

Supplementary Table 1. Prediction and detection of *B. velezensis* GA1 and *Pseudomonas* sp. CMR12a secondary metabolome. Metabolites were predicted by antiSMASH 5.0 (Blin et al., 2019) and were detected by UPLC-qTOF. “+” indicates detection of the bioactive secondary metabolites (BSMs) and “ND” indicates that the BSM is not detectable with our method. The locus tag numbers for *Pseudomonas* sp. CMR12a corresponds to the genome annotation from Biessy et al. (Genebank: CP027706.1). The locus tag for *B. velezensis* GA1 corresponds to the recently sequenced genome annotation (Genebank: CP046386.1).

BSM predicted	Category	Genes involved in the biosynthesis	Disrupted gene in the non-producing mutant	Detected
<i>B. velezensis</i> GA1				
Surfactins	NRPS/CLPs	<i>srfaABCD</i>	$\Delta srfaA$	+
Fengycins	NRPS/CLPs	<i>fenABCDE</i>	$\Delta fenA$	+
Iturins	NRPS/CLPs	<i>ituDABC</i>	$\Delta ituA$	+
Macrolactins	NRPS/PKS	<i>mInABCDEFGH</i>	$\Delta mInA$	+
Bacillaene	NRPS/PKS	<i>baeBCDEGHIJLMNRS</i>	$\Delta baeS$ and $\Delta baeJ$	+
Dihydrobacillaene	NRPS/PKS	<i>baeBCDEGHIJLMNRS</i>	$\Delta baeJ$	+
Difficidin	NRPS/PKS	<i>loaP-dfnABCDEFGHIJKLMNO</i>	$\Delta dfnM$	+
Oxydifficidin	NRPS/PKS	<i>loaP-dfnABCDEFGHIJKLMNO</i>	$\Delta dfnM$ and $\Delta dfnA$	+
Bacillibactin	NRPS/Siderophore	<i>dhbACEBF</i>	$\Delta dhbC$	+
Bacilysin	Dipeptide	<i>bacABC</i>	$\Delta bacA$	ND
Amylocyclin	RiPP	<i>acnBACDEF</i>	$\Delta acnA$	ND
Amylolysin	RiPP	<i>amlFEKRAMT</i>	$\Delta amlA$	ND
<i>Pseudomonas</i> sp. CMR12a				
Sessilins	NRPS/CLPs	<i>sesTRDABC-macA1B1</i>	$\Delta sesA$	+
Orfamides	NRPS/CLPs	<i>ofaR1ABC-macA2B2-ofaR2</i>	$\Delta ofaBC$	+
Phenazines	NRPS[1]	<i>phzABCDEFGH</i>	$\Delta phzABCDEFGH$	+
Pyoverdine	NRPS/Siderophore	<i>pvdYSLH-C4K39_6099 to C4K39_6098-fpvCDEF-C4K39_6092 to C4K39_6089-C4K39_6029 to C4K39_6028-pvdIJD-fpvZ-pvdEFONMP-ampO-pvdTR-fvpl-pvdA</i>	$\Delta pvdL$	+
Enantio-pyochelin	NRPS/Siderophore	<i>pchR-pchDHIEFKCBA</i>	$\Delta pchA$	+

Supplementary Table 2: Conservation in *Bacillus subtilis* and *Bacillus velezensis* of substrate binding proteins involved in iron transport. Percentage of identity were obtained by blast comparison performed on the MAGE platform

Transporters in <i>B. subtilis</i> 168	<i>B. velezensis</i> GA1		<i>B. velezensis</i> QST713		<i>B. velezensis</i> S499		<i>B. velezensis</i> FZB42	
	Gene name	% of identity	Gene name	% of identity	Gene name	% of identity	Gene name	% of identity
<i>feuA</i>	GL331_06035	83	BVQ_00990	83	AS588_13145	83	RBAM_002120	83
<i>fhuD</i>	GL331_01180	81	BVQ_17365	82	AS588_15255	82	RBAM_030440	82
<i>yxeB (frxB)</i>	GL331_04235	72	BVQ_20555	73	AS588_18310	72	RBAM_036560	72
<i>fpiA (pbtQ/yclQ)</i>	GL331_06955	74	BVQ_01985	73	AS588_12230	74	RBAM_004080	73
<i>yfmC (fecC)</i>	GL331_10185	36	BVQ_05570	36	AS588_10320	36	RBAM_010510	37
<i>yfiY(sxzY)</i>	GL331_04235 (<i>yxeB</i>)	33	BVQ_20555 (<i>yxeB</i>)	32	AS588_18310 (<i>yxeB</i>)	33	RBAM_036560 (<i>yxeB</i>)	32

Supplementary Table 3. Strains and plasmids used in this study.

