

Supplementary Information

Table S1. primers used to detect gene for biological control in *B. subtilis* and *P. megaterium*

S/No	Gene	Primer name	Primer sequence (5'-3')	Annealing Temp	Size (bp)	Reference
1	<i>Spas</i>	Spas-F	GGTTTGGTGGATGGAGCTGT	58 °C	375	Song Wenxin (2020)
		Spas-R	GCAAGGAGTCAGAGCAAGGT			
2	<i>fenD</i>	FNDF1	CCT GCA GAA GGA GAA GTG AAG	52 °C	293	Joshi, R., et al. (2006).
		FNDR1	TGC TCA TCG TCT TCC GTT TC			
3	<i>yndJ</i>	147F	CAG AGC GAC AGC AAT CAC AT	52 °C	212	Joshi, R., et al. (2006).
		147R	TGA ATT TCG GTC CGC TTA TC			
4	<i>srfAA</i>	SRFAF1	GAA AGA GCG GCT GCT GAA AC	62 °C	273	Joshi, R., et al. (2006).
		SRFAR1	CCC AAT ATT GCC GCA ATG AC			
5	<i>QkI</i>	QK1-F	CTTAAACGTCAGAGGCGGAG	55 °C	704	Song Wenxin (2020)
		QK1-R	ATTGTGCAGCTGCTTGTACG			
6	<i>ItuC</i>	ITUCF1	TTC ACT TTT GAT CTG GCG AT	52 °C	575	Joshi, R., et al. (2006).
		ITUCR3	CGT CCG GTA CAT TTT CAC			

Table S2. Chart outlining interpretive standards for zone diameter, used to determine the sensitivity and resistance status of antibiotics through the disk diffusion method ^[39].

S/no	Name of antibiotics (dose)	Inhibitory zone diameter to nearest millimeter (mm)		
		Sensitive (S)	Moderately sensitive (MS)	Resistant (R)
1	Cefthiopene (30 µg/disk)	≥18mm	15–17 mm	≤14 mm
2	Kanamycin (30 µg/disk)	≥18mm	14–17 mm	≤13 mm
3	Streptomycin (10 µg/disk)	≥15mm	12–14 mm	≤11 mm
4	Erythromycin (15 µg/disk)	≥23mm	14–22 mm	≤13 mm
5	Ciprofloxacin (15 µg/disk)	≥21mm	16–20 mm	≤15 mm
6	Tetracycline (30 µg/disk)	≥15mm	12–14 mm	≤11 mm
7	Penicillin (10 µg/disk)	≥14mm	00–00 mm	≤15 mm
8	Ampicillin (10 µg/disk)	≥13mm	14–16 mm	≤17 mm

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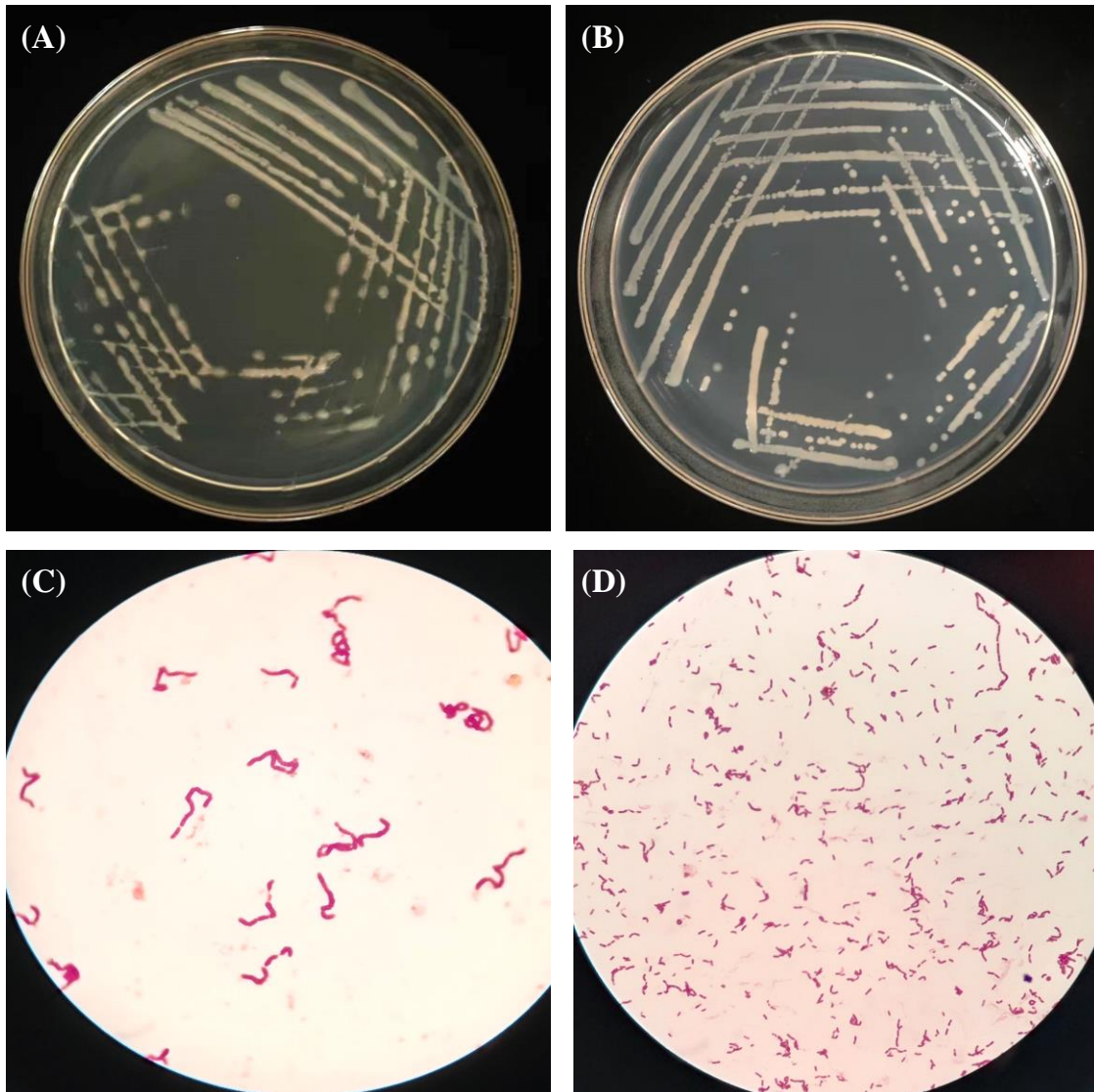


