

Supplementary Materials:

Table S1. Carbohydrate fermentation pattern of isolated *Lactobacillus* species from fermented rice tested using API 50 CHL system

	Sugar	mg/cup	Lb-				Lb-		Lb-	Lc-1
			1	Lb-2	Lb-4	Lb-8	10	11	17	
0	Control		-	-	-	-	-	-	-	-
1	Glycerol	1.64	-	-	-	-	-	-	-	-
2	Erythritol	1.44	-	-	-	-	-	-	-	-
3	D-Arabinose	1.4	-	-	-	-	-	-	-	-
4	L-Arabinose	1.4	-	-	-	-	+	-	+	+-
5	D-Ribose	1.4	+	+	-	-	+	+	+	+
6	D-Xylose	1.4	-	-	-	+	+	-	+	+
7	L-Xylose	1.4	-	-	-	-	-	-	-	-
8	D-Adonitol	1.36	-	-	-	-	-	-	-	-
9	Methyl-βD-Xylopyranoside	1.28	-	-	-	-	-	-	-	-
10	D-Galactose	1.4	+	+	+	-	+	+	+	+
11	D-Glucose	1.56	+	+	+	+	+	+	+	+
12	D-Fructose	1.4	+	+	+	+	+	+	+	+
13	D-Mannose	1.4	+	+	+	+	+	+	+	+
14	L-Sorbose	1.4	-	-	-	-	-	-	-	-
15	L-Rhamnose	1.36	-	-	-	-	-	-	-	-
16	Dulcitol	1.36	-	-	-	-	-	-	-	-
17	Inositol	1.4	-	-	-	-	-	-	-	-
18	D-Mannitol	1.36	-	-	-	-	+	-	-	-
19	D-Sorbitol	1.36	-	-	-	-	+	-	-	-
20	Methyl-αD-Mannopyranoside	1.28	-	-	-	-	-	-	-	-
21	Methyl-αD-Glucopyranoside	1.28	-	-	-	-	-	-	-	-
22	N-AcetylGlucosamine	1.28	+	+	+	-	+	+	+	+
23	Amygdalin	1.08	-	-	-	-	+	-	+	+

24	Arbutin	1.08	-	-	-	-	+	-	+	+
25	Esculin,	1.16								
	ferric citrate	0.152	+	+	-	-	+	+	+	+
26	Salicin	1.04	+	+	-	-	+	+	+	+
27	Cellobiose	1.32					+		+	+
28	Maltose	1.4	+	+	+	+	+	+	+	+
29	D-Lactose (bovine origin)	1.4	-	-	-	-	-	-	-	-
30	D-Melibiose	1.32	-	-	-	-	+	-	-	-
31	D-Saccharose (sucrose)	1.32	-	-	-	+	+	-	-	-
32	D-Trehalose	1.32	-	-	-	-	+	+	+	+
33	Inulin	1.28	-	-	-	-	-	-	-	-
34	D-MeLeZitose	1.32	-	-	-	-	-	-	-	-
35	D-Raffinose	1.56	-	-	-	-	-	-	-	-
36	Amidon (starch)	1.28	-	-	-	-	-	-	-	-
37	Glycogen	1.28	-	-	-	-	-	-	-	-
38	Xylitol	1.4	-	-	-	-	-	-	-	-
39	Gentiobiose	0.5	-	-	-	-	+	-	-	-
40	D-Turanose	1.32	-	-	-	-	+	-	-	-
41	D-Lyxose	1.4	-	-	-	-	-	-	-	-
42	D-Tagatose	1.4	-	-	-	-	+	-	+	+
43	D-Fucose	1.28	-	-	-	-	-	-	-	-
44	L-Fucose	1.28	-	-	-	-	-	-	-	-
45	D-Arabitol	1.4	-	-	-	-	-	-	-	-
46	L-Arabitol	1.4	-	-	-	-	-	-	-	-
47	Potassium gluconate	1.84	-	-	-	-	-	-	-	-
48	Potassium 2-Ketogluconate	2.12	-	-	-	-	-	-	-	-
49	Potassium	5-	1.8	-	-	-	-	-	-	-
	KetoGluconate									
Total Fermented sugar (%)			18.4	18.4	12.2	12.2	44.9	20.4	32.6	36.7
			%	%	4%	4%	%	%	5%	%

+: Positive reaction, -: Negative reaction.

Table S2 : Colonies observed on MRS media plates

Isolation source	Morpho types	Gram test	Catalase test	No.
White raw	Cluster coccus	+	-	14
	Candida	+	-	2
	Bacillus	+	-	1
Red Raw	Cluster coccus	+	-	14
	Candida	+	-	1
	Diplococcus	+	-	1
White cooked	Cluster coccus	+	-	2
	Candida	+	-	2
	Bacillus	+	-	2
	Diplo coccus	+	-	2
Red cooked	Bacillus	-	-	1
	Candida	-	-	1
Total				

Table S 3: Colonies observed on MRS- Sorbitol 0.2 % media plates

Isolation source	Morpho types	Gram test	Catalase test	No.
White raw	Cluster coccus	+	-	6
	Diplo coccus	+	-	7
	Bacillus	+	-	3
Red Raw	Diplo coccus	+	-	9
White cooked	Cluster coccus:	+	-	1
	Bacillus	+	-	3
	Bacillus	-	-	3
	Diplo coccus	+	-	3
Red cooked	Bacillus	+	-	3
	Bacillus	-	-	1
	Diplo coccus	+	-	1
	Candida	+	-	1
	Streptococcus	-	-	2
	Cocco bacillus	-	-	1
Total				

Table S 4: Colonies observed on MRS- L-Cysteine 0.25% media plates

Isolation		Gram	Catalase	
source	Morpho types	test	test	No
White raw	Cluster coccus	+	-	4
	Diplo coccus	+	-	2
	Bacillus	+	-	8
Red Raw	Cluster coccus	+	-	6
	Bacillus	+	-	4
	Diplo coccus	+	-	1
White cooked	Bacillus	+	-	6
Red cooked	Cluster coccus	+	-	1
	Diplo coccus	+	-	3
Total				