Relevant genotype and description		References or sources
<i>Bacillus velezensis</i>		
GA1	Wild type	1
GA1 Δsfp ::cat	GA1 deleted <i>sfp</i> gene; unable to produce lipopeptides, polyketides and bacillibactin	This study
GA1 $\Delta srfaA$::cat	GA1 deleted <i>srfaA</i> gene; unable to produce surfactins	This study
GA1 $\Delta ituA$::cat	GA1 deleted <i>ituA</i> gene; unable to produce iturins	This study
GA1 $\Delta fenA$::cat	GA1 deleted <i>fenA</i> gene; unable to produce fengycins	This study
GA1 $\Delta baeJ$::cat	GA1 deleted <i>baeJ</i> gene; unable to produce bacillaene and dihydrobacillaene	This study
GA1 $\Delta baeS$::cat	GA1 deleted <i>baeS</i> gene; unable to produce bacillaene	This study
GA1 $\Delta dfnA$::cat	GA1 deleted <i>dfnA</i> gene; unable to produce difficidin and oxydifficidin	This study
GA1 $\Delta dfnM$::cat	GA1 deleted <i>dfnM</i> gene; unable to produce oxydifficidin	This study
GA1 $\Delta mlnA$::cat	GA1 deleted <i>mlnA</i> gene; unable to produce macrolactins	This study
GA1 $\Delta dhbC$::cat	GA1 deleted <i>dhbC</i> gene; unable to produce bacillibactin	This study
GA1 $\Delta acnA$::cat	GA1 deleted <i>acnA</i> gene; unable to produce amylocyclicin	This study
GA1 Δsfp ::cat $\Delta acnA$::phleo	GA1 deleted <i>sfp</i> and <i>acnA</i> genes ; unable to produce lipopeptides, polyketides, bacillibactin and amylocyclicin	This study
GA1 $\Delta baeJ$::cat $\Delta dfnA$::phleo	GA1 deleted <i>baeJ</i> and <i>dfnM</i> genes; unable to produce <i>bacillaenes</i> and <i>difficidins</i>	This study
GA1 $\Delta furR$::cat	GA1 deleted <i>furR</i> gene	This study
GA1 $\Delta perR$::cat	GA1 deleted <i>perR</i> gene	This study
<i>Pseudomonas</i> sp.		
CMR12a	Wild type	2
$\Delta sesA$	CMR12a disrupted of <i>sesA</i> gene; Gm ^R ; unable to produce sessilin	3

$\Delta ofaBC$	CMR12a deleted <i>ofaB</i> and <i>ofaC</i> genes; Gm ^R ; unable to produce orfamide	4
Δphz	CMR12a deleted phenazine biosynthesis operon; unable to produce phenazine	3
$\Delta sesA-ofaBC$	CMR12a disrupted of <i>sesA</i> gene and deleted <i>ofaB</i> and <i>ofaC</i> genes; Gm ^R ; unable to produce sessilin and orfamide	4
$\Delta sesA-phz$	CMR12a disrupted of <i>sesA</i> gene and deleted phenazine biosynthesis operons; Gm ^R ; unable to produce sessilin and phenazine	3
$\Delta ofaAC-phz$	CMR12a deleted <i>ofaB</i> and <i>ofaC</i> genes and phenazine biosynthesis operons; unable to produce orfamide and phenazine	4
$\Delta sesA-ofaBC-phz$	CMR12a disrupted of <i>sesA</i> gene and deleted <i>ofaB</i> and <i>ofaC</i> genes and phenazine biosynthesis operons; Gm ^R ; unable to produce sessilin, orfamide and phenazine	4
$\Delta pchA$	CMR12a deleted <i>pchA</i> gene; unable to produce pyochelin	This study
$\Delta pvdI$	CMR12a deleted <i>pvdI</i> gene; unable to produce pyoverdine	This study
$\Delta pvdI-pchA$	CMR12a deleted of <i>pvdI</i> and <i>pchA</i> genes; unable to produce pyoverdine and pyochelin	This study
<i>Pseudomonas putida</i>		
RW10S2	Wild type; WLIP producer	5
BW11M1	Wild type; xantholysin producer	6
WCU-64	Wild type; putisolvin producer	7
<i>Pseudomonas lactis</i>		
SS101	Wild type; massetolide producer	8
<i>Pseudomonas tolaasii</i>		
CH36	Wild type; tolaasin and pseudodesmin producer	5
CH36 $\Delta toIA$	CH36 disrupted of <i>toIA</i> gene; Gm ^R ; unable to produce tolaasin	5
<i>E. coli</i>		
DH5 α pir	supE44, $\Delta lacU169$ ($\Phi lacZ\Delta M15$), <i>recA1</i> , <i>endA1</i> , <i>hsdR17</i> , <i>thi-1</i> , <i>gyrA96</i> , <i>relA1</i> , λ pir	9
DH5 α p497	Helper strain harboring P497 plasmid	C. Keel laboratory
Plasmids		

