

Table S1: Bacterial strains from the operational group *B. amyloliquefaciens*. The information source was obtained from the NCBI Entrez Genome Project database (<http://www.ncbi.nlm.nih.gov/genome>). Note, “NA” = not available.

Bacterial strain	Isolation source	Country	NCBI accession no.
<i>B. amyloliquefaciens</i> ATCC 13952	NA	NA	CP009748
<i>B. amyloliquefaciens</i> B425	Cereals	Netherlands	LQYP01000000
<i>B. amyloliquefaciens</i> CHCC26933	Soil	Japan	PQWK01000000
<i>B. amyloliquefaciens</i> CMW1	Japanese fermented soybean paste	Japan	BBLH01000000
<i>B. amyloliquefaciens</i> DSM 7	Soil and industrial amylase fermentations	Japan	FN597644
<i>B. amyloliquefaciens</i> HK1	Corn stalk residue compost	China	CP018902
<i>B. amyloliquefaciens</i> K2	Mangrove rhizosphere	Thailand	MOEA01000000
<i>B. amyloliquefaciens</i> KCP2	Municipal food waste	India	NMRK01000000
<i>B. amyloliquefaciens</i> LL3	Bibimbap	Korea	CP002634
<i>B. amyloliquefaciens</i> DSM 10	NA	NA	CP060710
<i>B. amyloliquefaciens</i> MT45	Chinese <i>Maotai Daqu</i>	China	CP011252
<i>B. amyloliquefaciens</i> NRRL 942	Amylase concentrates	Canada	QVEJ01000000
<i>B. amyloliquefaciens</i> RD7-7	Fermented soybean foods	South Korea	CP016913
<i>B. amyloliquefaciens</i> SRCM101266	Kochujang	South Korea	LYUG01000000
<i>B. amyloliquefaciens</i> SRCM101267	Food	South Korea	CP021505
<i>B. amyloliquefaciens</i> SRCM101294	Kochujang	South Korea	LZZO01000000
<i>B. amyloliquefaciens</i> TA208	NA	China	CP002627
<i>B. amyloliquefaciens</i> XH7	NA	China	CP002927
<i>B. amyloliquefaciens</i> YP6	Rhizosphere of <i>Lolium perenne</i> L. on a rock phosphorus mine	China	CP032146
<i>B. siamensis</i> 7551	Uncut heroin sample	Germany	NPCI01000000
<i>B. siamensis</i> JFL15	Gastrointestinal tract of <i>Trichiurus haumela</i>	China	LFWQ00000000
<i>B. siamensis</i> JJC33M	Soil	Mexico	JTJG01000000
<i>B. siamensis</i> KACC 16244	Crab	Thailand	GCA000262045
<i>B. siamensis</i> KCTC 13613	Salted thai food	Thailand	AJVF01000000
<i>B. siamensis</i> SCSIO 05746	Sea mud	Indian Ocean	CP025001
<i>B. siamensis</i> sdc15	black rice seed	India	PEKS01000000
<i>B. siamensis</i> SDLI1	<i>Scaptotrigona depilis</i> larva	Brazil	CP013950
<i>B. siamensis</i> SRCM100169	Kochujang	South Korea	LYUE01000000
<i>B. siamensis</i> XY18	Cured vanilla bean	China	LAGT01000000
<i>B. velezensis</i> 83	Mango orchard	Mexico	CP034203

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<i>B. velezensis</i> 157	<i>Eucommia ulmoides</i>	China	CP022341
<i>B. velezensis</i> 275	Tidal flat sediment sample	South Korea	CP019626
<i>B. velezensis</i> 916	Soil	China	AFSU00000000
<i>B. velezensis</i> 7899	Uncut heroin sample	Germany	NPDH01000000
<i>B. velezensis</i> 10075	Chinese food lobster sauce	China	CP025939