Figure S1. Streaking and pure NB agar plate of Isolate (A). *P. megaterium* H1, (B). *B. subtilis* I2. Morphology of (C). *P. megaterium* H1 (D). *B. subtilis* I2 light-microscope photomicrograph showing the rod form

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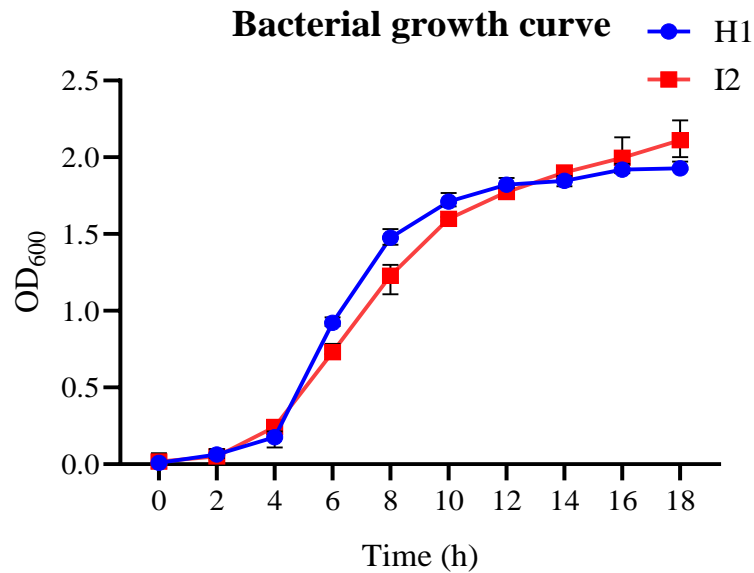


Figure S2. Antagonist bacteria growth curve in different intervals

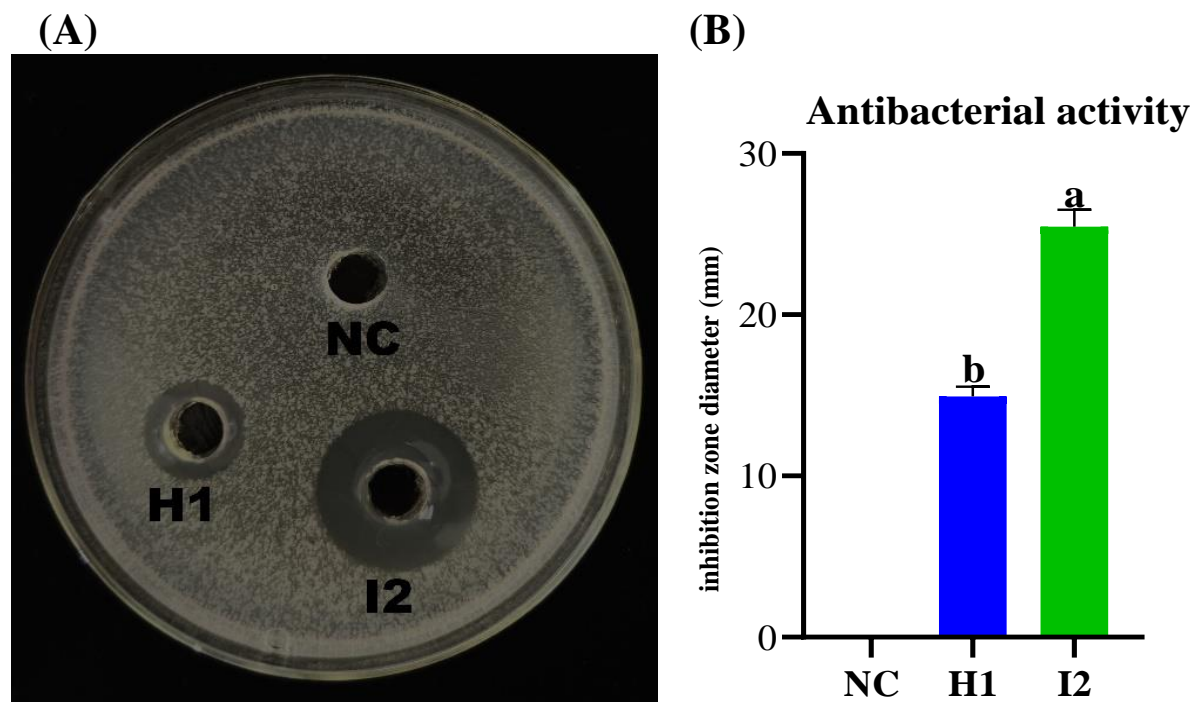


Figure S3. **(A)**: Screening and inhibition of *E. amylovora* by antagonistic bacteria filtrate. **(B)**: Diameter of inhibition zone of antagonist strains filtrate.