 1,88	5,529	± 0,119	52,56	± 0,93	4,897	± 0,193	2,591	± 0,063	2,899	± 0,097
Larva (L)	28,67	± 3,00	4,459	± 0,281	46,08	± 3,36	6,078	± 0,552	2,394	± 0,085	2,980	± 0,198
AL	31,08	± 1,82	4,510	± 0,212	50,76	± 1,57	6,231	± 0,193	2,492	± 0,104	3,272	± 0,162
Endophyte (E)	29,89	± 1,73	5,514	± 0,098	52,79	± 1,53	4,786	± 0,094	2,439	± 0,072	2,781	± 0,115
EA	26,69	± 1,24	5,773	± 0,079	53,12	± 1,20	4,689	± 0,122	2,552	± 0,071	2,953	± 0,129
EL	27,90	± 1,29	4,856	± 0,066	50,54	± 0,77	5,641	± 0,208	2,545	± 0,056	2,966	± 0,066
EAL	28,51	± 1,45	4,827	± 0,058	49,28	± 1,15	5,297	± 0,109	2,396	± 0,066	2,863	± 0,127

Factors			GLM			GLM			GLM			GLM			ANOVA			ANOVA		
	df1	df2	*F*	*P*	df2	*F*	*P*	df2	*F*	*P*	df2	*F*	*P*	df2	*F*	*P*	df2	*F*	*P*
Endophyte	1	62	0,752	0,390	62	**5,205**	**0,026**	62	1,128	0,293	62	**6,743**	**0,012**	56	0,169	0,682	56	1,006	0,320
Adult	1	61	0,010	0,919	61	0,651	0,423	61	1,116	0,295	61	0,159	0,692	56	0,254	0,616	56	1,795	0,186
Larva	1	60	0,074	0,787	60	**64,938**	**<0,001**	60	**7,353**	**0,009**	60	**39,657**	**<0,001**	56	1,928	0,171	56	*3,452*	*0,068*
E x A	1	59	0,834	0,365	59	0,031	0,862	59	2,175	0,146	59	1,023	0,316	56	0,720	0,400	56	0,915	0,343
E x L	1	58	0,121	0,730	58	1,730	0,194	58	0,06	0,807	58	1,527	0,222	56	0,850	0,360	56	1,769	0,189
A x L	1	57	1,461	0,232	57	0,337	0,564	57	0,195	0,661	57	0,029	0,866	56	0,975	0,328	56	0,087	0,769
E x A x L	1	56	0,092	0,763	56	0,280	0,599	56	1,301	0,259	56	0,182	0,672	56	2,094	0,153	56	1,490	0,227

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(Continuation of Table S3)

Micronutrients	Zinc (Zn)		Manganese (Mn)		Iron (Fe)		Copper (Cu)		Boron (B)		Molybdenum (Mo)	
µg g^{-1} DW	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Control	117,2	± 4,45	382,1	± 10,47	286,9	± 38,26	13,78	± 0,67	9,626	± 0,287	1,953	± 0,082
Adult (A)	120,7	± 6,19	403,7	± 14,50	257,1	± 48,01	13,51	± 0,56	9,306	± 0,213	2,040	± 0,112
Larva (L)	130,5	± 12,04	316,8	± 40,49	261,3	± 20,36	17,96	± 4,87	11,633	± 0,876	2,249	± 0,080
AL	116,0	± 7,67	345,6	± 27,26	316,1	± 60,82	11,75	± 0,68	12,262	± 0,835	2,370	± 0,126
Endophyte (E)	118,6	± 3,91	401,7	± 6,75	243,2	± 18,89	13,14	± 0,80	9,678	± 0,272	2,072	± 0,097
EA	120,1	± 4,15	396,2	± 6,11	242,3	± 28,76	13,74	± 0,82	9,625	± 0,195	2,115	± 0,105
EL	118,7	± 4,38	365,5	± 10,12	264,0	± 28,18	13,57	± 0,26	11,306	± 0,576	2,154	± 0,057
EAL	111,5	± 4,96	360,8	± 10,68	317,7	± 41,16	12,98	± 0,57	11,055	± 0,853	2,105	± 0,077

