**SUPPLEMENTARY FILE**

Attachment 1. Spore formation test of the isolated lactic acid bacteria

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
| 4 | A close-up of a red and blue cell  Description automatically generated  5 | 6 |
| 7 | Red cells under a microscope  Description automatically generated  8 | 9 |
| 10 | 11 | 12 |
| 13 | 14 |  |

Attachment 2. Motility test of the isolated lactic acid bacteria

|  |  |  |
| --- | --- | --- |
| A clear liquid in a tube  Description automatically generated  1 | A close up of a tube  Description automatically generated  2 | 3 |
| A clear liquid in a tube  Description automatically generated  4 | 5 | 6 |
| 7 | 8 | 9 |
| A clear liquid in a tube  Description automatically generated  10 | A clear liquid in a tube  Description automatically generated  11 | A clear tube with liquid in it  Description automatically generated  12 |
| A clear liquid in a tube  Description automatically generated  13 | 14 |  |

Attachment 3. SPSS Results of the temperature tolerance test

A screenshot of a test results

Description automatically generated

4°C

A screenshot of a test

Description automatically generated

15°C

A screenshot of a test results

Description automatically generated

45°C

Attachment 4. Identification of lactic acid bacteria Isolates by 16S rRNA: BLAST results

A screenshot of a computer

Description automatically generated

Isolate 4

A screenshot of a computer

Description automatically generated

Isolate 8

Attachment 5. TPC of Growth of isolates 4 and 8, and *Lactobacillus plantarum* in 2% SMB (Okara) medium

|  |  |  |  |
| --- | --- | --- | --- |
| **Isolate** | **10×-6** | **10×-7** | **10×-8** |
| **4** | A petri dish with a yellow liquid  Description automatically generated | A petri dish with bacteria  Description automatically generated | A petri dish with a white substance  Description automatically generated |
| **8** | A petri dish with white substance  Description automatically generated | A close-up of a petri dish  Description automatically generated | A petri dish with white specks  Description automatically generated |
| **LP** | A petri dish with white dots  Description automatically generated | A close-up of a petri dish  Description automatically generated | A close-up of a petri dish  Description automatically generated |

Attachment 6. TPC of Growth of isolates 4 and 8, and *Lactobacillus plantarum* in 3% SMB (Okara) medium

|  |  |  |  |
| --- | --- | --- | --- |
| **Isolate** | **10×-6** | **10×-7** | **10×-8** |
| **4** | A petri dish with yellow liquid  Description automatically generated | A close-up of a petri dish  Description automatically generated | A petri dish with a petri dish  Description automatically generated |
| **8** | A petri dish with white dots  Description automatically generated | A petri dish with white spots  Description automatically generated | A petri dish with a white substance  Description automatically generated |
| **LP** | A close-up of a petri dish  Description automatically generated | A close-up of a petri dish  Description automatically generated | A petri dish with a small hole  Description automatically generated |

Attachment 7. TPC of Growth of isolates 4 and 8, and *Lactobacillus plantarum* in MRS broth medium

|  |  |  |  |
| --- | --- | --- | --- |
| **Isolate** | **10×-6** | **10×-7** | **10×-8** |
| **4** | A petri dish with bacteria  Description automatically generated | A petri dish with bacteria  Description automatically generated | A petri dish with white spots  Description automatically generated |
| **8** | A close-up of a petri dish  Description automatically generated | A petri dish with white bacteria  Description automatically generated |  |
| **LP** |  |  |  |

Attachment 8. TPC of fermented soymilk with a duration of 6 hours at 37**°**C

|  |  |  |  |
| --- | --- | --- | --- |
| **Isolate** | **10×-6** | **10×-7** | **10×-8** |
| **Control**  (without inoculation) |  |  |  |
| **8** |  |  |  |
| **LP** |  |  |  |

Attachment 9. Calculation of the total titratable acidity, lactic acid levels, and lactic acid percentage

|  |  |  |  |
| --- | --- | --- | --- |
| **Isolate** | **Control** | **8** | **LP** |
| **Beginning NaOH (mL)** | 13 | 20 | 24 |
| **Ending NaOH (mL)** | 12,5 | 17 | 22,5 |
| **Total NaOH (mL)** | 0,5 | 3 | 1,5 |
| **Titratable Acidity (mL)** | 0,450 | 2,702 | 1,351 |
| **Lactic Acid Levels (mg/mL)** | 0,00045 | 0,0027 | 0,00135 |
| **Lactic Acid (mL)** | 0,045 | 0,270 | 0,135 |