

Bn	+T34 +S	+S4 +D	+T6 +D	+T34	+TC	Bn +S	+TC +D	+T6	+S4 +S	+T34 +D	+S4 +D	Bn +S
+S4	+TC +S	Bn +D	+TC +S	+T34 +D	+T6 +S	Bn +D	+TC	+T34 +S	+T6 +D	+T34	Bn	

+T6 +S	+T34	+TC +S	+T6	+S4 +D	+T6 +S	+T34 +S	+T6 +D	+TC	+S4 +S	+T34 +D	+S4	+S4 +D
+T6 +D	+TC +D	+S4	Bn +D	+S4 +S	Bn +S	Bn	+TC +D	+T34	Bn +S	+TC	+T6	

+T6 +D	+S4	+T34 +S	+TC +S	+S4 +S	Bn +D	+S4 +D	+T6 +S	+T34 +D	+T6	+T34 +D	+TC	Bn +D
+TC +S	+T34	+TC +D	+T6 +S	Bn	+TC +D	+T34 +D	+S4 +S	Bn	+S4	+T6	Bn +S	

+T6 +S	+T6	+TC +D	+S4 +S	+T34	+S4 +D	+T34 +S	+T34 +D	+T6 +D	Bn +S	Bn	+S4	+TC
+T34 +D	Bn +D	+TC +S	+S4	Bn	+S4 +S	Bn +S	+TC +D	+T6	+TC +S	Bn +D	+T6 +D	

+TC +S	+TC +D	+T34 +S	+T6	+S4 +D	Bn +S	+S4 +S	+S4	Bn	+T6 +D	Bn +D	+T34 +D	+T34
+S4	+S4 +D	+T6 +S	+T34 +D	+TC	+T34	+TC +S	Bn	+T6 +S	+TC	+T34 +S	+T6	

+T34 +S	+T34	Bn +S	+S4	+TC +S	+TC	+T6 +S	Bn	+S4 +D	+T6 +D	Bn +S	+T34 +S	Bn +D
+T6 +S	+T6 +D	+TC	+TC +D	+S4 +D	Bn +D	+T34	+S4 +S	+T34 +D		+TC +D	+T6	

+T6 +S	+TC +D	Bn +D	+T6	+S4	+T6 +D	Bn	+T34		Bn +S	+S4 +D	+T34 +S	Bn +D
+T34 +S	+TC	+TC +S	+S4 +D	Bn +S	+T34 +D	+S4 +S	+TC	+T6 +S	+TC +D	Bn	+T6	

+TC +D	+T34 +S	+TC +S	Bn	+T6 +S	+S4 +S	+S4	+T6 +D	+T34	+T6	+S4	Bn +S	+T6 +D
+T6	+T34 +D	+T34	+S4 +D	+TC	Bn +S	+T34 +S	Bn +D	+TC +D	+T6 +S	+TC +S	+T34 +D	

+T6 +D	+T34	+S4 +D	+S4 +S	Bn +S	+S4 +D	+T6	Bn	+T34 +S	+S4	+TC	+TC +S	+T34 +D
+TC	+S4	Bn +D	+T34 +D	+TC +S	+T6 +S	Bn +D	+S4 +S	+TC +D	+T6 +D	+T34	Bn	

Figure 1. Block and sub block random distribution in the greenhouse. Each plate indicates the Trichoderma inoculations: *T. harzianum* (+T34), *T. parareesei* (+T6), *T. parareesei* transformation control (+Tp), and the transformant with the silenced *Tparo7* gene (+S4), or without inoculation (Bn), and the different condition: without stress (without indication), under drought stress (+D) and under salt stress (NaCl 200mM)(+S).

Table S1. Table of ANOVA two ways for measurements of rapeseed-root colonization by *T. harzianum* (+T34), *T. parareesei* (+T6), *T. parareesei* transformation control (+Tp-TC) and the transformant with the silenced *Tparo7* gene (+Tparo7-S4) without stress, under drought stress and under salt stress (NaCl 200mM).