Factors		ANOVA			GLM			ANOVA			GLM			GLM			ANOVA		
	df1	df2	*F*	*P*	df2	*F*	*P*	df2	*F*	*P*	df2	*F*	*P*	df2	*F*	*P*	df2	*F*	*P*
Endophyte	1	56	0,399	0,530	62	1,927	0,171	56	0,036	0,850	62	0,467	0,497	62	0,489	0,487	56	0,383	0,538
Adult	1	56	0,872	0,354	61	0,537	0,467	56	0,055	0,815	61	1,577	0,215	61	0,000	0,999	56	0,564	0,456
Larva	1	56	0,058	0,811	60	**12,659**	**<0,001**	56	1,889	0,175	60	0,156	0,695	60	**23,289**	**<0.001**	56	**6,829**	**0,012**
E x A	1	56	0,044	0,835	59	1,227	0,273	56	0,273	0,604	59	1,583	0,214	59	0,137	0,713	56	0,644	0,426
E x L	1	56	0,669	0,417	58	0,892	0,349	56	0,216	0,644	58	0,273	0,603	58	1,313	0,257	56	**4,313**	**0,042**
A x L	1	56	2,041	0,159	57	0,021	0,884	56	1,731	0,194	57	1,928	0,170	57	0,204	0,654	56	0,047	0,829
E x A x L	1	56	0,149	0,701	56	0,014	0,907	56	0,045	0,832	56	0,841	0,363	56	0,478	0,492	56	0,229	0,635

df1, degrees of freedom; df2, degrees of freedom of residuals. Significant *P*-values (< 0.050) are given in bold, marginally significant *P*-values (< 0.100) are given in italic.

Table S4 Results of the three-way GLM for Exp I of the effects of the root endophyte *Piriformospora indica*, rice water weevil (RWW, *Lissorhoptrus oryzophilus*) adults, RWW larvae and the interactions between their effects on 12-oxophytodienoic acid (OPDA), jasmonic acid (JA) and jasmonoyl-isoleucine (JA-Ile) in leaves and in roots of 58-d-old rice plants

Factors			Leaves							Roots					
			OPDA		JA		JA-Ile			OPDA		JA		JA-Ile	
	df1	df2	*F*	*P*	*F*	*P*	*F*	*P*	df2	*F*	*P*	*F*	*P*	*F*	*P*
Endophyte (E)	1	62	0,000	0,995	0,441	0,509	0,888	0,350	59	1,040	0,312	**6,048**	**0,017**	*3,155*	*0,081*
Adult (A)	1	61	**4,732**	**0,034**	**6,420**	**0,014**	**5,340**	**0,025**	58	0,336	0,565	1,524	0,222	1,513	0,224
Larva (L)	1	60	*3,483*	*0,067*	**4,554**	**0,037**	*3,274*	*0,076*	57	0,032	0,858	**7,385**	**0,009**	**14,864**	**<0,001**
E x A	1	59	0,237	0,628	1,662	0,203	1,424	0,238	56	0,069	0,794	0,829	0,367	0,984	0,326
E x L	1	58	0,594	0,444	0,047	0,829	0,609	0,438	55	2,079	0,155	**4,133**	**0,047**	1,657	0,204
A x L	1	57	0,047	0,830	2,015	0,161	1,368	0,247	54	0,196	0,660	0,588	0,447	0,024	0,877
E x A x L	1	56	0,608	0,439	0,533	0,469	0,348	0,558	53	0,291	0,592	0,674	0,415	0,909	0,345

df1, degrees of freedom; df2, degrees of freedom of residuals. Significant *P*-values (< 0.050) are given in bold, marginally significant *P*-values (< 0.100) are given in italic.

Table S5 Results of the three-way GLM for Exp I of the effects of the root endophyte *Piriformospora indica*, rice water weevil (RWW, *Lissorhoptrus oryzophilus*) adults, RWW larvae and the interactions between their effects on the relative transcription levels of *OsJAR1* and *OsKS1* genes in roots of 58 d-old rice plants

Factors			*OsJAR1*		*OsKS1*	
	df1	df2	*F*	*P*	*F*	*P*
Endophyte (E)	1	59	0,574	0,452	**6,037**	**0,017**
Adult (A)	1	58	0,166	0,685	0,000	0,993
Larva (L)	1	57	0,138	0,711	**48,198**	**<0,001**
E x A	1	56	0,013	0,910	1,723	0,195
E x L	1	55	*3,475*	*0,068*	0,768	0,385
A x L	1	54	2,436	0,125	0,109	0,743
E x A x L	1	53	0,678	0,414	*3,420*	*0,070*

df1, degrees of freedom; df2, degrees of freedom of residuals. Significant *P*-values (< 0.050) are given in bold, marginally significant *P*-values (< 0.100) are given in italic.

Table S6 Results of the three-way ANOVA or GLM for Exp II of the effects of the root endophyte *Piriformospora indica*, rice water weevil (RWW, *Lissorhoptrus oryzophilus*) adults, RWW larvae and the interactions between their effects on the FW of shoots, untreated root-half, and treated root-half of 58-d-old WT, *coi1-18*, and *Eui1-OX* plant lines.

