

Biocontrol of *Macrophomina phaseolina* using *Bacillus amyloliquefaciens* strains in cowpea (*Vigna unguiculata*)

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Supplementary Material

Table S1. List of GenBank and culture accession numbers of *Macrophomina* used in this study for phylogenetic analysis.

Species	Isolate	Host	Origin	GeneBank accession number	
				ITS	tef1- α
<i>Macrophomina phaseolina</i>	KARE885	<i>Prunus dulcis</i>	USA	MN166021	MN318094
<i>M. phaseolina</i>	CBS 162.25	<i>Eucalyptus</i> sp.	Italy	KF531826	KF951996
<i>M. phaseolina</i>	CPMM	<i>Opuntia ficus-indica</i>	Italy	KT261801	KT261797
<i>M. phaseolina</i>	FDe13MX	<i>Fragaria x ananassa</i>	Mexico	MW651771	MZ044245
<i>M. phaseolina</i>	FDe23MX	<i>Fragaria x ananassa</i>	Mexico	MW651772	MZ044246
<i>M. pseudophaseolina</i>	CPC 21417	<i>Arachis hypogaea</i>	Senegal	KF951791	KF952153
<i>M. pseudophaseolina</i>	CPC 21458	<i>Arachis hypogaea</i>	Senegal	KF951793	KF952155
<i>M. vaccinii</i>	CGMCC3.19508	<i>Vaccinium corymbosum</i>	China	MK687455	MK687431
<i>M. vaccinii</i>	CGMCC3.19509	<i>Vaccinium corymbosum</i>	China	MK687456	MK687432
<i>Neoscytalidium dimidiatum</i>	CBS 251.49	<i>Juglans regia</i>	USA	KF531819	KF531797
<i>N. dimidiatum</i>	CBS 145.78	<i>Homo sapiens</i>	UK	KF531816	KF531795
<i>N. dimidiatum</i>	CBS 499.66	<i>Mangifera indica</i>	Mali	KF531820	KF531798
<i>Dothiorella viticola</i>	STE-U 6139	<i>Prunus pérسica</i> var. <i>nucipersica</i>	South Africa	EF445360	EF445393

Isolates from this study are highlighted in bold text.

Table S2. List of GenBank and culture accession numbers of *Bacillus* used in this study for phylogenetic analysis.

Species	Isolate	Isolation source	Origin	16S rRNA GeneBank accession number
<i>Bacillus amyloliquefaciens</i>	NBRC 15535	soil	Japan	NR_112685
<i>B. amyloliquefaciens</i>	W9	marine water sample	India	MH188056
<i>B. amyloliquefaciens</i>	AB-525	rice cake	China	KJ879953
<i>B. amyloliquefaciens</i>	BsA3MX	Strawberry plant	Mexico	MW651769
<i>B. amyloliquefaciens</i>	BsC11MX	Strawberry plant	Mexico	MW651770
<i>B. axarquiensis</i>	CIP 108772	river-mouth sediments	Spain	DQ993670
<i>B. cereus</i>	ATCC 14579	unknown	unknown	AE016877
<i>B. circulans</i>	IAMI 12462	soil	unknown	D78312
<i>B. coagulans</i>	NBRC 12583	evaporated milk	unknown	AB271752
<i>B. licheniformis</i>	ATCC 14580	unknown	unknown	CP000002
<i>B. mojavensis</i>	IFO 15718	soil	USA	AB021191
<i>B. mycoides</i>	ATCC 6462	soil	unknown	AB021192
<i>B. siamensis</i>	PD-A10	poo-dong	Thailand	GQ281299
<i>B. siamensis</i>	RET2912	landfill soil	India	MN530054
<i>B. siamensis</i>	LFS1715	landfill soil	India	MN519261
<i>B. subtilis</i>	DSM10	unknown	unknown	AJ276351
<i>B. subtilis</i> subsp. <i>spizizenii</i>	NBRL B-23049	tunisian desert	Tunisia	AF074970
<i>B. thuringiensis</i>	IAM 12077	mediterranean flour moth	unknown	D16281
<i>B. vallismortis</i>	DSM 11031	soil	USA	AB021198
<i>B. velezensis</i>	CR-502	brackish water	Spain	AY603658
<i>Alicyclobacillus acidocaldarius</i>	DSM 446	acid hot spring	USA	AJ496806

Isolates from this study are highlighted in bold text.