  

**FigureS1.** Antibacterial activity of some *Lpb. plantarum* strains and their CFSs (crude CFS, neutralized CFS pH=6.0, cells and heat treated cells) against *L. monocytogenes* (A) and *E.coli* (B and C).

  

**FigureS2.** Antifungal activity of *Lpb. plantarum* strains against some indicator fungi species: *Penicillium expansum* (A), *F. culmorum* CECT 2148 (B) and *Botrytis cinerea* CECT 20973 (C)

**Table S1.** Pathogen antagonism by *Lpb. plantarum* on tomatoes.CFU counts of *Lpb. plantarum* inoculated in MRS as pure culture and inoculated as co-culture with pathogen (*L. monocytogenes* CECT 4031 or *E.coli* O157:H7) . Mean ± standard deviation from three independent CFU counts from three different experiments. Each experiment was done in duplicate. Log CFU per tomato compared to single inoculated pathogen used as control. Two-way ANOVA, Dunnett’s multiple comparisons test are used to compare strains at different time. § *p*<0.05 *vs* 5 days 3nm-*Listeria*, 1nm-*Listeria*, RSOLV-*Listeria* and pepp1-*Listeria*; & *p*<0.05 *vs* 5 days pepp2-*Listeria*.

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|  |  |  Number of tomato-attached *Lpb. plantarum* (Log CFU/g in MRS) |
|  | **Medium agar** | **1 day** | **3 days** | **5 days** |
| *E.coli* O157:H7-3nm | MRS | 1.83±1.26 | 1.78±1.53 | 1.85±1.31 |
| *E.coli* O157:H7-1nm | MRS | 1.84±1.36 | 1.60±0.54 | 1.60±1.34 |
| *E.coli* O157:H7-S4 | MRS | 1.86±1.28 | 1.54±0.51 | 1.73±1.26 |
| *E.coli* O157:H7-RSOLV | MRS | 1.82±1.05 | 1.60±0.69 | 1.72±1.20 |
| *E.coli* O157:H7-pepp1 | MRS | 1.93±1.36 | 1.52±0.98 | 1.65±0.39 |
| *E.coli* O157:H7-pepp2 | MRS | 1.91±1.06 | 1.42±1.26 | 1.59±1.18 |
| *L. monocytogenes* CECT 4031 -3nm | MRS | 1.86±1.16 | 1.75±1.18 | 1.90±0.94 |
| *L. monocytogenes* CECT 4031 -1nm | MRS | 1.83±0.63 | 1.36±0.73 | 1.59±0.40 |
| *L. monocytogenes* CECT 4031 –S4  | MRS | 1.72±0.55 | 1.75±0.67 | 1.04±0.15§ |
| *L. monocytogenes* CECT 4031 -RSOLV | MRS | 1.70±0.80 | 1.74±1.29 | 1.85±0.43 |
| *L. monocytogenes* CECT 4031 –pepp1 | MRS | 1.93±0.88 | 1.57±1.46 | 2.00±1.44& |
| *L. monocytogenes* CECT 4031 –pepp2 | MRS | 1.98±1.60 | 1.61±1.20 | 1.63±0.84 |
| 3nm (control) | MRS | 1.80±1.30 | 1.59±1.20 | 1.68±1.09 |
| 1nm (control) | MRS | 1.80±1.10 | 1.40±0.33 | 2.15±0.55 |
| S4 (control) | MRS | 1.66±1.56 | 1.81±0.60 | 1.79±0.93 |
| RSOLV (control) | MRS | 1.93±1.77 | 1.14±1.29 | 1.10±0.55 |
| pepp1 (control) | MRS | 1.87±1.15 | 1.43±0.45 | 1.75±0.03 |
| pepp2 (control) | MRS | 1.82±1.67 | 1.01±0.45 | 1.02±0.15 |