WT		Shoot			Untreated root-half			Treated root-half		
		ANOVA			GLM			GLM		
Factors	df1	df2	*F*	*P*	df2	*F*	*P*	df2	*F*	*P*
Endophyte (E)	1	56	**4,738**	**0,034**	62	*3,290*	*0,075*	62	**5,223**	**0,026**
Adult (A)	1	56	0,197	0,659	61	0,486	0,488	61	0,354	0,554
Larva (L)	1	56	0,620	0,434	60	0,217	0,643	60	**4,030**	**0,049**
E x A	1	56	0,014	0,906	59	0,003	0,959	59	0,020	0,887
E x L	1	56	0,219	0,642	58	1,178	0,282	58	0,720	0,400
A x L	1	56	1,842	0,180	57	0,810	0,372	57	*3,234*	*0,078*
E x A x L	1	56	0,179	0,674	56	0,220	0,641	56	0,950	0,334

coi1-18		Shoot			Untreated root-half			Treated root-half		
		GLM			GLM			GLM		
Factors	df1	df2	*F*	*P*	df2	*F*	*P*	df2	*F*	*P*
Endophyte (E)	1	61	**16,305**	**<0,001**	61	**19,430**	**<0,001**	61	**17,243**	**<0,001**
Adult (A)	1	60	2,295	0,136	60	1,870	0,177	60	1,609	0,210
Larva (L)	1	59	0,140	0,710	59	0,028	0,869	59	0,666	0,418
E x A	1	58	0,263	0,610	58	0,352	0,556	58	0,791	0,378
E x L	1	57	0,558	0,458	57	1,121	0,294	57	0,019	0,892
A x L	1	56	0,242	0,625	56	0,524	0,472	56	0,720	0,400
E x A x L	1	55	0,000	0,997	55	0,979	0,327	55	0,323	0,572

Eui1-OX		Shoot			Untreated root-half			Treated root-half		
		GLM			GLM			GLM		
Factors	df1	df2	*F*	*P*	df2	*F*	*P*	df2	*F*	*P*
Endophyte (E)	1	57	2,155	0,148	57	2,599	0,113	57	0,581	0,449
Adult (A)	1	56	0,975	0,328	56	0,861	0,358	56	0,578	0,451
Larva (L)	1	55	**5,612**	**0,022**	55	2,505	0,120	55	**5,789**	**0,020**
E x A	1	54	0,703	0,406	54	1,018	0,318	54	0,480	0,492
E x L	1	53	0,212	0,647	53	0,000	0,999	53	0,002	0,963
A x L	1	52	0,279	0,600	52	1,267	0,266	52	0,567	0,455
E x A x L	1	51	1,203	0,278	51	0,226	0,637	51	0,252	0,618

df1, degrees of freedom; df2, degrees of freedom of residuals. Significant *P*-values (< 0.050) are given in bold, marginally significant *P*-values (< 0.100) are given in italic.

Table S7 Results of the two-way ANOVA or GLM for Exp II of the effects of the root endophyte *Piriformospora indica*, rice water weevil (RWW, *Lissorhoptrus oryzophilus*) adults, and the interaction between their effects on survival and growth of RWW larvae 28 d after neonate infestation in roots of 58-d-old WT, *coi1-18* or *Eui1-OX* plant lines

		WT						*coi1-18*						*Eui1-OX*					
		Survival			Growth			Survival			Growth			Survival			Growth		
		GLM			GLM			ANOVA			GLM			ANOVA			GLM		
Factors	df1	df2	*F*	*P*	df2	*F*	*P*	df2	*F*	*P*	df2	*F*	*P*	df2	*F*	*P*	df2	*F*	*P*
Endophyte (E)	1	30	0,131	0,721	27	1,085	0,308	28	**9,048**	**0,006**	29	0,083	0,775	28	0,688	0,414	22	0,161	0,693
Adults (A)	1	29	0,066	0,799	26	0,071	0,792	28	0,692	0,412	28	0,072	0,791	28	0,199	0,659	21	*4,122*	*0,056*
E x A	1	28	0,237	0,630	25	0,035	0,854	28	1,479	0,234	27	0,005	0,944	28	0,066	0,799	20	0,016	0,900

WT, wild type; df1, degrees of freedom; df2, degrees of freedom of residuals. Significant *P*-values (< 0.050) are given in bold, marginally significant *P*-values (< 0.100) are given in italic.