

Table S1. Screening of antimicrobial activity of the sixty-five LAB strains performed by spot agar assay.

CFS	<i>P. larvae</i>	<i>M. plutonius</i>	CFS	<i>P. larvae</i>	<i>M. plutonius</i>
<i>Apilactobacillus kukeii</i> 196	1.10±0.10	0.66±0.05	<i>Fructobacillus ficulneus</i> 453	1.16±0.15	0.33±0.05
<i>Apilactobacillus kukeii</i> 198	2.03±0.15	1.06±0.22	<i>Fructobacillus fructosus</i> 267	0.26±0.05	0.96±0.11
<i>Apilactobacillus kukeii</i> 210	0.70±0.11	1.33±0.15	<i>Fructobacillus fructosus</i> 294	0.56±0.11	1.51±0.23
<i>Apilactobacillus kunkeei</i> 129	3.00±0.17	1.96±0.12	<i>Fructobacillus fructosus</i> 295	1.03±0.15	1.56±0.11
<i>Apilactobacillus kunkeei</i> 15	3.23±0.15	1.63±0.11	<i>Fructobacillus fructosus</i> 352	0.82±0.10	2.73±0.15
<i>Apilactobacillus kunkeei</i> 172	2.21±0.24	2.16±0.26	<i>Fructobacillus fructosus</i> 353	1.93±0.11	1.86±0.15
<i>Apilactobacillus kunkeei</i> 174	2.1±0.12	1.14±0.14	<i>Fructobacillus fructosus</i> 360	2.94±0.14	2.56±0.11
<i>Apilactobacillus kunkeei</i> 176	1.64±0.22	3.16±0.27	<i>Fructobacillus pseudoficulneus</i> 455	0.83±0.05	1.43±0.15
<i>Apilactobacillus kunkeei</i> 177	0.54±0.13	2.86±0.15	<i>Lactiplantibacillus plantarum</i> 108	1.46±0.15	0.83±0.05
<i>Apilactobacillus kunkeei</i> 180	3.33±0.25	1.89±0.17	<i>Lactiplantibacillus plantarum</i> 110	2.74±0.17	1.86±0.15
<i>Apilactobacillus kunkeei</i> 193	1.46±0.25	2.66±0.15	<i>Lactiplantibacillus plantarum</i> 122	3.16±0.15	2.36±0.15
<i>Apilactobacillus kunkeei</i> 251	2.76±0.11	1.31±0.12	<i>Lactiplantibacillus plantarum</i> 129	3.16±0.26	1.26±0.05
<i>Apilactobacillus kunkeei</i> 26	1.25±0.17	1.26±0.15	<i>Lactiplantibacillus plantarum</i> 130	2.53±0.15	2.46±0.15
<i>Apilactobacillus kunkeei</i> 298	0.56±0.15	1.25±0.17	<i>Lactiplantibacillus plantarum</i> 131	1.43±0.22	2.96±0.25
<i>Apilactobacillus kunkeei</i> 299	3.43±0.42	2.06±0.11	<i>Lactiplantibacillus plantarum</i> 257	2.53±0.40	1.41±0.17
<i>Apilactobacillus kunkeei</i> 30	2.76±0.15	2.56±0.05	<i>Lactiplantibacillus plantarum</i> 3	0.96±0.15	2.43±0.32
<i>Apilactobacillus kunkeei</i> 300	1.40±0.20	3.03±0.15	<i>Lactiplantibacillus plantarum</i> 53	1.82±0.17	3.28±0.26
<i>Apilactobacillus kunkeei</i> 314	3.03±0.15	1.96±0.15	<i>Lactiplantibacillus plantarum</i> 82	0.97±0.14	2.76±0.22
<i>Apilactobacillus kunkeei</i> 32	0.36±0.11	2.76±0.25	<i>Lactiplantibacillus plantarum</i> 83	2.46±0.22	2.23±0.25
<i>Apilactobacillus kunkeei</i> 328	0.16±0.05	2.90±0.13	<i>Lactiplantibacillus plantarum</i> 84	1.53±0.20	1.19±0.17
<i>Apilactobacillus kunkeei</i> 338	2.06±0.25	1.23±0.15	<i>Lactiplantibacillus plantarum</i> 86	1.06±0.15	0.33±0.05
<i>Apilactobacillus kunkeei</i> 467	0.97±0.11	1.36±0.11	<i>Lactiplantibacillus plantarum</i> 92	2.16±0.14	0.66±0.15
<i>Apilactobacillus kunkeei</i> 78	1.53±0.35	2.92±0.26	<i>Lactiplantibacillus plantarum</i> ATCC 14917	1.16±0.15	1.83±0.11
<i>Apilactobacillus kunkeei</i> 99	1.23±0.05	2.26±0.21	<i>Lactiplantibacillus plantarum</i> LP100	2.13±0.15	0.56±0.15
<i>Apilactobacillus kunkeei</i> ALK181	5.83±0.36	6.72±0.25	<i>Lactiplantibacillus plantarum</i> LP148	7.96±0.25	6.93±0.32
<i>Apilactobacillus kunkeei</i> ALK222	6.00±0.35	5.63±0.22	<i>Lactiplantibacillus plantarum</i> LP179	5.91±0.36	5.51±0.37
<i>Apilactobacillus kunkeei</i> ALK268	5.13±0.23	6.16±0.21	<i>Lactiplantibacillus plantarum</i> LP212	2.40±0.25	1.16±0.15
<i>Apilactobacillus kunkeei</i> ALK385	6.43±0.35	5.63±0.32	<i>Lactiplantibacillus plantarum</i> LP25	0.86±0.05	0.53±0.05
<i>Apilactobacillus kunkeei</i> ATCC 700308	1.03±0.15	1.46±0.11	<i>Lactiplantibacillus plantarum</i> LP31	7.46±0.25	5.96±0.25
<i>Enterococcus faecalis</i> 145	0.67±0.14	1.36±0.15	<i>Lactiplantibacillus plantarum</i> LP42	8.12±0.37	4.93±0.32
<i>Enterococcus faecalis</i> 146	1.31±0.22	2.3±0.09	<i>Lactiplantibacillus plantarum</i> LP8	1.33±0.15	2.00±0.34
<i>Enterococcus faecalis</i> 390	2.13±0.15	3.26±0.34	<i>Lactiplantibacillus plantarum</i> LP86	2.63±0.37	1.10±0.17
			<i>Lactiplantibacillus plantarum</i> LP95	1.83±0.15	2.56±0.15