<i>B. velezensis</i> 11B91	Marine	China	LPUP00000000
<i>B. velezensis</i> 131-4	Soil	South Korea	CP028441
<i>B. velezensis</i> 1B-23	Potato rhizosphere	Canada	CP033967
<i>B. velezensis</i> 2A-2B	Soil	Mexico	MLCV00000000
<i>B. velezensis</i> 3A-25B	Soil	Mexico	MLCW00000000
<i>B. velezensis</i> 5B6	Leaf of <i>Prunus avium</i>	South Korea	AJST01000000
<i>B. velezensis</i> 5RB	Lake sediment	Bulgaria	QXJL00000000
<i>B. velezensis</i> 7537-G2	Uncut heroin sample	Germany	NPBZ00000000
<i>B. velezensis</i> 7551-1	Uncut heroin sample	Germany	NPCI01000000
<i>B. velezensis</i> 7551-2	Uncut heroin sample	Germany	NPCJ01000000
<i>B. velezensis</i> 7586-G	Uncut heroin sample	Germany	NPCK00000000
<i>B. velezensis</i> 8-2	Soil	South Korea	CP028439
<i>B. velezensis</i> 9912D	Sediment sample from the Liaodong Bay of the Bohai Sea	China	CP017775
<i>B. velezensis</i> 9D-6	Potato rhizosphere	Canada	CP020805
<i>B. velezensis</i> A6	<i>Oryza sativa</i> rhizosphere	India	MSXZ01000000
<i>B. velezensis</i> AGVL-005	Soybean seeds	Brazil	CP024922
<i>B. velezensis</i> AH159-1	Mushroom	South Korea	JFBZ00000000
<i>B. velezensis</i> ALB65	Alfalfa silage	United States	CP029069
<i>B. velezensis</i> ALB69	Almond drupes	United States	CP029070
<i>B. velezensis</i> ANSB01E	Chicken intestine	China	CP036518
<i>B. velezensis</i> AP183	Cotton plant rhizosphere	United States	CP029296
<i>B. velezensis</i> AP194	Soil	United States	LSZL01000000
<i>B. velezensis</i> AP214	Soil	United States	LSZM00000000
<i>B. velezensis</i> AS43.3	NA	NA	CP003838
<i>B. velezensis</i> ATCC 12321	NA	NA	ARYD01000000
<i>B. velezensis</i> ATCC 19217	NA	NA	CP009749
<i>B. velezensis</i> B-1	Oil field	Germany	CP009684
<i>B. velezensis</i> B15	Grape skin	China	CP014783
<i>B. velezensis</i> B1895	NA	Russia	JMEG00000000
<i>B. velezensis</i> B25	Rhizospheric soil	Mexico	CP016285
<i>B. velezensis</i> B26	Switchgrass	Canada	LGAT01000000
<i>B. velezensis</i> B4140	Cereals	Netherlands	LQYO00000000
<i>B. velezensis</i> B5	Deep-sea sediment	Pacific Ocean	NRIK01000000
<i>B. velezensis</i> B6	Soil used for soybean agriculture	China	NEOS00000000

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<i>B. velezensis</i> CAU B946	Rice rhizosphere	China	HE617159
<i>B. velezensis</i> B9601-Y2	Wheat rhizosphere	China	HE774679
<i>B. velezensis</i> Bac57	Red sea lagoons-mangrove mud	Saudi Arabia	CP033054
<i>B. velezensis</i> BE2	Maize rhizosphere	France	RRZG00000000
<i>B. velezensis</i> BH072	Honey	China	CP009938
<i>B. velezensis</i> BIM B-439D	Soil	Belarus	CP032144
<i>B. velezensis</i> Bs006	<i>Physalis peruviana</i> root	Colombia	LJAU00000000
<i>B. velezensis</i> BS-37	Oil from Sheng Li oil field	China	CP023414
<i>B. velezensis</i> Bs-916	Paddy soil	China	CP009611
