

Supplementary materials

Biocontrol potential of *Bacillus amyloliquefaciens* against *Botrytis pelargonii* and *Alternaria alternata* associated with *Capsicum annuum*

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Table S1. Primers used in this study for PCR amplification of the 18S rDNA fungal isolates

Gene symbol	Primers (5'–3') Forward/reverse
ITS1	5'-TCC GTA GGT GAA CCT GCG G-3'
ITS4	5'-TCCTCCGCTTATTGATATGC-3'
RPB2-5F2	5'-GGGGWGAYCAGAAGAAGGC-3'
fRPB2-7cR	5'-CCCATRGCTTGYTTTCCCAT-3'
Alt-for	5'ATGCAGTTCACCACCATCGC'3
Alt-rev	5'ACGAGGGTGAYGTAGGCGTC'3
gpd 1	5'CAACGGCTTCGGTCGCATTG'3
gpd 2	5'GCCAAGCAGTTGGTTGTGC'3

Table S2. Physiochemical properties of the soil samples over eight days of treatment.

Sample name	Soil texture	pH	EC (mS)	Moisture (%)
8DAT				
Cont	sandy loam	7.0±0.0c	1.18±0.0d	70±0.0d
PGPR	sandy loam	7.9±1.0a	2.96±5.4a	86.6±11.5b
BOT	sandy loam	7.0±0.0c	0.4±0.0e	46.6±4.4e
BOT+PGPR	sandy loam	7.8±0.0b	2.1±0.0c	83.3±8.8c
ALT	sandy loam	6.9±6.2d	0.37±3.9f	45.0±5.7f
ALT+PGPR	sandy loam	7.9±6.2a	2.64±0.0b	90.0±10.0a

Values show the means ± standard error (n = 3) and significant differences at $p < 0.05$ in accordance with the least significant difference test.

Table S3. Primers used for relative gene expression analysis.

Gene symbol	Primers (5'–3') Forward/reverse
CaWRKY2	5'-GTTTACCAATCGCCGAGACAG-3' 5'-CAGGTTCGTCACACTGCTCC-3'
CaBI-1	5'-ATATGGATCCATGGAGGGTTTCACGGTCGT-3' 5'-ATATGGATCCCTAGTTTCTCCTCTTCTTCTTC-3'
CaBiP1	5'-AGAGATCCCTCAGTAGCCAGC-3' 5'-GTTGTTCAACTCCTCAAAACGT-3'
CaBiP2	5'-AAGAAGTTGAGGCAGTGTGC-3' 5'-TGTGAATCGTCATCATCGTTG-3'
CaBiP3	5'-CAACATACTCTTGTGTGGGCG-3' 5'-TGAAGGGGTGATTCTGTTTCC-3'
CaXTH1	5'-ATCCCATTTTCATCTTCAAATTAAAGC-3' 5'-GGGGAAATGATTTATTGTTATTTTCG-3'
CaXTH2	5'-CTATGCCCGGCAGCTTGGGCTGAA-3' 5'-GACAACATTAGTAAACTCAATCC-3'
CaAMP1	5'-GAATTCATGGTTTCCAAAAGTAGTATTTTT-3' 5'-CTCGAGTTAGGCACAACAATAGTCACAACG-3'
CaPR1	5'-CAGGATGCAACACTCTGGTGG-3' 5'-ATCAAAGGCCGGTTGGTC-3'
CaDEF1	5'-CAAGGGAGTATGTGCTAGTGAGAC-3' 5'-TGCACAGCACTATCATTGCATAC-3'
CaASRF1	5'-ATGGGCCTCTCACAATATCCAAC-3' 5'-TCACATTGGACACGTATCGTCCTCT-3'
CaSBP11	5'-CGGGATCCATGGAGTCTTGGAGTTATTTCTCAGG-3' 5'-TCCCCCGGGGCAGTGATTCTAAGGCCGGG-3'
Actin	5'-ACTCTTAATCAATCCCTCCACC-3' 5'-CTGTATGACTGACACCATCACC-3'



Figure S1. Symptomatic pepper plant collected from the farm



Figure S2. Effect of plant growth-promoting rhizobacteria (PGPR) inoculation on the pepper plants grown under normal and biotic stress conditions after eight days (A and B). Treatment: control, PGPR, BOT, PGPR + BOT, ALT, and PGPR + ALT.