

Table S1. Factorial ANOVA showing the *p*-values of the factors *fungus*, *sterilization* of soil and *disinfection* of seeds and of their interactions for leaf chlorophyll content (SPAD) and the SPAD decrease 15 and 30 days after sowing (DAS). Bold values mean significant differences

Factors and interaction	<i>B. bassiana</i>			<i>M. brunneum</i>		
	SPAD 1	SPAD2	ΔSPAD	SPAD 1	SPAD2	ΔSPAD
Fungus (F)	0.141	0.284	0.490	0.148	0.103	0.497
Sterilization (S)	0.000	0.002	0.013	0.000	0.077	0.003
Disinfection (D)	0.390	0.821	0.310	0.948	0.918	0.935
F×S	0.456	0.699	0.557	0.619	0.306	0.301
F×D	0.103	0.121	0.854	0.005	0.072	0.233
S×D	0.246	0.415	0.557	0.403	0.831	0.379
F×S×D	0.881	0.557	0.251	0.510	0.994	0.333

(*p* < 0.05) between plant treatments or significant interactions of factors.

Table S2. Factorial ANOVA ($n = 12$) as a function of fungal treatment and soil sterilization factors when seeds were non-disinfected (ND) and disinfected (D). Value for factor fungus was omitted.

Seed disinfection	Fungal treatments	Soil sterilization ^[a]	SPAD 1	SPAD 2	ΔSPAD
ND	Control vs <i>B. bassiana</i>				
		Sterilized	32.34 ± 0.84	19.47 ± 1.04	12.87 ± 0.73
		Non-sterilized	29.03 ± 0.66	17.27 ± 0.76	11.76 ± 0.40
		P_{ST}	0.002	0.094	0.203
		$P_{interaction}$	0.390	0.890	0.263
	Control vs <i>M. brunneum</i>				
		Sterilized	32.32 ± 0.83	19.52 ± 1.00	12.80 ± 0.74
		Non-sterilized	29.69 ± 0.94	18.08 ± 1.16	11.61 ± 0.44
		P_{ST}	0.023	0.325	0.186
		$P_{interaction}$	0.907	0.524	0.241
D	Control vs <i>B. bassiana</i>				
		Sterilized	34.14 ± 0.61	20.37 ± 0.76	13.77 ± 0.31
		Non-sterilized	28.87 ± 1.21	16.83 ± 0.81	12.04 ± 0.57
		P_{ST}	0.002	0.007	0.023
		$P_{interaction}$	0.729	0.488	0.663
	Control vs <i>M. brunneum</i>				
		Sterilized	32.92 ± 1.00	19.62 ± 0.87	13.31 ± 0.46
		Non-sterilized	29.07 ± 0.46	17.78 ± 0.56	11.29 ± 0.33
		P_{ST}	0.002	0.110	0.001
		$P_{interaction}$	0.430	0.400	0.951

^[a] P_{ST} : probability value between soil treatments (sterilized vs non-sterilized). $P_{interaction}$: probability value corresponding to the interaction between the two factors (fungus and sterilization).