<i>B. velezensis</i> BTLK6A	Seed of <i>Triticum aestivum</i> cv. <i>Kanchan</i>	Bangladesh	WOYD00000000
<i>B. velezensis</i> BTS 4	Seed in rice cultivar Rangabinni	Bangladesh	WOVK01000000
<i>B. velezensis</i> BUU 004	Pond sediment containing <i>Penaeus monodon</i>	Thailand	SJCZ00000000
<i>B. velezensis</i> C2	Crown in <i>Lycopersicon esculentum</i> Mill.	Tunisia	NOWG01000000
<i>B. velezensis</i> CBMB205	Rice rhizosphere	Korea	CP014838
<i>B. velezensis</i> CBMC205	Rice rhizosphere	South Korea	CP011937
<i>B. velezensis</i> CC09	<i>Cinnamomum camphora</i> leaves	China	CP015443
<i>B. velezensis</i> CC178	Cucumber phyllosphere	South Korea	CP006845
<i>B. velezensis</i> CE2	Soil	United States	RBZX00000000
<i>B. velezensis</i> CFSAN034338	Agricultural soil	Canada	LYNA00000000
<i>B. velezensis</i> CFSAN034339	Agricultural soil	Canada	LYNB00000000
<i>B. velezensis</i> CFSAN034340	Agricultural soil	United States	LYNC00000000
<i>B. velezensis</i> CGMCC 11640	Bamboo forest soil	China	CP026610
<i>B. velezensis</i> CH13	Chernozem soil used for wheat agriculture	Moldova	MPHE00000000
<i>B. velezensis</i> CHCC26801	Water	Spain	PQWL00000000
<i>B. velezensis</i> CMT-6	Douchi	China	CP025341
<i>B. velezensis</i> CN026	Chicken feces	Belgium	CP024897
<i>B. velezensis</i> Co1-6	<i>Calendula officinalis</i> rhizosphere	Egypt	CVPA00000000
<i>B. velezensis</i> CS1.10S	Soy sauce mash	China	RCDH00000000
<i>B. velezensis</i> KD1	Doenjang	South Korea	CP014990
<i>B. velezensis</i> DC-12	Fermented soya beans	China	AMQI01000000
<i>B. velezensis</i> DJFZ40	Soil	China	PVRO00000000
<i>B. velezensis</i> DKU_NT_04	Fermented soya beans	South Korea	CP026533
<i>B. velezensis</i> DR-08	Soil	South Korea	CP028437
<i>B. velezensis</i> DSYZ	Rhizosphere	China	CP030150
<i>B. velezensis</i> EBL11	Rice rhizosphere	China	JCOC00000000
<i>B. velezensis</i> EGD-AQ14	Saline desert plant rhizosphere	India	AVQH00000000

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<i>B. velezensis</i> F11	Salt lake	Algeria	MSTO00000000
<i>B. velezensis</i> FH17	Soil / grassland	Netherlands	RQPG00000000
<i>B. velezensis</i> Fito_F321	leaf of <i>Vitis vinifera</i>	Portugal	MSYT00000000
<i>B. velezensis</i> FKM10	Apple rhizosphere	China	LNTG00000000
<i>B. velezensis</i> FS001	deer feces	China	PYLR00000000
<i>B. velezensis</i> FTC01	Probiotic animal feed	Brazil	MAYA00000000
<i>B. velezensis</i> FZB42	Plant-pathogen-infested soil of a sugar beet field	Germany	CP000560
<i>B. velezensis</i> G341	4-year-old roots of Korean ginseng	South Korea	CP011686
<i>B. velezensis</i> GB03	Healthy foliage of a Douglas fir	Australia	AYTJ01000000
<i>B. velezensis</i> GB1	Vegetable plot used for cucumber agriculture	China	KZ155841
<i>B. velezensis</i> GBSW11	Soil	China	PVRP00000000