		Without Stress				Drought				Salt			
		Bn+T34	Bn+T6	Bn+Tp-TC	Bn+Tparo7-S4	Bn+T34	Bn+T6	Bn+Tp-TC	Bn+Tparo7-S4	Bn+T34	Bn+T6	Bn+Tp-TC	Bn+Tparo7-S4
Without Stress	Bn+T34	-	*	*	*	*	**	**	**	*	**	**	**
	Bn+T6	*	-	N	N	**	***	***	***	**	***	***	***
	Bn+Tp-TC	*	N	-	N	**	***	***	***	**	***	***	***
	Bn+Tparo7-S4	*	N	N	-	**	***	***	***	**	***	***	***
Drought	Bn+T34	*	**	**	**	-	*	*	*	N	*	*	*
	Bn+T6	**	***	***	***	*	-	N	N	*	N	N	N
	Bn+Tp-TC	**	***	***	***	*	N	-	N	*	N	N	N
	Bn+Tparo7-S4	**	***	***	***	*	N	N	-	*	N	N	N
Salt	Bn+T34	*	**	**	**	N	*	*	*	-	*	*	*
	Bn+T6	**	***	***	***	*	N	N	N	*	-	N	N
	Bn+Tp-TC	**	***	***	***	*	N	N	N	*	N	-	N
	Bn+Tparo7-S4	**	***	***	***	*	N	N	N	*	N	N	-

Two-way analysis of variance (ANOVA), followed by Sidak's multiple comparison test, indicating significant differences as follows: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; **** $p < 0.0001$; ***** $p < 0.00001$; -, indicates analysis not applicable; N, indicates no significant differences.

Table S2. Table of ANOVA two ways for indirect quantification of ROS in roots by relative ion leakage in the roots of rapeseed (Bn) inoculated with *T. harzianum* (+T34), *T. parareesei* (+T6), *T. parareesei* transformation control (+Tp-TC) and the transformants with the silenced *Tparo7* gene (+Tparo7-S4).

		Without Stress					Drought					Salt				
		Bn	Bn+T34	Bn+T6	Bn+Tp-TC	Bn+Tparo7-S4	Bn	Bn+T34	Bn+T6	Bn+Tp-TC	Bn+Tparo7-S4	Bn	Bn+T34	Bn+T6	Bn+Tp-TC	Bn+Tparo7-S4
Without Stress	Bn	-	*	*	**	*	**	*	N	N	**	***	*	N	N	**
	Bn+T34	*	-	N	*	N	***	**	*	*	***	****	**	*	*	***
	Bn+T6	*	N	-	N	N	***	**	*	*	***	****	**	*	*	***
	Bn+Tp-TC	**	*	N	-	*	****	***	**	**	****	*****	***	**	**	****
	Bn+Tparo7-S4	*	N	N	*	-	***	**	*	*	***	****	**	*	*	***
Drought	Bn	**	***	***	****	***	-	*	**	**	N	*	*	**	**	N
	Bn+T34	*	**	**	***	**	*	-	*	*	*	**	N	*	*	*
	Bn+T6	N	*	*	**	*	**	*	-	N	**	***	*	N	N	**
	Bn+Tp-TC	N	*	*	**	*	**	*	N	-	**	***	*	N	N	**
	Bn+Tparo7-S4	**	***	***	****	***	N	*	**	**	-	*	*	**	**	N
Salt	Bn	***	****	****	*****	****	*	**	***	***	*	-	**	***	***	N
	Bn+T34	*	**	**	***	**	*	N	*	*	*	**	-	*	*	*

Bn+T6	N	*	*	**	*	**	*	N	N	**	***	*	-	N	**
Bn+Tp-TC	N	*	*	**	*	**	*	N	N	**	***	*	N	-	**
Bn+Tparo7-S4	**	***	***	****	***	N	*	**	**	N	N	*	**	**	-

Two-way analysis of variance (ANOVA), followed by Sidak's multiple comparison test, indicating significant differences as follows: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; **** $p < 0.0001$; ***** $p < 0.00001$; -, indicates analysis not applicable, N, indicates no significant differences.