pEMG	pSEVA212S; oriR6K, <i>lacZα</i> with two flanking I-SceI sites; Km ^r , Ap ^r	10
pEMG-pchA	Suicide plasmid used for the deletion of pchA	This study
pEMG-pvdl	Suicide plasmid used for the deletion of pvdl	This study
pSW-2	oriRK2, <i>xyIS</i> , <i>P_m::l-sceI</i> ; Gm ^R	10
Phytopathogenic strains		
<i>Xanthomonas campestris</i> pv. <i>campestris</i>		DSMZ ¹ N°3586
<i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i>		DSMZ ¹ N°20741
<i>Pectobacterium carotovorum</i>		De Mot laboratory
<i>Pseudomonas fuscovaginae</i>		De Mot laboratory
<i>Pseudomonas cichorii</i>		De Mot laboratory
<i>Agrobacterium tumefaciens</i>		De Mot laboratory
<i>Rhodococcus fascians</i>		De Mot laboratory

Supplementary Table 4. Primers used in this study

Primer Name	Primer sequence (5'→3')	Targeted genes
Deletion mutant		
<i>B. velezensis</i> GA1		
UpsrfaAF	TCAGCAAACTGCGTGGTAG	<i>srfaA</i>
UpsrfaAR	CCAATTTTCGAATTCCTTTACCGCGATAAAAAAGTTATTTCCATATGTGTGC	
DwsrfAF	CAGCTCCAGATCCTCTACGCCGGACACGCTTTATATCGTGCCGAA	
DwsrfAR	AAGAAATGATCATAAATACC	
UpFenAF	AGCAAAAACCGGGTCACTAA	<i>fenA</i>
UpFenAR	CCAATTTTCGAATTCCTTTACCGGTTCTGCTGACATGACAAGCA	
DwFenAF	CAGCTCCAGATCCTCTACGCCGGACAAAGACTTTAATTTCAAAAAAGGTG	
DwFenAR	CCTTTTGAAGAAGAGAAGAAAAAG	
UpltuAF	ATGCAGGAAATAGGGTGAA	<i>ituA</i>
UpltuAR	CCAATTTTCGAATTCCTTTACCGGGTATACATAGGTCCCTCCTG	
DwltuAF	CAGCTCCAGATCCTCTACGCCGGACCAATGAACTTTTAGGGAAAAAGCA	
DwltuAR	GCGACTAACGTATCGGGTTG	
UpDfnAF	GACTTTTGAATAATCTACAGTGCTCC	<i>dfnA</i>
UpDfnAR	TTTTCGAATTCCTTTACCGGAAACGCGTTTGGCATTGAG	
UpDfnAphleoR	CAGGAAACAGCTATGACAAACGCGTTTGGCATTGAG	
DwDfnAphleoF	GTAAAACGACGGCCAGTACAGGCTGAGTATGACCAGACA	
DwDfnAF	CAGCTCCAGATCCTCTACGCCGGACACAGGCTGAGTATGACCAGACA	
DwDfnAR	TCCGGAATATGATCTTGTGAAG	
UpDfnMF	GGCAGTGGAGCTGTACC	<i>dfnM</i>
UpDfnMR	CCAATTTTCGAATTCCTTTACCGGGTCAATTTTCATTCCTCCAAGA	
DwDfnMF	CAGCTCCAGATCCTCTACGCCGGACCTTGTGAGTTTTGAACGAAAAA	
DwDfnMR	AGCCGTTATCAATCGTGCTG	
UpBaeJF	GTATGCGTCCCAGACTCAGC	<i>baeJ</i>
UpBaeJR	CCAATTTTCGAATTCCTTTACCGGTTTCATAGAGCTGCCTCCAT	
DwBaeJF	CAGCTCCAGATCCTCTACGCCGGACGGGATACCTATGAAGTGGAGGTT	
DwBaeJR	TCATAGTAGCCGACTTGAGAATCA	
UpBaeSF	GTACAGCAAGTGCCATGAG	<i>baeS</i>
UpBaeSR	CCAATTTTCGAATTCCTTTACCGGTTTTGAAAAGACATAACCAACAG	
DwBaeSF	CAGCTCCAGATCCTCTACGCCGACTTTAATATCGCCCCCTGTTT	
DwBaeSR	GAGGCGTTGAAGCATAACCAAG	
UpsfpF	TCGTACCCTGAAATCAAA	<i>sfp</i>
UpsfpR	CCAATTTTCGAATTCCTTTACCGCGCATGTCCAGATCCTCCGCTCT	
DwsfpF	CAGCTCCAGATCCTCTACGCCGGACGACGGGATTGAGATGAAAA	
DwsfpR	CATTGAGACGTACCCGCTTT	
UpdhbCF	GCGTTTCTGCCTGAATCC	<i>dhbC</i>
UpdhbCR	CCAATTTTCGAATTCCTTTACCGCGCATGTTTGTCCCTCCTTTTCGT	
DwdhbCF	CAGCTCCAGATCCTCTACGCCGGACGCTTTACCAAGATGA	
DwdhbCR	GCAGCACTGAAGGCTTGAT	
UpmlnAF	CGGAAAAACCGTTTCAAAAA	<i>mlnA</i>
UpmlnAR	CAGGAAACAGCTATGACTTTTAAAAATTGCTATTTACTCTAAGCA	
DwmlnAF	GTAAAACGACGGCCAGTCTAAGGCGCAGATTGGATA	
DwmlnAR	TGTACCTGTGCCATGTGCTT	
UpacnAF	TCCTTGCTCACTGGGTGATGA	<i>acnA</i>
UpacnAR	TTTTCGAATTCCTTTACCGGGTTTCATATAACATCTCCCTACTCTG	
DwacnAF	CCAGATCCTCTACGCCGGACGACGCTGCTTGGTAAAATCG	
DwacnAR	CGCAAAATCAGCGTTTGTG	