<i>B. velezensis</i> GD4a	NA	NA	FTNB00000000
<i>B. velezensis</i> GF610	Garden soil	United States	NQXV00000000
<i>B. velezensis</i> GFP-2	Whitespotted bamboo shark intestine	China	CP021011
<i>B. velezensis</i> GH1-13	Rice paddy soil	South Korea	CP019040
<i>B. velezensis</i> GQJK49	<i>Lycium barbarum</i> L. rhizosphere	China	CP021495
<i>B. velezensis</i> GR4-5	Soil	South Korea	JYGH00000000
<i>B. velezensis</i> GYL4	Pepper plant	Korea	CP020874
<i>B. velezensis</i> GZB	Electronic waste sludge of dismantling workshop	China	MTQG01000000
<i>B. velezensis</i> H57	Lucerne leaf	Australia	LMUC00000000
<i>B. velezensis</i> HB-26	Soil	China	AUWK00000000
<i>B. velezensis</i> HJ18-4	Fermented soybean paste	South Korea	MDCI01000000
<i>B. velezensis</i> Hx05	Banana rhizosphere	China	CP029473
<i>B. velezensis</i> IT-45	NA	NA	CP004065
<i>B. velezensis</i> J01	Shrimp feed	Brazil	CP023133
<i>B. velezensis</i> J-5	Tomato rhizosphere	China	CP018295
<i>B. velezensis</i> J7-1	Soil	South Korea	CP028440
<i>B. velezensis</i> JJ-D34	Fermented soybean product	South Korea	CP011346
<i>B. velezensis</i> JK	Seeds of <i>Oryza sativa</i> L., Shenliangyou 5814	China	VANQ01000000
<i>B. velezensis</i> JRS5	Rhizosphere of the desert plant <i>Rhazya stricta</i>	Saudi Arabia	CYHL00000000
<i>B. velezensis</i> JS25R	Spikelets of wheat heads	NA	CP009679
<i>B. velezensis</i> JT3-1	yak feces	China	CP032506
<i>B. velezensis</i> JTYP2	Leaves of <i>Echeveria laui</i>	China	CP020375
<i>B. velezensis</i> JW	Carp gastrointestinal tract	China	PPXP00000000
<i>B. velezensis</i> Jxnu-18	Lobster sauces	NA	OFHT00000000

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<i>B. velezensis</i> Jxnuwx-1	Lobster sauces	China	LMAT00000000
<i>B. velezensis</i> K26	Korean fermented food	South Korea	CP023075
<i>B. velezensis</i> KACC 13105	Rice rhizosphere	South Korea	JTKJ00000000
<i>B. velezensis</i> KACC 18228	Rice endophyte	South Korea	LLZA00000000
<i>B. velezensis</i> KD1	Doenjang	South Korea	CP014990
<i>B. velezensis</i> KHG19	NA	NA	CP007242
<i>B. velezensis</i> L-1	Soil	China	CP023859
<i>B. velezensis</i> LABIM40	<i>Fusarium</i> culture contamination in plate	Brazil	CP023748
<i>B. velezensis</i> LB002	Fertilizer	China	CP037417
<i>B. velezensis</i> LDO2	Peanut root	China	CP029034
<i>B. velezensis</i> LFB112	Chinese herbs	China	CP006952
<i>B. velezensis</i> L-H15	Cucumber seedling substrate	China	CP010556
<i>B. velezensis</i> LK7	Plant	Malaysia	LDUN00000000
<i>B. velezensis</i> LM2303	Wild yak dung	China	CP018152
<i>B. velezensis</i> LPL-K103	Lemon samples	China	CP039380
<i>B. velezensis</i> L-S60	Soil	China	CP011278
<i>B. velezensis</i> LS69	Rice field	China	CP015911
<i>B. velezensis</i> Lzh-a42	Tomato rhizosphere	China	CP025308
