

Table S1. Microorganisms used in this study.

Miroorganism	Medium	Culture condition
LAB		
<i>Lactobacillus plantarum</i> EM	MRS	30°C or 37°C, 24 h
<i>Weissella koreensis</i> DB1	MRS	30°C, 24 h
<i>Lactobacillus plantarum</i> ATCC 14917	MRS	30°C, 24 h
Bacteria		
<i>Bacillus cereus</i> ATCC 14579	LB	37°C, 24 h
<i>Escherichia coli</i> O157:H7 ATCC 43895	LB	37°C, 24 h
<i>Pseudomonas aeruginosa</i> ATCC 27853	LB	37°C, 24 h
<i>Salmonella enterica</i> serovar. Typhi ATCC 14028	LB	37°C, 24 h
Molds		
<i>Aspergillus flavus</i> ATCC 22546	MEA	30°C, 48 h
<i>Aspergillus fumigatus</i> ATCC 96918	MEA	30°C, 48 h
<i>Penicillium roqueforti</i> ATCC 10110	PDA	25°C, 48 h
<i>Penicillium expansum</i> ATCC 7861	PDA	25°C, 48 h

MEA; malt extract agar, PDA; potato dextrose agar, LB: Luria-Bertani, MRS: de Man Rogosa Sharpe

Table S2. Rice bran slurry supplemented with different nutrients.

Rice bran slurry	Supplemented nutrients and their concentrations used
Basic slurry	+ None
: 20 % rice	+ Carbon source: 1 and 3% (w/v) of glucose, maltose, sucrose, or fructose
bran powder	+ Nitrogen source: 1, 3, and 5% (w/v) of peptone, soytone, beef extract, or yeast extract
distilled in	+ Complex compound source: 1, 2, 3, 4, and 5% (w/v) of corn steep liquor (CSL)
water	+ Combined nutrients: 1% of glucose + 3% beef extract, 1% of glucose + 3% CSL, 1% of glucose + 3% of beef extract + 3% of CSL 3% of beef extract + 3 % CSL, or 1% of glucose + 3% of beef extract + 3% of CSL

Table S3. Phytase activity of *L. plantarum* EM.

LAB strains	Diameter of clear zone (mm)
<i>Lactobacillus plantarum</i> EM	18.14±0.10 ^a
<i>Lactobacillus plantarum</i> ATCC 14917	12.51±0.14 ^b
<i>Weissella koreensis</i> DB1	9.01±0.02 ^c

Means ±SDs with different letters were significantly different (p<0.05) by Duncan's multiple range test.