Pseudomonas sp.

CMR12a			
	UppvdIF	GGCATTCTTGACCGGTCGTC	
	UppvdIR	GTGTTGTCCATTACACAGCCTCCATTGCATTATCGGGAGTCATCC	
	DwpvdIF	ATGGAGGCTGTGTAATGGACAACA	
	DwpvdIR	TGTAGCGGTGTAGCAGAG	<i>pvdI</i>
	pvdICheckF	CCTGCTGCTGGAAGGATTGA	
	pvdICheckR	GGATCGAGCTGCCAAAGGAA	
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	UppchAF	GACCAACTGCCGGCGGAT	
	UppchAR	CCTTCAGCGATCGGCCGGTGCATCACATCTTGCCTCCTTGCTCC	
	DwpchAF	TGATGCACCGGCCGATC	
	DwpchAR	GTGGTGAAGCTTTCATGCC	<i>pchA</i>
	pchACheckF	TCATCCACTGGAACATCGCC	
	pchACheckR	GCGGACTGATTTCTCGGTA	
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Antibiotic marker			
	CatF	CGCGGTAAAAGAATTCGAAAA	Chloramphenicol
	CatR	GTCCGGCGTAGAGGATCTG	marker
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	PhleoF	GTCATAGCTGTTCTGCGAAAAGGGGTTTCATTTT	Phleomycin
	PhleoR	ACTGGCCGTCGTTTACTCCAATAAATGCGACACCAA	marker
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	nptIIF	GAGGATCGTTTCGCATGATT	Kanamycin
	nptIIR	CGCTCAGAAGAAGCTCGTCAA	marker
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	psw-F	GGACGCTTCGCTGAAAATA	pSW-II insertion
	psw-R	AACGTCGTGACTGGGAAAAC	
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RT-qPCR			
<i>B. velezensis</i> GA1			
	AcnA_F_qPCR	CCAAGCAGCTGCGTATTTTT	<i>acnA</i>
	AcnA_R_qPCR	CTTCGACTCTGGGCATCTCT	
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	QgyrA_F	GAGACGCACTGAAATCGTGA	<i>gyrA</i>
	QgyrA_R	GCCGGGAGACGTTTAACATA	
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	SrfA_F_qPCR	ATTGTTTACGGTGGCTCTGG	<i>srfaA</i>
	SrfA_R_qPCR	CGCTGCGATAGTCAAAATCA	
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	BaeJQ_F_qPCR	CCGATGACGATTCCTGAAGT	<i>baeJ</i>
	BaeJQ_R_qPCR	GCCCTTTCACAATCGAAAAGA	
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	DfnA_F_qPCR	GGCGTTTTGCTCTTCGTT	<i>dfnA</i>
	DfnA_R_qPCR	ATCAGACGGCGTATCGTGTC	

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