<i>B. velezensis</i> M27	Cotton-waste compost	South Korea	AMPK00000000
<i>B. velezensis</i> M49	Ulu Slim hot spring	Malaysia	LQQW00000000
<i>B. velezensis</i> M75	Environment sample from cotton waste for mushroom cultivation	South Korea	CP016395
<i>B. velezensis</i> MBE1283	Korean traditional alcoholic beverage	South Korea	CP013727
<i>B. velezensis</i> MG33	Soil	Netherlands	QJJB00000000
<i>B. velezensis</i> MG43	Soil	Netherlands	QJJC00000000
<i>B. velezensis</i> MH25	Rhizosphere	China	CP034176
<i>B. velezensis</i> MRC 16791	Cave deposit	India	PHNH00000000
<i>B. velezensis</i> MRC 5958	Hot spring	India	PTTN00000000
<i>B. velezensis</i> NAU-B3	Wheat rhizosphere	China	HG514499
<i>B. velezensis</i> NB91	Human external auditory canal	China	MTID00000000
<i>B. velezensis</i> NBIF-001	Soil	China	CP020893
<i>B. velezensis</i> NBIF-003	Soil	China	LJJY00000000
<i>B. velezensis</i> NJAU-Z9	Field soil	China	CP022556
<i>B. velezensis</i> NJN-6	Rhizosphere of healthy banana plants	China	CP007165
<i>B. velezensis</i> NKG-1	Rare dormant volcanic soils	China	CP024203
<i>B. velezensis</i> NKYL29	Soil	China	JPYY00000000
<i>B. velezensis</i> NRRL B-41580	River Velez	Spain	LLZC00000000

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<i>B. velezensis</i> NRRL B-4257	Soil	Israel	LLZB000000000
<i>B. velezensis</i> NWUMFk_BS10.5	Maize rhizosphere	South Africa	NITU000000000
<i>B. velezensis</i> NY12-2	Fermented foods	South Korea	CP033576
<i>B. velezensis</i> OB9	Crude oil	Canada	LGAU000000000
<i>B. velezensis</i> OEE1	NA	Tunisia	MZXS000000000
<i>B. velezensis</i> OSY-GA1	Soil	United States	CP031880
<i>B. velezensis</i> OSY-S3	Silage	United States	CP024706
<i>B. velezensis</i> P42	<i>Punica granatum</i> phylloplane	India	MSXY000000000
<i>B. velezensis</i> Pc3	Seawater	Antarctica	CP010406
<i>B. velezensis</i> PEBA20	Poplar	China	PVHM000000000
<i>B. velezensis</i> PG12	Apple	China	PIWI000000000
<i>B. velezensis</i> QST713	Commercial product SERENADE (Bayer)	France	CP025079
<i>B. velezensis</i> RC 218	Wheat anther	Argentina	LQCL000000000
<i>B. velezensis</i> RHNK22	Rhizosphere	India	LMAG000000000
<i>B. velezensis</i> RUPDJ	NA	NA	FTNS000000000
<i>B. velezensis</i> S141	Soybean rhizosphere	Thailand	AP018402
<i>B. velezensis</i> S3-1	Cucumber rhizosphere soil	China	CP016371
<i>B. velezensis</i> S499	Soil	Democratic Republic of the Congo	CP014700
<i>B. velezensis</i> SB1216	Soil	United States	CP015417
<i>B. velezensis</i> SB-9	<i>Vitis labrusca</i> x <i>Vitis vinifera</i> root	China	RRZZ000000000
<i>B. velezensis</i> SCDB 291	Doenjang	South Korea	CP022654
<i>B. velezensis</i> SCGB 1	Doenjang	South Korea	CP023320
<i>B. velezensis</i> SCGB 574	Doenjang	South Korea	CP023431
<i>B. velezensis</i> SGAir0473	Air	Singapore	CP027868
<i>B. velezensis</i> SK007	Soil	China	QXJQ000000000
<i>B. velezensis</i> SK19.001	Soil	China	AOFO000000000
<i>B. velezensis</i> SPZ1	NA	NA	AQGM000000000
<i>B. velezensis</i> SQR9	NA	NA	CP006890
<i>B. velezensis</i> SRCM100072	Food	South Korea	CP021888
<i>B. velezensis</i> SRCM100730	Kochujang	South Korea	LZZN000000000
<i>B. velezensis</i> SRCM100731	Kochujang	South Korea	LYUF000000000
<i>B. velezensis</i> SRCM101413	Food	South Korea	CP021890
<i>B. velezensis</i> SRCM103616	Food	South Korea	CP035410
<i>B. velezensis</i> SRCM103639	Food	South Korea	SDED000000000
<i>B. velezensis</i> SRCM103691	Food	South Korea	CP035393
<i>B. velezensis</i> SRCM103788	Food	South Korea	CP035399
<i>B. velezensis</i> SSBW-10	Slow sand biofilter	Poland	NBMO000000000

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<i>B. velezensis</i> SSBW-18	Slow sand biofilter	Poland	NBMN00000000
<i>B. velezensis</i> SSBW-19	Slow sand biofilter	Poland	NBMM00000000
<i>B. velezensis</i> SSBW-2	Slow sand biofilter	Poland	NBMQ00000000
<i>B. velezensis</i> SSBW-8	Slow sand biofilter	Poland	NBMP00000000
<i>B. velezensis</i> sx01604	Soil	China	CP018007
<i>B. velezensis</i> SYBC H47	Honey	China	CP017747
<i>B. velezensis</i> T20E-257	<i>Solanum lycopersicum</i> root endosphere	South Korea	CP021976
<i>B. velezensis</i> TB1501	Soil	China	CP022531
<i>B. velezensis</i> TH16	Soil / grassland	Netherlands	RQPF00000000
<i>B. velezensis</i> TJ02	Soil	China	CP024797
<i>B. velezensis</i> TrigoCor1448	Wheat plant	Brazil	CP007244
<i>B. velezensis</i> UASWS BA1	Dead <i>Platanus x acerifolia</i>	Switzerland	AWQY00000000
<i>B. velezensis</i> UBA5705	Soil	China	DIHD00000000
<i>B. velezensis</i> UCMB5033	Cotton plant	Ukraine	NC022075
<i>B. velezensis</i> UCMB5036	Cotton plant	Ukraine	NC020410
<i>B. velezensis</i> UCMB5113	Soil	Ukraine	NC022081
<i>B. velezensis</i> UMAF6614	NA	NA	CP006960
<i>B. velezensis</i> UMAF6639	NA	NA	CP006058
<i>B. velezensis</i> UNC69MF	NA	NA	JQKM00000000
<i>B. velezensis</i> V4	Water	China	MBDV00000000
<i>B. velezensis</i> VCC-2003	River mud	Turkey	CP027429
<i>B. velezensis</i> W1	NA	China	CP028375
<i>B. velezensis</i> W2	Saffron field	India	JOKF00000000
<i>B. velezensis</i> WS-8	Soil	China	CP018200
<i>B. velezensis</i> X1	Soil	China	JQNZ01000018
<i>B. velezensis</i> XK-4-1	Cotton	China	LJDI01000010
<i>B. velezensis</i> Y14	Rhizosphere of peanut	China	CP017953
<i>B. velezensis</i> Y2	Wheat rhizosphere	NA	NC017912
<i>B. velezensis</i> YJ11-1-4	Soybean fermented product	South Korea	CP011347
<i>B. velezensis</i> ZeaDK315Endobac16	<i>Zea mays</i> endosperm	France	CP043809
<i>B. velezensis</i> ZF2	Cucumber plants	China	CP032154
<i>B. velezensis</i> ZL918	Infected bulbs of <i>Sagittaria sagittifolia</i>	China	CP021338